In the House of Representatives, U. S.,

December 6, 2007.

Resolved, That the House agree to the amendments of the Senate to the bill (H.R. 6) entitled "An Act to reduce our Nation's dependency on foreign oil by investing in clean, renewable, and alternative energy resources, promoting new emerging energy technologies, developing greater efficiency, and creating a Strategic Energy Efficiency and Renewables Reserve to invest in alternative energy, and for other purposes", with the following

HOUSE AMENDMENTS TO SENATE AMENDMENTS:

In lieu of the matter proposed to be inserted by the amendment of the Senate to the text of the bill, insert the following:

1 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

- 2 (a) Short Title.—This Act may be cited as the "En-
- 3 ergy Independence and Security Act of 2007".
- 4 (b) Table of Contents of this
- 5 Act is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Definitions.

Sec. 3. Relationship to other law.

TITLE I—ENERGY SECURITY THROUGH IMPROVED VEHICLE FUEL ECONOMY

Subtitle A—Increased Corporate Average Fuel Economy Standards

Sec. 101. Short title.

Sec. 102. Average fuel economy standards for automobiles and certain other vehicles.

Sec. 103. Definitions.

- Sec. 104. Credit trading program.
- Sec. 105. Consumer information.
- Sec. 106. Continued applicability of existing standards.
- Sec. 107. National Academy of Sciences studies.
- Sec. 108. National Academy of Sciences study of medium-duty and heavy-duty truck fuel economy.
- Sec. 109. Extension of flexible fuel vehicle credit program.
- Sec. 110. Periodic review of accuracy of fuel economy labeling procedures.
- Sec. 111. Consumer tire information.
- Sec. 112. Use of civil penalties for research and development.
- Sec. 113. Exemption from separate calculation requirement.

Subtitle B—Improved Vehicle Technology

- Sec. 131. Transportation electrification.
- Sec. 132. Domestic manufacturing conversion grant program.
- Sec. 133. Inclusion of electric drive in Energy Policy Act of 1992.
- Sec. 134. Loan guarantees for fuel-efficient automobile parts manufacturers.
- Sec. 135. Advanced battery loan guarantee program.
- Sec. 136. Advanced technology vehicles manufacturing incentive program.

Subtitle C—Federal Vehicle Fleets

- Sec. 141. Federal vehicle fleets.
- Sec. 142. Federal fleet conservation requirements.

TITLE II—ENERGY SECURITY THROUGH INCREASED PRODUCTION OF BIOFUELS

Subtitle A—Renewable Fuel Standard

- Sec. 201. Definitions.
- Sec. 202. Renewable fuel standard.
- Sec. 203. Study of impact of Renewable Fuel Standard.
- Sec. 204. Environmental and resource conservation impacts.
- Sec. 205. Biomass based diesel and biodiesel labeling.
- Sec. 206. Study of credits for use of renewable electricity in electric vehicles.
- Sec. 207. Grants for production of advanced biofuels.
- Sec. 208. Integrated consideration of water quality in determinations on fuels and fuel additives.
- Sec. 209. Anti-backsliding.
- Sec. 210. Effective date, savings provision, and transition rules.

Subtitle B—Biofuels Research and Development

- Sec. 221. Biodiesel.
- Sec. 222. Biogas.
- Sec. 223. Grants for biofuel production research and development in certain States.
- Sec. 224. Biorefinery energy efficiency.
- Sec. 225. Study of optimization of flexible fueled vehicles to use E-85 fuel.
- Sec. 226. Study of engine durability and performance associated with the use of biodiesel.
- Sec. 227. Study of optimization of biogas used in natural gas vehicles.
- Sec. 228. Algal biomass.
- Sec. 229. Biofuels and biorefinery information center.
- Sec. 230. Cellulosic ethanol and biofuels research.

- Sec. 231. Bioenergy research and development, authorization of appropriation.
- Sec. 232. Environmental research and development.
- Sec. 233. Bioenergy research centers.
- Sec. 234. University based research and development grant program.

Subtitle C—Biofuels Infrastructure

- Sec. 241. Prohibition on franchise agreement restrictions related to renewable fuel infrastructure.
- Sec. 242. Renewable fuel dispenser requirements.
- Sec. 243. Ethanol pipeline feasibility study.
- Sec. 244. Renewable fuel infrastructure grants.
- Sec. 245. Study of the adequacy of transportation of domestically-produced renewable fuel by railroads and other modes of transportation.
- Sec. 246. Federal fleet fueling centers.
- Sec. 247. Standard specifications for biodiesel.
- Sec. 248. Biofuels distribution and advanced biofuels infrastructure.

Subtitle D—Environmental Safeguards

Sec. 251. Waiver for fuel or fuel additives.

TITLE III—ENERGY SAVINGS THROUGH IMPROVED STANDARDS FOR APPLIANCE AND LIGHTING

Subtitle A—Appliance Energy Efficiency

- Sec. 301. External power supply efficiency standards.
- Sec. 302. Updating appliance test procedures.
- Sec. 303. Residential boilers.
- Sec. 304. Furnace fan standard process.
- Sec. 305. Improving schedule for standards updating and clarifying State authority.
- Sec. 306. Regional standards for furnaces, central air conditioners, and heat pumps.
- Sec. 307. Procedure for prescribing new or amended standards.
- Sec. 308. Expedited rulemakings.
- Sec. 309. Battery chargers.
- Sec. 310. Standby mode.
- Sec. 311. Energy standards for home appliances.
- Sec. 312. Walk-in coolers and walk-in freezers.
- Sec. 313. Electric motor efficiency standards.
- Sec. 314. Standards for single package vertical air conditioners and heat pumps.
- Sec. 315. Improved energy efficiency for appliances and buildings in cold climates
- Sec. 316. Technical corrections.

Subtitle B—Lighting Energy Efficiency

- Sec. 321. Efficient light bulbs.
- Sec. 322. Incandescent reflector lamp efficiency standards.
- Sec. 323. Public building energy efficient and renewable energy systems.
- Sec. 324. Metal halide lamp fixtures.
- Sec. 325. Energy efficiency labeling for consumer electronic products.

TITLE IV—ENERGY SAVINGS IN BUILDINGS AND INDUSTRY

Sec. 401. Definitions.

Subtitle A—Residential Building Efficiency

- Sec. 411. Reauthorization of weatherization assistance program.
- Sec. 412. Study of renewable energy rebate programs.
- Sec. 413. Energy code improvements applicable to manufactured housing.

Subtitle B—High-Performance Commercial Buildings

- Sec. 421. Commercial high-performance green buildings.
- Sec. 422. Zero Net Energy Commercial Buildings Initiative.
- Sec. 423. Public outreach.

Subtitle C—High-Performance Federal Buildings

- Sec. 431. Energy reduction goals for Federal buildings.
- Sec. 432. Management of energy and water efficiency in Federal buildings.
- Sec. 433. Federal building energy efficiency performance standards.
- Sec. 434. Management of Federal building efficiency.
- Sec. 435. Leasing.
- Sec. 436. High-performance green Federal buildings.
- Sec. 437. Federal green building performance.
- Sec. 438. Storm water runoff requirements for Federal development projects.
- Sec. 439. Cost-effective technology acceleration program.
- Sec. 440. Authorization of appropriations.
- Sec. 441. Public building life-cycle costs.

Subtitle D—Industrial Energy Efficiency

- Sec. 451. Industrial energy efficiency.
- Sec. 452. Energy-intensive industries program.
- Sec. 453. Energy efficiency for data center buildings.

Subtitle E—Healthy High-Performance Schools

- Sec. 461. Healthy high-performance schools.
- Sec. 462. Study on indoor environmental quality in schools.

Subtitle F—Institutional Entities

Sec. 471. Energy sustainability and efficiency grants and loans for institutions.

Subtitle G—Public and Assisted Housing

Sec. 481. Application of International Energy Conservation Code to public and assisted housing.

Subtitle H—General Provisions

- Sec. 491. Demonstration project.
- Sec. 492. Research and development.
- Sec. 493. Environmental Protection Agency demonstration grant program for local governments.
- Sec. 494. Green Building Advisory Committee.
- Sec. 495. Advisory Committee on Energy Efficiency Finance.

TITLE V—ENERGY SAVINGS IN GOVERNMENT AND PUBLIC INSTITUTIONS

Subtitle A—United States Capitol Complex

- Sec. 501. Capitol complex photovoltaic roof feasibility studies.
- Sec. 502. Capitol complex E-85 refueling station.
- Sec. 503. Energy and environmental measures in Capitol complex master plan.
- Sec. 504. Promoting maximum efficiency in operation of Capitol power plant.
- Sec. 505. Capitol power plant carbon dioxide emissions feasibility study and demonstration projects.

Subtitle B—Energy Savings Performance Contracting

- Sec. 511. Authority to enter into contracts; reports.
- Sec. 512. Financing flexibility.
- Sec. 513. Promoting long-term energy savings performance contracts and verifying savings.
- Sec. 514. Permanent reauthorization.
- Sec. 515. Definition of energy savings.
- Sec. 516. Retention of savings.
- Sec. 517. Training Federal contracting officers to negotiate energy efficiency contracts.
- Sec. 518. Study of energy and cost savings in nonbuilding applications.

Subtitle C—Energy Efficiency in Federal Agencies

- Sec. 521. Installation of photovoltaic system at Department of Energy head-quarters building.
- Sec. 522. Prohibition on incandescent lamps by Coast Guard.
- Sec. 523. Standard relating to solar hot water heaters.
- Sec. 524. Federally-procured appliances with standby power.
- Sec. 525. Federal procurement of energy efficient products.
- Sec. 526. Procurement and acquisition of alternative fuels.
- Sec. 527. Government efficiency status reports.
- Sec. 528. OMB government efficiency reports and scorecards.
- Sec. 529. Electricity sector demand response.

Subtitle D—Energy Efficiency of Public Institutions

- Sec. 531. Reauthorization of State energy programs.
- Sec. 532. Utility energy efficiency programs.

Subtitle E-Energy Efficiency and Conservation Block Grants

- Sec. 541. Definitions.
- Sec. 542. Energy Efficiency and Conservation Block Grant Program.
- Sec. 543. Allocation of funds.
- Sec. 544. Use of funds.
- Sec. 545. Requirements for eligible entities.
- Sec. 546. Competitive grants.
- Sec. 547. Review and evaluation.
- Sec. 548. Funding.

TITLE VI—ACCELERATED RESEARCH AND DEVELOPMENT

Subtitle A—Solar Energy

- Sec. 601. Short title.
- Sec. 602. Thermal energy storage research and development program.
- Sec. 603. Concentrating solar power commercial application studies.
- Sec. 604. Solar energy curriculum development and certification grants.
- Sec. 605. Daylighting systems and direct solar light pipe technology.
- Sec. 606. Solar Air Conditioning Research and Development Program.
- Sec. 607. Photovoltaic demonstration program.

Subtitle B—Geothermal Energy

- Sec. 611. Short title.
- Sec. 612. Definitions.
- Sec. 613. Hydrothermal research and development.
- $Sec.\ 614.\ General\ geothermal\ systems\ research\ and\ development.$
- Sec. 615. Enhanced geothermal systems research and development.
- Sec. 616. Geothermal energy production from oil and gas fields and recovery and production of geopressured gas resources.
- Sec. 617. Cost sharing and proposal evaluation.
- Sec. 618. Center for geothermal technology transfer.
- Sec. 619. GeoPowering America.
- Sec. 620. Educational pilot program.
- Sec. 621. Reports.
- Sec. 622. Applicability of other laws.
- Sec. 623. Authorization of appropriations.
- Sec. 624. International geothermal energy development.
- Sec. 625. High cost region geothermal energy grant program.

Subtitle C—Marine and Hydrokinetic Renewable Energy Technologies

- Sec. 631. Short title.
- Sec. 632. Definition.
- Sec. 633. Marine and hydrokinetic renewable energy research and development.
- Sec. 634. National Marine Renewable Energy Research, Development, and Demonstration Centers.
- Sec. 635. Applicability of other laws.
- Sec. 636. Authorization of appropriations.

Subtitle D—Energy Storage for Transportation and Electric Power

Sec. 641. Energy storage competitiveness.

Subtitle E—Miscellaneous Provisions

- Sec. 651. Lightweight materials research and development.
- Sec. 652. Commercial insulation demonstration program.
- Sec. 653. Technical criteria for clean coal power Initiative.
- Sec. 654. H-Prize.
- Sec. 655. Bright Tomorrow Lighting Prizes.
- Sec. 656. Renewable Energy innovation manufacturing partnership.

TITLE VII—CARBON CAPTURE AND SEQUESTRATION

Subtitle A—Carbon Capture and Sequestration Research, Development, and Demonstration

- Sec. 701. Short title.
- Sec. 702. Carbon capture and sequestration research, development, and demonstration program.
- Sec. 703. Carbon capture.
- Sec. 704. Review of large-scale programs.
- Sec. 705. Geologic sequestration training and research.
- Sec. 706. Relation to Safe Drinking Water Act.
- Sec. 707. Safety research.
- Sec. 708. University based research and development grant program.

Subtitle B—Carbon Capture and Sequestration Assessment and Framework

- Sec. 711. Carbon dioxide sequestration capacity assessment.
- Sec. 712. Assessment of carbon sequestration and methane and nitrous oxide emissions from ecosystems.
- Sec. 713. Carbon dioxide sequestration inventory.
- Sec. 714. Framework for geological carbon sequestration on public land.

TITLE VIII—IMPROVED MANAGEMENT OF ENERGY POLICY

Subtitle A—Management Improvements

- Sec. 801. National media campaign.
- Sec. 802. Alaska Natural Gas Pipeline administration.
- Sec. 803. Renewable energy deployment.
- Sec. 804. Coordination of planned refinery outages.
- Sec. 805. Assessment of resources.
- Sec. 806. Sense of Congress relating to the use of renewable resources to generate energy.
- Sec. 807. Geothermal assessment, exploration information, and priority activities.

Subtitle B—Prohibitions on Market Manipulation and False Information

- Sec. 811. Prohibition on market manipulation.
- Sec. 812. Prohibition on false information.
- Sec. 813. Enforcement by the Federal Trade Commission.
- Sec. 814. Penalties.
- Sec. 815. Effect on other laws.

TITLE IX—INTERNATIONAL ENERGY PROGRAMS

- Sec. 901. Definitions.
- Subtitle A—Assistance to Promote Clean and Efficient Energy Technologies in Foreign Countries
- Sec. 911. United States assistance for developing countries.
- Sec. 912. United States exports and outreach programs for India, China, and other countries.
- Sec. 913. United States trade missions to encourage private sector trade and investment.
- Sec. 914. Actions by Overseas Private Investment Corporation.
- Sec. 915. Actions by United States Trade and Development Agency.

- Sec. 916. Deployment of international clean and efficient energy technologies and investment in global energy markets.
- Sec. 917. United States-Israel energy cooperation.

Subtitle B—International Clean Energy Foundation

- Sec. 921. Definitions.
- Sec. 922. Establishment and management of Foundation.
- Sec. 923. Duties of Foundation.
- Sec. 924. Annual report.
- Sec. 925. Powers of the Foundation; related provisions.
- Sec. 926. General personnel authorities.
- Sec. 927. Authorization of appropriations.

Subtitle C—Miscellaneous Provisions

- Sec. 931. Energy diplomacy and security within the Department of State.
- Sec. 932. National Security Council reorganization.
- Sec. 933. Annual national energy security strategy report.
- Sec. 934. Convention on Supplementary Compensation for Nuclear Damage contingent cost allocation.
- Sec. 935. Transparency in extractive industries resource payments.

TITLE X—GREEN JOBS

- Sec. 1001. Short title.
- Sec. 1002. Energy efficiency and renewable energy worker training program.

TITLE XI—ENERGY TRANSPORTATION AND INFRASTRUCTURE

Subtitle A—Department of Transportation

Sec. 1101. Office of Climate Change and Environment.

Subtitle B—Railroads

- Sec. 1111. Advanced technology locomotive grant pilot program.
- Sec. 1112. Capital grants for class II and class III railroads.

- Sec. 1121. Short sea transportation initiative.
- Sec. 1122. Short sea shipping eligibility for capital construction fund.
- Sec. 1123. Short sea transportation report.

Subtitle D—Highways

- Sec. 1131. Increased Federal share for CMAQ projects.
- Sec. 1132. Distribution of rescissions.
- Sec. 1133. Sense of Congress regarding use of complete streets design techniques.

TITLE XII—SMALL BUSINESS ENERGY PROGRAMS

- Sec. 1201. Express loans for renewable energy and energy efficiency.
- Sec. 1202. Pilot program for reduced 7(a) fees for purchase of energy efficient technologies.
- Sec. 1203. Small business energy efficiency.
- Sec. 1204. Larger 504 loan limits to help business develop energy efficient technologies and purchases.

- Sec. 1205. Energy saving debentures.
- Sec. 1206. Investments in energy saving small businesses.
- Sec. 1207. Renewable fuel capital investment company.
- Sec. 1208. Study and report.

TITLE XIII—SMART GRID

- Sec. 1301. Statement of policy on modernization of electricity grid.
- Sec. 1302. Smart grid system report.
- Sec. 1303. Smart grid advisory committee and smart grid task force.
- Sec. 1304. Smart grid technology research, development, and demonstration.
- Sec. 1305. Smart grid interoperability framework.
- Sec. 1306. Federal matching fund for smart grid investment costs.
- Sec. 1307. State consideration of smart grid.
- Sec. 1308. Study of the effect of private wire laws on the development of combined heat and power facilities.
- Sec. 1309. DOE study of security attributes of smart grid systems.

TITLE XIV—RENEWABLE ELECTRICITY STANDARD

Sec. 1401. Renewable electricity standard.

TITLE XV—CLEAN RENEWABLE ENERGY AND CONSERVATION TAX ACT OF 2007

Sec. 1500. Short title; amendment of 1986 Code.

Subtitle A—Clean Renewable Energy Production Incentives

Part I—Provisions Relating to Renewable Energy

- Sec. 1501. Extension and modification of renewable energy credit.
- Sec. 1502. Production credit for electricity produced from marine renewables.
- Sec. 1503. Extension and modification of energy credit.
- Sec. 1504. Extension and modification of credit for residential energy efficient property.
- Sec. 1505. Extension and modification of special rule to implement FERC and State electric restructuring policy.
- Sec. 1506. New clean renewable energy bonds.

Part II—Provisions Relating to Carbon Mitigation and Coal

- Sec. 1507. Expansion and modification of advanced coal project investment credit
- Sec. 1508. Expansion and modification of coal gasification investment credit.
- Sec. 1509. Seven-year applicable recovery period for depreciation of qualified carbon dioxide pipeline property.
- Sec. 1510. Special rules for refund of the coal excise tax to certain coal producers and exporters.
- Sec. 1511. Extension of temporary increase in coal excise tax.
- Sec. 1512. Carbon audit of the tax code.

Subtitle B—Transportation and Domestic Fuel Security

Part I—Biofuels

Sec. 1521. Credit for production of cellulosic biomass alcohol.

- Sec. 1522. Expansion of special allowance to cellulosic biomass alcohol fuel plant property.
- Sec. 1523. Modification of alcohol credit.
- Sec. 1524. Extension and modification of credits for biodiesel and renewable diesel.
- Sec. 1525. Clarification of eligibility for renewable diesel credit.
- Sec. 1526. Provisions clarifying treatment of fuels with no nexus to the United
 States
- Sec. 1527. Comprehensive study of biofuels.

Part II—Advanced Technology Motor Vehicles

- Sec. 1528. Credit for new qualified plug-in electric drive motor vehicles.
- Sec. 1529. Exclusion from heavy truck tax for idling reduction units and advanced insulation.

PART III—OTHER TRANSPORTATION PROVISIONS

- Sec. 1530. Restructuring of New York Liberty Zone tax credits.
- Sec. 1531. Extension of transportation fringe benefit to bicycle commuters.

Subtitle C—Energy Conservation and Efficiency

Part I—Conservation Tax Credit Bonds

- Sec. 1541. Qualified energy conservation bonds.
- Sec. 1542. Qualified forestry conservation bonds.

PART II—EFFICIENCY

- Sec. 1543. Extension and modification of energy efficient existing homes credit.
- Sec. 1544. Extension and modification of energy efficient commercial buildings deduction.
- Sec. 1545. Modifications of energy efficient appliance credit for appliances produced after 2007.
- Sec. 1546. Seven-year applicable recovery period for depreciation of qualified energy management devices.

Subtitle D—Other Provisions

Part I—Forestry Provisions

- Sec. 1551. Deduction for qualified timber gain.
- Sec. 1552. Excise tax not applicable to section 1203 deduction of real estate investment trusts.
- Sec. 1553. Timber REIT modernization.
- Sec. 1554. Mineral royalty income qualifying income for timber REITs.
- Sec. 1555. Modification of taxable REIT subsidiary asset test for timber REITs.
- Sec. 1556. Safe harbor for timber property.

Part II—Exxon Valdez

Sec. 1557. Income averaging for amounts received in connection with the Exxon Valdez litigation.

Subtitle E—Revenue Provisions

Sec. 1561. Limitation of deduction for income attributable to domestic production of oil, gas, or a primary products thereof.

- Sec. 1562. Elimination of the different treatment of foreign oil and gas extraction income and foreign oil related income for purposes of the foreign tax credit
- Sec. 1563. Seven-year amortization of geological and geophysical expenditures for certain major integrated oil companies.
- Sec. 1564. Broker reporting of customer's basis in securities transactions.
- Sec. 1565. Extension of additional 0.2 percent FUTA surtax.
- Sec. 1566. Termination of treatment of natural gas distribution lines as 15-year property.
- Sec. 1567. Time for payment of corporate estimated taxes.
- Sec. 1568. Modification of penalty for failure to file partnership returns.

Subtitle F—Secure Rural Schools

Sec. 1571. Secure rural schools and community self-determination program.

1 SEC. 2. DEFINITIONS.

- 2 In this Act:
- 3 (1) Department.—The term "Department"
- 4 means the Department of Energy.
- 5 (2) Institution of higher education.—The
- 6 term "institution of higher education" has the mean-
- 7 ing given the term in section 101(a) of the Higher
- 8 Education Act of 1965 (20 U.S.C. 1001(a)).
- 9 (3) Secretary.—The term "Secretary" means
- 10 the Secretary of Energy.

11 SEC. 3. RELATIONSHIP TO OTHER LAW.

- 12 Except to the extent expressly provided in this Act or
- 13 an amendment made by this Act, nothing in this Act or
- 14 an amendment made by this Act supersedes, limits the au-
- 15 thority provided or responsibility conferred by, or author-
- 16 izes any violation of any provision of law (including a reg-
- 17 ulation), including any energy or environmental law or
- 18 regulation.

1	TITLE I—ENERGY SECURITY
2	THROUGH IMPROVED VEHI-
3	CLE FUEL ECONOMY
4	Subtitle A—Increased Corporate
5	Average Fuel Economy Standards
6	SEC. 101. SHORT TITLE.
7	This subtitle may be cited as the "Ten-in-Ten Fuel
8	Economy Act".
9	SEC. 102. AVERAGE FUEL ECONOMY STANDARDS FOR AUTO-
10	MOBILES AND CERTAIN OTHER VEHICLES.
11	(a) Increased Standards.—Section 32902 of title
12	49, United States Code, is amended—
13	(1) in subsection (a)—
14	(A) by striking "Non-Passenger Auto-
15	MOBILES.—" and inserting "Prescription of
16	Standards by Regulation.—";
17	(B) by striking "(except passenger auto-
18	mobiles)" in subsection (a); and
19	(C) by striking the last sentence;
20	(2) by striking subsection (b) and inserting the
21	following:
22	"(b) Standards for Automobiles and Certain
23	Other Vehicles.—
24	"(1) In general.—The Secretary of Transpor-
25	tation, after consultation with the Secretary of En-

1	ergy and the Administrator of the Environmental
2	Protection Agency, shall prescribe separate average
3	fuel economy standards for—
4	"(A) passenger automobiles manufactured
5	by manufacturers in each model year beginning
6	with model year 2011 in accordance with this
7	subsection;
8	"(B) non-passenger automobiles manufac-
9	tured by manufacturers in each model year be-
10	ginning with model year 2011 in accordance
11	with this subsection;
12	"(C) work trucks in accordance with sub-
13	section (k); and
14	"(D) commercial medium-duty or heavy-
15	duty on-highway vehicles in accordance with
16	subsection (l).
17	"(2) Fuel economy standards for auto-
18	MOBILES.—
19	"(A) Automobile fuel economy average
20	FOR MODEL YEARS 2011 THROUGH 2020.—The
21	Secretary shall prescribe a separate average fuel
22	economy standard for passenger automobiles and
23	a separate average fuel economy standard for
24	non-passenger automobiles for each model year
25	beginning with model year 2011 to achieve a

1	combined fuel economy average for model year
2	2020 of at least 35 miles per gallon for the total
3	fleet of passenger and non-passenger automobiles
4	manufactured for sale in the United States for
5	that model year.
6	"(B) Automobile fuel economy average
7	FOR MODEL YEARS 2021 THROUGH 2030.—For
8	model years 2021 through 2030, the average fuel
9	economy required to be attained by each fleet of
10	passenger and non-passenger automobiles manu-
11	factured for sale in the United States shall be the
12	maximum feasible average fuel economy stand-
13	ard for each fleet for that model year.
14	"(C) Progress toward standard re-
15	QUIRED.—In prescribing average fuel economy
16	standards under subparagraph (A), the Sec-
17	retary shall prescribe annual fuel economy
18	standard increases that increase the applicable
19	average fuel economy standard ratably beginning
20	with model year 2011 and ending with model
21	year 2020.
22	"(3) Authority of the Secretary.—The Sec-
23	retary shall—
24	"(A) prescribe by regulation separate aver-
25	age fuel economy standards for passenger and

1	non-passenger automobiles based on 1 or more
2	vehicle attributes related to fuel economy and ex-
3	press each standard in the form of a mathe-
4	matical function; and
5	"(B) issue regulations under this title pre-
6	scribing average fuel economy standards for at
7	least 1, but not more than 5, model years.
8	"(4) Minimum standard.—In addition to any
9	standard prescribed pursuant to paragraph (3), each
10	manufacturer shall also meet the minimum standard
11	for domestically manufactured passenger automobiles,
12	which shall be the greater of—
13	"(A) 27.5 miles per gallon; or
14	"(B) 92 percent of the average fuel economy
15	projected by the Secretary for the combined do-
16	mestic and non-domestic passenger automobile
17	fleets manufactured for sale in the United States
18	by all manufacturers in the model year, which
19	projection shall be published in the Federal Reg-
20	ister when the standard for that model year is
21	promulgated in accordance with this section.";
22	and
23	(3) in subsection (c)—

1	(A) by striking "(1) Subject to paragraph
2	(2) of this subsection, the" and inserting "The";
3	and
4	(B) by striking paragraph (2).
5	(b) Fuel Economy Standard for Work Trucks.—
6	Section 32902 of title 49, United States Code, is amended
7	by adding at the end the following:
8	"(k) Work Trucks.—
9	"(1) Study.—Not later than 1 year after the
10	date of the enactment of the Ten-in-Ten Fuel Econ-
11	omy Act, the Secretary of Transportation, in con-
12	sultation with the Secretary of Energy and the Ad-
13	ministrator of the Environmental Protection Agency,
14	shall examine the fuel efficiency of work trucks and
15	determine—
16	"(A) the appropriate test procedures and
17	methodologies for measuring the fuel efficiency of
18	work trucks;
19	"(B) the appropriate metric for measuring
20	and expressing work truck fuel efficiency per-
21	formance, taking into consideration, among other
22	things, the work performed by work trucks and
23	types of operations in which they are used;
24	"(C) the range of factors, including, without
25	limitation, design, functionality, use, duty cycle.

infrastructure, and total overall energy consumption
 tion and operating costs that affect work truck
 fuel efficiency; and

"(D) such other factors and conditions that could have an impact on a program to improve work truck fuel efficiency.

"(2) Rulemaking.—Not later than 24 months after completion of the study required under paragraph (1), the Secretary, in consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency, by regulation, shall determine in a rulemaking proceeding how to implement a work truck fuel efficiency improvement program designed to achieve the maximum feasible improvement, and shall adopt and implement appropriate test methods, measurement metrics, fuel economy standards, and compliance and enforcement protocols that are appropriate, cost-effective, and technologically feasible for work trucks. Any fuel economy standard prescribed under this section shall be prescribed at least 18 months before the model year to which it applies. The Secretary may prescribe separate standards for different classes of vehicles under this subsection.".

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1	(c) Fuel Economy Standard for Commercial Me-
2	DIUM-DUTY AND HEAVY-DUTY ON-HIGHWAY VEHICLES.—
3	Section 32902 of title 49, United States Code, as amended
4	by subsection (b), is further amended by adding at the end
5	the following:
6	"(l) Commercial Medium- and Heavy-Duty On-
7	Highway Vehicles.—
8	"(1) STUDY.—Not later than 1 year after the
9	National Academy of Sciences publishes the results of
10	its study under section 108 of the Ten-in-Ten Fuel
11	Economy Act, the Secretary of Transportation, in
12	consultation with the Secretary of Energy and the
13	Administrator of the Environmental Protection Agen-
14	cy, shall examine the fuel efficiency of commercial
15	medium- and heavy-duty on-highway vehicles and de-
16	termine—
17	"(A) the appropriate test procedures and
18	methodologies for measuring the fuel efficiency of
19	such vehicles;
20	"(B) the appropriate metric for measuring
21	and expressing commercial medium- and heavy-
22	duty on-highway vehicle fuel efficiency perform-
23	ance, taking into consideration, among other
24	things, the work performed by such on-highway

vehicles and types of operations in which they are used;

- "(C) the range of factors, including, without limitation, design, functionality, use, duty cycle, infrastructure, and total overall energy consumption and operating costs that affect commercial medium- and heavy-duty on-highway vehicle fuel efficiency; and
- "(D) such other factors and conditions that could have an impact on a program to improve commercial medium- and heavy-duty on-highway vehicle fuel efficiency.
- "(2) Rulemaking.—Not later than 24 months after completion of the study required under paragraph (1), the Secretary, in consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency, by regulation, shall determine in a rulemaking proceeding how to implement a commercial medium- and heavy-duty on-highway vehicle fuel efficiency improvement program designed to achieve the maximum feasible improvement, and shall adopt and implement appropriate test methods, measurement metrics, fuel economy standards, and compliance and enforcement protocols that are appropriate, cost-effective, and technologically fea-

1	sible for commercial medium- and heavy-duty on-
2	highway vehicles. Any fuel economy standard pre-
3	scribed under this section shall be prescribed at least
4	18 months before the model year to which it applies.
5	The Secretary may prescribe separate standards for
6	different classes of vehicles under this subsection.
7	"(3) Lead-time; regulatory stability.—The
8	first commercial medium- and heavy-duty on-high-
9	way vehicle fuel efficiency regulatory program adopt-
10	ed pursuant to this subsection shall provide not less
11	than—
12	"(A) 4 full model years of regulatory lead-
13	time; and
14	"(B) 3 full model years of regulatory sta-
15	bility.".
16	SEC. 103. DEFINITIONS.
17	(a) In General.—Section 32901(a) of title 49, United
18	States Code, is amended—
19	(1) by striking paragraph (3) and inserting the
20	following:
21	"(3) except as provided in section 32908 of this
22	title, 'automobile' means a 4-wheeled vehicle that is
23	propelled by fuel, or by alternative fuel, manufactured
24	primarily for use on public streets, roads, and high-

1	ways and rated at less than 10,000 pounds gross vehi-
2	cle weight, except—
3	"(A) a vehicle operated only on a rail line;
4	"(B) a vehicle manufactured in different
5	stages by 2 or more manufacturers, if no inter-
6	mediate or final-stage manufacturer of that vehi-
7	cle manufactures more than 10,000 multi-stage
8	vehicles per year; or
9	"(C) a work truck.";
10	(2) by redesignating paragraphs (7) through (16)
11	as paragraphs (8) through (17), respectively;
12	(3) by inserting after paragraph (6) the fol-
13	lowing:
14	"(7) 'commercial medium- and heavy-duty on-
15	highway vehicle' means an on-highway vehicle with a
16	gross vehicle weight rating of 10,000 pounds or
17	more.";
18	(4) in paragraph (9)(A), as redesignated, by in-
19	serting "or a mixture of biodiesel and diesel fuel meet-
20	ing the standard established by the American Society
21	for Testing and Materials or under section 211(u) of
22	the Clean Air Act (42 U.S.C. 7545(u)) for fuel con-
23	taining 20 percent biodiesel (commonly known as
24	'B20')" after "alternative fuel";

1	(5) by redesignating paragraph (17), as redesig-
2	nated, as paragraph (18);
3	(6) by inserting after paragraph (16), as redesig-
4	nated, the following:
5	"(17) 'non-passenger automobile' means an auto-
6	mobile that is not a passenger automobile or a work
7	truck."; and
8	(7) by adding at the end the following:
9	"(19) 'work truck' means a vehicle that—
10	"(A) is rated at between 8,500 and 10,000
11	pounds gross vehicle weight; and
12	"(B) is not a medium-duty passenger vehi-
13	cle (as defined in section 86.1803–01 of title 40,
14	Code of Federal Regulations, as in effect on the
15	date of the enactment of the Ten-in-Ten Fuel
16	Economy Act).".
17	SEC. 104. CREDIT TRADING PROGRAM.
18	(a) In General.—Section 32903 of title 49, United
19	States Code, is amended—
20	(1) by striking "section 32902(b)-(d) of this
21	title" each place it appears and inserting "subsections
22	(a) through (d) of section 32902";
23	(2) in subsection $(a)(2)$ —
24	(A) by striking "3 consecutive model years"
25	and inserting "5 consecutive model years";

1	(B) by striking "clause (1) of this sub-
2	section," and inserting "paragraph (1)";
3	(3) by redesignating subsection (f) as subsection
4	(h); and
5	(4) by inserting after subsection (e) the following:
6	"(f) Credit Trading Among Manufacturers.—
7	"(1) In general.—The Secretary of Transpor-
8	tation may establish, by regulation, a fuel economy
9	credit trading program to allow manufacturers whose
10	automobiles exceed the average fuel economy stand-
11	ards prescribed under section 32902 to earn credits to
12	be sold to manufacturers whose automobiles fail to
13	achieve the prescribed standards such that the total
14	oil savings associated with manufacturers that exceed
15	the prescribed standards are preserved when trading
16	credits to manufacturers that fail to achieve the pre-
17	scribed standards.
18	"(2) Limitation.—The trading of credits by a
19	manufacturer to the category of passenger automobiles
20	manufactured domestically is limited to the extent
21	that the fuel economy level of such automobiles shall
22	comply with the requirements of section 32902(b)(4),
23	without regard to any trading of credits from other

manufacturers.

1	"(g) Credit Transferring Within a Manufac-
2	TURER'S FLEET.—
3	"(1) In General.—The Secretary of Transpor-
4	tation shall establish by regulation a fuel economy
5	credit transferring program to allow any manufac-
6	turer whose automobiles exceed any of the average fuel
7	economy standards prescribed under section 32902 to
8	transfer the credits earned under this section and to
9	apply such credits within that manufacturer's fleet to
10	a compliance category of automobiles that fails to
11	achieve the prescribed standards.
12	"(2) Years for which used.—Credits trans-
13	ferred under this subsection are available to be used
14	in the same model years that the manufacturer could
15	have applied such credits under subsections (a), (b),
16	(d), and (e), as well as for the model year in which
17	the manufacturer earned such credits.
18	"(3) Maximum increase.—The maximum in-
19	crease in any compliance category attributable to
20	transferred credits is—
21	"(A) for model years 2011 through 2013,
22	1.0 mile per gallon;
23	"(B) for model years 2014 through 2017,
24	1.5 miles per gallon; and

1	"(C) for model year 2018 and subsequent
2	model years, 2.0 miles per gallon.
3	"(4) Limitation.—The transfer of credits by a
4	manufacturer to the category of passenger automobiles
5	manufactured domestically is limited to the extent
6	that the fuel economy level of such automobiles shall
7	comply with the requirements under section
8	32904(b)(4), without regard to any transfer of credits
9	from other categories of automobiles described in
10	paragraph (6)(B).
11	"(5) Years available.—A credit may be trans-
12	ferred under this subsection only if it is earned after
13	model year 2010.
14	"(6) Definitions.—In this subsection:
15	"(A) Fleet.—The term 'fleet' means all
16	automobiles manufactured by a manufacturer in
17	a particular model year.
18	"(B) Compliance category of auto-
19	MOBILES.—The term 'compliance category of
20	automobiles' means any of the following 3 cat-
21	egories of automobiles for which compliance is
22	separately calculated under this chapter:
23	"(i) Passenger automobiles manufac-
24	$tured\ domestically.$

1	"(ii) Passenger automobiles not manu-
2	$factured\ domestically.$
3	"(iii) Non-passenger automobiles.".
4	(b) Conforming Amendments.—
5	(1) Limitations.—Section 32902(h) of title 49,
6	United States Code, is amended—
7	(A) in paragraph (1), by striking "and" at
8	$the\ end;$
9	(B) in paragraph (2), by striking the period
10	at the end and inserting "; and"; and
11	(C) by adding at the end the following:
12	"(3) may not consider, when prescribing a fuel
13	economy standard, the trading, transferring, or avail-
14	ability of credits under section 32903.".
15	(2) SEPARATE CALCULATIONS.—Section
16	32904(b)(1)(B) is amended by striking "chapter."
17	and inserting "chapter, except for the purposes of sec-
18	tion 32903.".
19	SEC. 105. CONSUMER INFORMATION.
20	Section 32908 of title 49, United States Code, is
21	amended by adding at the end the following:
22	"(g) Consumer Information.—
23	"(1) Program.—The Secretary of Transpor-
24	tation, in consultation with the Secretary of Energy
25	and the Administrator of the Environmental Protec-

1	tion Agency, shall develop and implement by rule a
2	program to require manufacturers—
3	"(A) to label new automobiles sold in the
4	United States with—
5	"(i) information reflecting an auto-
6	mobile's performance on the basis of criteria
7	that the Administrator shall develop, not
8	later than 18 months after the date of the
9	enactment of the Ten-in-Ten Fuel Economy
10	Act, to reflect fuel economy and greenhouse
11	gas and other emissions over the useful life
12	of the automobile;
13	"(ii) a rating system that would make
14	it easy for consumers to compare the fuel
15	economy and greenhouse gas and other
16	emissions of automobiles at the point of
17	purchase, including a designation of auto-
18	mobiles—
19	"(I) with the lowest greenhouse
20	gas emissions over the useful life of the
21	vehicles; and
22	"(II) the highest fuel economy;
23	and

1 "(iii) a permanent and prominent dis-2 play that an automobile is capable of oper-3 ating on an alternative fuel; and

> "(B) to include in the owner's manual for vehicles capable of operating on alternative fuels information that describes that capability and the benefits of using alternative fuels, including the renewable nature and environmental benefits of using alternative fuels.

"(2) Consumer education.—

"(A) IN GENERAL.—The Secretary of Transportation, in consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency, shall develop and implement by rule a consumer education program to improve consumer understanding of automobile performance described in paragraph (1)(A)(i) and to inform consumers of the benefits of using alternative fuel in automobiles and the location of stations with alternative fuel capacity.

"(B) FUEL SAVINGS EDUCATION CAM-PAIGN.—The Secretary of Transportation shall establish a consumer education campaign on the fuel savings that would be recognized from the

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- purchase of vehicles equipped with thermal management technologies, including energy efficient
 air conditioning systems and glass.
- "(3) Fuel tank labels for alternative 4 5 FUEL AUTOMOBILES.—The Secretary of Transpor-6 tation shall by rule require a label to be attached to 7 the fuel compartment of vehicles capable of operating 8 on alternative fuels, with the form of alternative fuel 9 stated on the label. A label attached in compliance with the requirements of section 32905(h) is deemed 10 11 to meet the requirements of this paragraph.
- "(4) RULEMAKING DEADLINE.—The Secretary of
 Transportation shall issue a final rule under this subsection not later than 42 months after the date of the
 enactment of the Ten-in-Ten Fuel Economy Act.".
- 16 SEC. 106. CONTINUED APPLICABILITY OF EXISTING STAND-
- 17 **ARDS**.
- Nothing in this subtitle, or the amendments made by
- 19 this subtitle, shall be construed to affect the application of
- 20 section 32902 of title 49, United States Code, to passenger
- 21 automobiles or non-passenger automobiles manufactured be-
- 22 fore model year 2011.
- 23 SEC. 107. NATIONAL ACADEMY OF SCIENCES STUDIES.
- 24 (a) In General.—As soon as practicable after the
- 25 date of enactment of this Act, the Secretary of Transpor-

- 1 tation shall execute an agreement with the National Acad-
- 2 emy of Sciences to develop a report evaluating vehicle fuel
- 3 economy standards, including—

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- 4 (1) an assessment of automotive technologies and
 5 costs to reflect developments since the Academy's 2002
 6 report evaluating the corporate average fuel economy
 7 standards was conducted:
 - (2) an analysis of existing and potential technologies that may be used practically to improve automobile and medium-duty and heavy-duty truck fuel economy;
 - (3) an analysis of how such technologies may be practically integrated into the automotive and medium-duty and heavy-duty truck manufacturing process; and
- 16 (4) an assessment of how such technologies may 17 be used to meet the new fuel economy standards under 18 chapter 329 of title 49, United States Code, as 19 amended by this subtitle.
- 20 (b) Report.—The Academy shall submit the report to 21 the Secretary, the Committee on Commerce, Science, and 22 Transportation of the Senate, and the Committee on Energy 23 and Commerce of the House of Representatives, with its
- 24 findings and recommendations not later than 5 years after

1	the date on which the Secretary executes the agreement with
2	$the\ Academy.$
3	(c) QUINQUENNIAL UPDATES.—After submitting the
4	initial report, the Academy shall update the report at 5
5	year intervals thereafter through 2025.
6	SEC. 108. NATIONAL ACADEMY OF SCIENCES STUDY OF ME-
7	DIUM-DUTY AND HEAVY-DUTY TRUCK FUEL
8	ECONOMY.
9	(a) In General.—As soon as practicable after the
10	date of enactment of this Act, the Secretary of Transpor-
11	tation shall execute an agreement with the National Acad-
12	emy of Sciences to develop a report evaluating medium-
13	duty and heavy-duty truck fuel economy standards, includ-
14	ing—
15	(1) an assessment of technologies and costs to
16	evaluate fuel economy for medium-duty and heavy-
17	duty trucks;
18	(2) an analysis of existing and potential tech-
19	nologies that may be used practically to improve me-
20	dium-duty and heavy-duty truck fuel economy;
21	(3) an analysis of how such technologies may be
22	practically integrated into the medium-duty and
23	heavy-duty truck manufacturing process;
24	(4) an assessment of how such technologies may
25	be used to meet fuel economy standards to be pre-

1	scribed under section 32902(l) of title 49, United
2	States Code, as amended by this subtitle; and
3	(5) associated costs and other impacts on the op-
4	eration of medium-duty and heavy-duty trucks, in-
5	cluding congestion.
6	(b) Report.—The Academy shall submit the report to
7	the Secretary, the Committee on Commerce, Science, and
8	Transportation of the Senate, and the Committee on Energy
9	and Commerce of the House of Representatives, with its
10	findings and recommendations not later than 1 year after
11	the date on which the Secretary executes the agreement with
12	$the\ Academy.$
13	SEC. 109. EXTENSION OF FLEXIBLE FUEL VEHICLE CREDIT
14	PROGRAM.
15	(a) In General.—Section 32906 of title 49, United
16	States Code, is amended to read as follows:
17	"§ 32906. Maximum fuel economy increase for alter-
18	native fuel automobiles
19	"(a) In General.—For each of model years 1993
20	through 2019 for each category of automobile (except an
21	electric automobile), the maximum increase in average fuel
22	economy for a manufacturer attributable to dual fueled
23	automobiles is—
24	"(1) 1.2 miles a gallon for each of model years
25	1993 through 2014;

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"(2) 1.0 miles per gallon for model year 2015;
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             "(3) 0.8 miles per gallon for model year 2016;
             "(4) 0.6 miles per gallon for model year 2017;
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 4
             "(5) 0.4 miles per gallon for model year 2018;
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             "(6) 0.2 miles per gallon for model year 2019;
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        and
             "(7) 0 miles per gallon for model years after
 7
 8
        2019.
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         "(b) CALCULATION.—In applying subsection (a), the
   Administrator of the Environmental Protection Agency
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   shall determine the increase in a manufacturer's average
   fuel economy attributable to dual fueled automobiles by sub-
   tracting from the manufacturer's average fuel economy cal-
   culated under section 32905(e) the number equal to what
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   the manufacturer's average fuel economy would be if it were
   calculated by the formula under section 32904(a)(1) by in-
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   cluding as the denominator for each model of dual fueled
   automobiles the fuel economy when the automobiles are op-
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   erated on gasoline or diesel fuel.".
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        (b) Conforming Amendments.—Section 32905 of
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   title 49, United States Code, is amended—
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             (1) in subsection (b), by striking "1993-2010,"
23
        and inserting "1993 through 2019,";
             (2) in subsection (d), by striking "1993-2010,"
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25
        and inserting "1993 through 2019.":
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1	(3) by striking subsections (f) and (g); and
2	(4) by redesignating subsection (h) as subsection
3	(f).
4	(c) B20 Biodiesel Flexible Fuel Credit.—Sec-
5	tion 32905(b)(2) of title 49, United States Code, is amended
6	to read as follows:
7	"(2) .5 divided by the fuel economy—
8	"(A) measured under subsection (a) when
9	operating the model on alternative fuel; or
10	"(B) measured based on the fuel content of
11	B20 when operating the model on B20, which is
12	deemed to contain 0.15 gallon of fuel.".
13	SEC. 110. PERIODIC REVIEW OF ACCURACY OF FUEL ECON-
14	OMY LABELING PROCEDURES.
15	Beginning in December, 2009, and not less often than
16	every 5 years thereafter, the Administrator of the Environ-
17	mental Protection Agency, in consultation with the Sec-
18	retary of Transportation, shall—
19	(1) reevaluate the fuel economy labeling proce-
20	dures described in the final rule published in the Fed-
21	eral Register on December 27, 2006 (71 Fed. Reg.
22	77,872; 40 C.F.R. parts 86 and 600) to determine
23	whether changes in the factors used to establish the la-
24	beling procedures warrant a revision of that process;
25	and

1	(2) submit a report to the Committee on Com-
2	merce, Science, and Transportation of the Senate and
3	the Committee on Energy and Commerce of the House
4	of Representatives that describes the results of the re-
5	evaluation process.
6	SEC. 111. CONSUMER TIRE INFORMATION.
7	(a) In General.—Chapter 323 of title 49, United
8	States Code, is amended by inserting after section 32304
9	the following:
10	"§ 32304A. Consumer tire information
11	"(a) Rulemaking.—
12	"(1) In general.—Not later than 24 months
13	after the date of enactment of the Ten-in-Ten Fuel
14	Economy Act, the Secretary of Transportation shall,
15	after notice and opportunity for comment, promulgate
16	rules establishing a national tire fuel efficiency con-
17	sumer information program for replacement tires de-
18	signed for use on motor vehicles to educate consumers
19	about the effect of tires on automobile fuel efficiency,
20	safety, and durability.
21	"(2) Items included in rule.—The rule-
22	making shall include—
23	"(A) a national tire fuel efficiency rating
24	system for motor vehicle replacement tires to as-

1	sist consumers in making more educated tire
2	purchasing decisions;
3	"(B) requirements for providing informa-
4	tion to consumers, including information at the
5	point of sale and other potential information
6	dissemination methods, including the Internet;
7	"(C) specifications for test methods for
8	manufacturers to use in assessing and rating
9	tires to avoid variation among test equipment
10	and manufacturers; and
11	"(D) a national tire maintenance consumer
12	education program including, information on
13	tire inflation pressure, alignment, rotation, and
14	tread wear to maximize fuel efficiency, safety,
15	and durability of replacement tires.
16	"(3) Applicability.—This section shall apply
17	only to replacement tires covered under section
18	575.104(c) of title 49, Code of Federal Regulations, in
19	effect on the date of the enactment of the Ten-in-Ten
20	Fuel Economy Act.
21	"(b) Consultation.—The Secretary shall consult
22	with the Secretary of Energy and the Administrator of the
23	Environmental Protection Agency on the means of con-
24	veuing tire fuel efficiency consumer information.

- 1 "(c) Report to Congress.—The Secretary shall con-
- 2 duct periodic assessments of the rules promulgated under
- 3 this section to determine the utility of such rules to con-
- 4 sumers, the level of cooperation by industry, and the con-
- 5 tribution to national goals pertaining to energy consump-
- 6 tion. The Secretary shall transmit periodic reports detail-
- 7 ing the findings of such assessments to the Senate Com-
- 8 mittee on Commerce, Science, and Transportation and the
- 9 House of Representatives Committee on Energy and Com-
- 10 merce.
- 11 "(d) Tire Marking.—The Secretary shall not require
- 12 permanent labeling of any kind on a tire for the purpose
- 13 of tire fuel efficiency information.
- 14 "(e) Application With State and Local Laws and
- 15 Regulations.—Nothing in this section prohibits a State
- 16 or political subdivision thereof from enforcing a law or reg-
- 17 ulation on tire fuel efficiency consumer information that
- 18 was in effect on January 1, 2006. After a requirement pro-
- 19 mulgated under this section is in effect, a State or political
- 20 subdivision thereof may adopt or enforce a law or regula-
- 21 tion on tire fuel efficiency consumer information enacted
- 22 or promulgated after January 1, 2006, if the requirements
- 23 of that law or regulation are identical to the requirement
- 24 promulgated under this section. Nothing in this section
- 25 shall be construed to preempt a State or political subdivi-

- 1 sion thereof from regulating the fuel efficiency of tires (in-
- 2 cluding establishing testing methods for determining com-
- 3 pliance with such standards) not otherwise preempted
- 4 under this chapter.".
- 5 (b) Enforcement.—Section 32308 of title 49, United
- 6 States Code, is amended—
- 7 (1) by redesignating subsections (c) and (d) as
- 8 subsections (d) and (e), respectively; and
- 9 (2) by inserting after subsection (b) the fol-
- 10 lowing:
- 11 "(c) Section 32304A.—Any person who fails to com-
- 12 ply with the national tire fuel efficiency information pro-
- 13 gram under section 32304A is liable to the United States
- 14 Government for a civil penalty of not more than \$50,000
- 15 for each violation.".
- 16 (c) Conforming Amendment.—The chapter analysis
- 17 for chapter 323 of title 49, United States Code, is amended
- 18 by inserting after the item relating to section 32304 the fol-
- 19 lowing:

"32304A. Consumer tire information".

- 20 SEC. 112. USE OF CIVIL PENALTIES FOR RESEARCH AND DE-
- 21 **VELOPMENT.**
- 22 Section 32912 of title 49, United States Code, is
- 23 amended by adding at the end the following:
- 24 "(e) Use of Civil Penalties.—For fiscal year 2008
- 25 and each fiscal year thereafter, from the total amount de-

- 1 posited in the general fund of the Treasury during the pre-
- 2 ceding fiscal year from fines, penalties, and other funds ob-
- 3 tained through enforcement actions conducted pursuant to
- 4 this section (including funds obtained under consent de-
- 5 crees), the Secretary of the Treasury, subject to the avail-
- 6 ability of appropriations, shall—

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"(1) transfer 50 percent of such total amount to the account providing appropriations to the Secretary of Transportation for the administration of this chapter, which shall be used by the Secretary to support

rulemaking under this chapter; and

- "(2) transfer 50 percent of such total amount to
 the account providing appropriations to the Secretary
 of Transportation for the administration of this chapter, which shall be used by the Secretary to carry out
 a program to make grants to manufacturers for retooling, reequipping, or expanding existing manufacturing facilities in the United States to produce ad-
- 19 vanced technology vehicles and components.".
- 20 SEC. 113. EXEMPTION FROM SEPARATE CALCULATION RE-
- 21 **QUIREMENT.**
- 22 (a) Repeal.—Paragraphs (6), (7), and (8) of section
- 23 32904(b) of title 49, United States Code, are repealed.
- 24 (b) Effect of Repeal on Existing Exemptions.—
- 25 Any exemption granted under section 32904(b)(6) of title

1	49, United States Code, prior to the date of the enactment
2	of this Act shall remain in effect subject to its terms through
3	model year 2013.
4	(c) Accrual and Use of Credits.—Any manufac-
5	turer holding an exemption under section 32904(b)(6) of
6	title 49, United States Code, prior to the date of the enact-
7	ment of this Act may accrue and use credits under sections
8	32903 and 32905 of such title begining with model year
9	2011.
10	Subtitle B—Improved Vehicle
11	Technology
12	SEC. 131. TRANSPORTATION ELECTRIFICATION.
13	(a) Definitions.—In this section:
14	(1) Administrator.—The term "Adminis-
15	trator" means the Administrator of the Environ-
16	mental Protection Agency.
17	(2) Battery.—The term "battery" means an
18	electrochemical energy storage system powered di-
19	rectly by electrical current.
20	(3) Electric transportation technology.—
21	The term "electric transportation technology"
22	means—
23	(A) technology used in vehicles that use an
24	electric motor for all or part of the motive power
25	of the vehicles, including battery electric, hybrid

1	electric, plug-in hybrid electric, fuel cell, and
2	plug-in fuel cell vehicles, or rail transportation;
3	or
4	(B) equipment relating to transportation or
5	mobile sources of air pollution that use an elec-
6	tric motor to replace an internal combustion en-
7	gine for all or part of the work of the equipment,
8	including—
9	(i) corded electric equipment linked to
10	transportation or mobile sources of air pol-
11	lution; and
12	(ii) electrification technologies at air-
13	ports, ports, truck stops, and material-han-
14	$dling\ facilities.$
15	(4) Nonroad vehicle.—The term "nonroad ve-
16	hicle" means a vehicle—
17	(A) powered—
18	(i) by a nonroad engine, as that term
19	is defined in section 216 of the Clean Air
20	Act (42 U.S.C. 7550); or
21	(ii) fully or partially by an electric
22	motor powered by a fuel cell, a battery, or
23	an off-board source of electricity; and
24	(B) that is not a motor vehicle or a vehicle
25	used solely for competition.

1	(5) Plug-in electric drive vehicle.—The
2	term "plug-in electric drive vehicle" means a vehicle
3	that—
4	(A) draws motive power from a battery
5	with a capacity of at least 4 kilowatt-hours;
6	(B) can be recharged from an external
7	source of electricity for motive power; and
8	(C) is a light-, medium-, or heavy-duty
9	motor vehicle or nonroad vehicle (as those terms
10	are defined in section 216 of the Clean Air Act
11	(42 U.S.C. 7550)).
12	(6) Qualified electric transportation
13	PROJECT.—The term "qualified electric transpor-
14	tation project" means an electric transportation tech-
15	nology project that would significantly reduce emis-
16	sions of criteria pollutants, greenhouse gas emissions,
17	and petroleum, including—
18	(A) shipside or shoreside electrification for
19	vessels;
20	(B) truck-stop electrification;
21	(C) electric truck refrigeration units;
22	(D) battery powered auxiliary power units
23	for trucks;
24	(E) electric airport ground support equip-
25	ment:

1	(F) electric material and cargo handling
2	equipment;
3	(G) electric or dual-mode electric rail;
4	(H) any distribution upgrades needed to
5	supply electricity to the project; and
6	(I) any ancillary infrastructure, including
7	panel upgrades, battery chargers, in-situ trans-
8	formers, and trenching.
9	(b) Plug-in Electric Drive Vehicle Program.—
10	(1) Establishment.—The Secretary shall estab-
11	lish a competitive program to provide grants on a
12	cost-shared basis to State governments, local govern-
13	ments, metropolitan transportation authorities, air
14	pollution control districts, private or nonprofit enti-
15	ties, or combinations of those governments, authori-
16	ties, districts, and entities, to carry out 1 or more
17	projects to encourage the use of plug-in electric drive
18	vehicles or other emerging electric vehicle technologies,
19	as determined by the Secretary.
20	(2) Administration.—The Secretary shall, in
21	consultation with the Secretary of Transportation
22	and the Administrator, establish requirements for ap-
23	plications for grants under this section, including re-
24	porting of data to be summarized for dissemination

to grantees and the public, including safety, vehicle,

25

1	and component performance, and vehicle and compo-
2	nent life cycle costs.
3	(3) Priority.—In making awards under this
4	subsection, the Secretary shall—
5	(A) give priority consideration to applica-
6	tions that—
7	(i) encourage early widespread use of
8	vehicles described in paragraph (1); and
9	(ii) are likely to make a significant
10	contribution to the advancement of the pro-
11	duction of the vehicles in the United States;
12	and
13	(B) ensure, to the maximum extent prac-
14	ticable, that the program established under this
15	subsection includes a variety of applications,
16	manufacturers, and end-uses.
17	(4) Reporting.—The Secretary shall require a
18	grant recipient under this subsection to submit to the
19	Secretary, on an annual basis, data relating to safety,
20	vehicle performance, life cycle costs, and emissions of
21	vehicles demonstrated under the grant, including
22	emissions of greenhouse gases.
23	(5) Cost sharing.—Section 988 of the Energy
24	Policy Act of 2005 (42 U.S.C. 16352) shall apply to
25	a grant made under this subsection.

1	(6) Authorization of Appropriations.—
2	There is authorized to be appropriated to carry out
3	this subsection \$90,000,000 for each of fiscal years
4	2008 through 2012, of which not less than ½ of the
5	total amount appropriated shall be available each fis-
6	cal year to make grants to local and municipal gov-
7	ernments.
8	(c) Near-Term Transportation Sector Elec-
9	TRIFICATION PROGRAM.—
10	(1) In general.—Not later than 1 year after
11	the date of enactment of this Act, the Secretary, in
12	consultation with the Secretary of Transportation
13	and the Administrator, shall establish a program to
14	provide grants for the conduct of qualified electric
15	$transportation\ projects.$
16	(2) Priority.—In providing grants under this
17	subsection, the Secretary shall give priority to large-
18	scale projects and large-scale aggregators of projects.
19	(3) Cost sharing.—Section 988 of the Energy
20	Policy Act of 2005 (42 U.S.C. 16352) shall apply to
21	a grant made under this subsection.
22	(4) Authorization of Appropriations.—
23	There is authorized to be appropriated to carry out
24	this subsection \$95,000,000 for each of fiscal years

25

2008 through 2013.

1	(d) Education Program.—
2	(1) In general.—The Secretary shall develop of
3	nationwide electric drive transportation technology
4	education program under which the Secretary shall
5	provide—
6	(A) teaching materials to secondary schools
7	and high schools; and
8	(B) assistance for programs relating to elec-
9	tric drive system and component engineering to
10	institutions of higher education.
11	(2) Electric vehicle competition.—The pro-
12	gram established under paragraph (1) shall include o
13	plug-in hybrid electric vehicle competition for institu
14	tions of higher education, which shall be known as the
15	"Dr. Andrew Frank Plug-In Electric Vehicle Com
16	petition".
17	(3) Engineers.—In carrying out the program
18	established under paragraph (1), the Secretary shall
19	provide financial assistance to institutions of higher
20	education to create new, or support existing, degree
21	programs to ensure the availability of trained elec-
22	trical and mechanical engineers with the skills nec
23	essary for the advancement of—
24	(A) plua-in electric drive vehicles: and

1	(B) other forms of electric drive transpor-
2	tation technology vehicles.
3	(4) Authorization of Appropriations.—
4	There are authorized to be appropriated such sums as
5	may be necessary to carry out this subsection.
6	SEC. 132. DOMESTIC MANUFACTURING CONVERSION GRANT
7	PROGRAM.
8	Section 712 of the Energy Policy Act of 2005 (42
9	U.S.C. 16062) is amended to read as follows:
10	"SEC. 712. DOMESTIC MANUFACTURING CONVERSION
11	GRANT PROGRAM.
12	"(a) Program.—
13	"(1) In general.—The Secretary shall establish
14	a program to encourage domestic production and
15	sales of efficient hybrid and advanced diesel vehicles
16	and components of those vehicles.
17	"(2) Inclusions.—The program shall include
18	grants to automobile manufacturers and suppliers
19	and hybrid component manufacturers to encourage
20	domestic production of efficient hybrid, plug-in elec-
21	tric hybrid, plug-in electric drive, and advanced die-
22	sel vehicles.
23	"(3) Priority shall be given to the
24	refurbishment or retooling of manufacturing facilities

1	that have recently ceased operation or will cease oper-
2	ation in the near future.
3	"(b) Coordination With State and Local Pro-
4	GRAMS.—The Secretary may coordinate implementation of
5	this section with State and local programs designed to ac-
6	complish similar goals, including the retention and retrain-
7	ing of skilled workers from the manufacturing facilities, in-
8	cluding by establishing matching grant arrangements.
9	"(c) Authorization of Appropriations.—There are
10	authorized to be appropriated to the Secretary such sums
11	as may be necessary to carry out this section.".
12	SEC. 133. INCLUSION OF ELECTRIC DRIVE IN ENERGY POL-
13	ICY ACT OF 1992.
14	Section 508 of the Energy Policy Act of 1992 (42
15	U.S.C. 13258) is amended—
16	(1) by redesignating subsections (a) through (d)
17	as subsections (b) through (e), respectively;
18	(2) by inserting before subsection (b) the fol-
19	lowing:
20	"(a) Definitions.—In this section:
21	"(1) Fuel cell electric vehicle.—The term
22	'fuel cell electric vehicle' means an on-road or
23	nonroad vehicle that uses a fuel cell (as defined in sec-
24	tion 803 of the Spark M. Matsunaga Hydrogen Act
25	of 2005 (42 U.S.C. 16152)).

1	"(2) Hybrid electric vehicle.—The term
2	'hybrid electric vehicle' means a new qualified hybrid
3	motor vehicle (as defined in section $30B(d)(3)$ of the
4	Internal Revenue Code of 1986).
5	"(3) Medium- or heavy-duty electric vehi-
6	CLE.—The term 'medium- or heavy-duty electric vehi-
7	cle' means an electric, hybrid electric, or plug-in hy-
8	brid electric vehicle with a gross vehicle weight of
9	more than 8,501 pounds.
10	"(4) Neighborhood electric vehicle.—The
11	term 'neighborhood electric vehicle' means a 4-wheeled
12	on-road or nonroad vehicle that—
13	"(A) has a top attainable speed in 1 mile
14	of more than 20 mph and not more than 25 mph
15	on a paved level surface; and
16	"(B) is propelled by an electric motor and
17	on-board, rechargeable energy storage system that
18	is rechargeable using an off-board source of elec-
19	tricity.
20	"(5) Plug-in electric drive vehicle.—The
21	term 'plug-in electric drive vehicle' means a vehicle
22	that—
23	"(A) draws motive power from a battery
24	with a canacity of at least 4 kilowatt-hours:

1	"(B) can be recharged from an external
2	source of electricity for motive power; and
3	"(C) is a light-, medium-, or heavy duty
4	motor vehicle or nonroad vehicle (as those terms
5	are defined in section 216 of the Clean Air Act
6	(42 U.S.C. 7550).";
7	(3) in subsection (b) (as redesignated by para-
8	graph (1))—
9	(A) by striking "The Secretary" and insert-
10	ing the following:
11	"(1) Allocation.—The Secretary"; and
12	(B) by adding at the end the following:
13	"(2) Electric vehicles.—Not later than Jan-
14	uary 31, 2009, the Secretary shall—
15	"(A) allocate credit in an amount to be de-
16	termined by the Secretary for—
17	"(i) acquisition of—
18	"(I) a hybrid electric vehicle;
19	"(II) a plug-in electric drive vehi-
20	cle;
21	"(III) a fuel cell electric vehicle;
22	"(IV) a neighborhood electric vehi-
23	$cle;\ or$
24	"(V) a medium- or heavy-duty
25	electric vehicle; and

1	"(ii) investment in qualified alter-
2	native fuel infrastructure or nonroad equip-
3	ment, as determined by the Secretary; and
4	"(B) allocate more than 1, but not to exceed
5	5, credits for investment in an emerging tech-
6	nology relating to any vehicle described in sub-
7	paragraph (A) to encourage—
8	"(i) a reduction in petroleum demand;
9	"(ii) technological advancement; and
10	"(iii) a reduction in vehicle emis-
11	sions.";
12	(4) in subsection (c) (as redesignated by para-
13	graph (1)), by striking "subsection (a)" and inserting
14	"subsection (b)"; and
15	(5) by adding at the end the following:
16	"(f) Authorization of Appropriations.—There are
17	authorized to be appropriated such sums as are necessary
18	to carry out this section for each of fiscal years 2008
19	through 2013.".
20	SEC. 134. LOAN GUARANTEES FOR FUEL-EFFICIENT AUTO-
21	MOBILE PARTS MANUFACTURERS.
22	(a) In General.—Section 712(a)(2) of the Energy
23	Policy Act of 2005 (42 U.S.C. 16062(a)(2)) (as amended
24	by section 132) is amended by inserting "and loan guaran-
25	tees under section 1703" after "grants".

1	(b) Conforming Amendment.—Section 1703(b) of
2	the Energy Policy Act of 2005 (42 U.S.C. 16513(b)) is
3	amended by striking paragraph (8) and inserting the fol-
4	lowing:
5	"(8) Production facilities for the manufacture of
6	fuel efficient vehicles or parts of those vehicles, includ-
7	ing electric drive vehicles and advanced diesel vehi-
8	cles.".
9	SEC. 135. ADVANCED BATTERY LOAN GUARANTEE PRO-
10	GRAM.
11	(a) Establishment of Program.—The Secretary
12	shall establish a program to provide guarantees of loans by
13	private institutions for the construction of facilities for the
14	manufacture of advanced vehicle batteries and battery sys-
15	tems that are developed and produced in the United States,
16	including advanced lithium ion batteries and hybrid elec-
17	trical system and component manufacturers and software
18	designers.
19	(b) Requirements.—The Secretary may provide a
20	loan guarantee under subsection (a) to an applicant if—
21	(1) without a loan guarantee, credit is not avail-
22	able to the applicant under reasonable terms or condi-
23	tions sufficient to finance the construction of a facil-
24	ity described in subsection (a);

1	(2) the prospective earning power of the appli-
2	cant and the character and value of the security
3	pledged provide a reasonable assurance of repayment
4	of the loan to be guaranteed in accordance with the
5	terms of the loan; and
6	(3) the loan bears interest at a rate determined
7	by the Secretary to be reasonable, taking into account
8	the current average yield on outstanding obligations
9	of the United States with remaining periods of matu-
10	rity comparable to the maturity of the loan.
11	(c) Criteria.—In selecting recipients of loan guaran-
12	tees from among applicants, the Secretary shall give pref-
13	erence to proposals that—
14	(1) meet all applicable Federal and State per-
15	mitting requirements;
16	(2) are most likely to be successful; and
17	(3) are located in local markets that have the
18	greatest need for the facility.
19	(d) Maturity.—A loan guaranteed under subsection
20	(a) shall have a maturity of not more than 20 years.
21	(e) Terms and Conditions.—The loan agreement for
22	a loan guaranteed under subsection (a) shall provide that
23	no provision of the loan agreement may be amended or

 $24\ \ waived\ without\ the\ consent\ of\ the\ Secretary.$

- 1 (f) Assurance of Repayment.—The Secretary shall
- 2 require that an applicant for a loan guarantee under sub-
- 3 section (a) provide an assurance of repayment in the form
- 4 of a performance bond, insurance, collateral, or other means
- 5 acceptable to the Secretary in an amount equal to not less
- 6 than 20 percent of the amount of the loan.
- 7 (g) Guarantee Fee.—The recipient of a loan guar-
- 8 antee under subsection (a) shall pay the Secretary an
- 9 amount determined by the Secretary to be sufficient to cover
- 10 the administrative costs of the Secretary relating to the loan
- 11 guarantee.
- 12 (h) Full Faith and Credit.—The full faith and
- 13 credit of the United States is pledged to the payment of
- 14 all guarantees made under this section. Any such guarantee
- 15 made by the Secretary shall be conclusive evidence of the
- 16 eligibility of the loan for the guarantee with respect to prin-
- 17 cipal and interest. The validity of the guarantee shall be
- 18 incontestable in the hands of a holder of the guaranteed
- 19 *loan*.
- 20 (i) Reports.—Until each guaranteed loan under this
- 21 section has been repaid in full, the Secretary shall annually
- 22 submit to Congress a report on the activities of the Sec-
- 23 retary under this section.

1	(j) Authorization of Appropriations.—There are
2	authorized to be appropriated such sums as are necessary
3	to carry out this section.
4	(k) Termination of Authority.—The authority of
5	the Secretary to issue a loan guarantee under subsection
6	(a) terminates on the date that is 10 years after the date
7	of enactment of this Act.
8	SEC. 136. ADVANCED TECHNOLOGY VEHICLES MANUFAC-
9	TURING INCENTIVE PROGRAM.
10	(a) Definitions.—In this section:
11	(1) Advanced technology vehicle.—The
12	term "advanced technology vehicle" means a light
13	duty vehicle that meets—
14	(A) the Bin 5 Tier II emission standard es-
15	tablished in regulations issued by the Adminis-
16	trator of the Environmental Protection Agency
17	under section 202(i) of the Clean Air Act (42
18	U.S.C. 7521(i)), or a lower-numbered Bin emis-
19	sion standard;
20	(B) any new emission standard in effect for
21	fine particulate matter prescribed by the Admin-
22	istrator under that Act (42 U.S.C. 7401 et seq.);
23	and

1	(C) at least 125 percent of the average base
2	year combined fuel economy for vehicles with
3	substantially similar attributes.
4	(2) Combined fuel economy.—The term "com-
5	bined fuel economy" means—
6	(A) the combined city/highway miles per
7	gallon values, as reported in accordance with sec-
8	tion 32904 of title 49, United States Code; and
9	(B) in the case of an electric drive vehicle
10	with the ability to recharge from an off-board
11	source, the reported mileage, as determined in a
12	manner consistent with the Society of Auto-
13	motive Engineers recommended practice for that
14	configuration or a similar practice recommended
15	by the Secretary.
16	(3) Engineering integration costs.—The
17	term "engineering integration costs" includes the cost
18	of engineering tasks relating to—
19	(A) incorporating qualifying components
20	into the design of advanced technology vehicles;
21	and
22	(B) designing tooling and equipment and
23	developing manufacturing processes and mate-
24	rial suppliers for production facilities that

1	produce qualifying components or advanced tech-
2	nology vehicles.
3	(4) Qualifying components.—The term
4	"qualifying components" means components that the
5	Secretary determines to be—
6	(A) designed for advanced technology vehi-
7	cles; and
8	(B) installed for the purpose of meeting the
9	performance requirements of advanced technology
10	vehicles.
11	(b) Advanced Vehicles Manufacturing Facil-
12	ITY.—The Secretary shall provide facility funding awards
13	under this section to automobile manufacturers and compo-
14	nent suppliers to pay not more than 30 percent of the cost
15	of—
16	(1) reequipping, expanding, or establishing a
17	manufacturing facility in the United States to
18	produce—
19	(A) qualifying advanced technology vehicles;
20	or
21	(B) qualifying components; and
22	(2) engineering integration performed in the
23	United States of qualifying vehicles and qualifying
24	components.

1	(c) Period of Availability.—An award under sub-
2	section (b) shall apply to—
3	(1) facilities and equipment placed in service be-
4	fore December 30, 2020; and
5	(2) engineering integration costs incurred during
6	the period beginning on the date of enactment of this
7	Act and ending on December 30, 2020.
8	(d) Direct Loan Program.—
9	(1) In General.—Not later than 1 year after
10	the date of enactment of this Act, and subject to the
11	availability of appropriated funds, the Secretary shall
12	carry out a program to provide a total of not more
13	than \$25,000,000,000 in loans to eligible individuals
14	and entities (as determined by the Secretary) for the
15	costs of activities described in subsection (b).
16	(2) Application.—An applicant for a loan
17	under this subsection shall submit to the Secretary an
18	application at such time, in such manner, and con-
19	taining such information as the Secretary may re-
20	quire, including a written assurance that—
21	(A) all laborers and mechanics employed by
22	contractors or subcontractors during construc-
23	tion, alteration, or repair that is financed, in
24	whole or in part, by a loan under this section
25	shall be paid wages at rates not less than those

1	prevailing on similar construction in the local-
2	ity, as determined by the Secretary of Labor in
3	accordance with sections 3141-3144, 3146, and
4	3147 of title 40, United States Code; and
5	(B) the Secretary of Labor shall, with re-
6	spect to the labor standards described in this
7	paragraph, have the authority and functions set
8	forth in Reorganization Plan Numbered 14 of
9	1950 (5 U.S.C. App.) and section 3145 of title
10	40, United States Code.
11	(3) Selection of eligible projects.—The
12	Secretary shall select eligible projects to receive loans
13	under this subsection in cases in which, as determined
14	by the Secretary, the award recipient—
15	(A) is financially viable without the receipt
16	of additional Federal funding associated with the
17	$proposed\ project;$
18	(B) will provide sufficient information to
19	the Secretary for the Secretary to ensure that the
20	qualified investment is expended efficiently and
21	effectively; and
22	(C) has met such other criteria as may be
23	established and published by the Secretary.
24	(4) Rates, terms, and repayment of
25	LOANS.—A loan provided under this subsection—

1	(A) shall have an interest rate that, as of
2	the date on which the loan is made, is equal to
3	the cost of funds to the Department of the Treas-
4	ury for obligations of comparable maturity;
5	(B) shall have a term equal to the lesser
6	of—
7	(i) the projected life, in years, of the el-
8	igible project to be carried out using funds
9	from the loan, as determined by the Sec-
10	retary; and
11	(ii) 25 years;
12	(C) may be subject to a deferral in repay-
13	ment for not more than 5 years after the date on
14	which the eligible project carried out using funds
15	from the loan first begins operations, as deter-
16	mined by the Secretary; and
17	(D) shall be made by the Federal Financing
18	Bank.
19	(e) Improvement.—The Secretary shall issue regula-
20	tions that require that, in order for an automobile manufac-
21	turer to be eligible for an award or loan under this section
22	during a particular year, the adjusted average fuel economy
23	of the manufacturer for light duty vehicles produced by the
24	manufacturer during the most recent year for which data
25	are available shall be not less than the average fuel economy

1	for all light duty vehicles of the manufacturer for model
2	year 2005. In order to determine fuel economy baselines for
3	eligibility of a new manufacturer or a manufacturer that
4	has not produced previously produced equivalent vehicles,
5	the Secretary may substitute industry averages.
6	(f) FEES.—Administrative costs shall be no more than
7	\$100,000 or 10 basis point of the loan.
8	(g) Priority.—The Secretary shall, in making
9	awards or loans to those manufacturers that have existing
10	facilities, give priority to those facilities that are oldest or
11	have been in existence for at least 20 years. Such facilities
12	can currently be sitting idle.
13	(h) Set Aside for Small Automobile Manufac-
14	Turers and Component Suppliers.—
15	(1) Definition of covered firm.—In this sub-
16	section, the term "covered firm" means a firm that—
17	(A) employs less than 500 individuals; and
18	(B) manufactures automobiles or compo-
19	nents of automobiles.
20	(2) Set aside.—Of the amount of funds that
21	are used to provide awards for each fiscal year under
22	subsection (b), the Secretary shall use not less than 10
23	percent to provide awards to covered firms or con-
24	sortia led by a covered firm.

1	(i) Authorization of Appropriations.—There are
2	authorized to be appropriated such sums as are necessary
3	to carry out this section for each of fiscal years 2008
4	through 2012.
5	Subtitle C—Federal Vehicle Fleets
6	SEC. 141. FEDERAL VEHICLE FLEETS.
7	Section 303 of the Energy Policy Act of 1992 (42
8	U.S.C. 13212) is amended—
9	(1) by redesignating subsection (f) as subsection
10	(g); and
11	(2) by inserting after subsection (e) the following
12	new subsection:
13	"(f) Vehicle Emission Requirements.—
14	"(1) Definitions.—In this subsection:
15	"(A) FEDERAL AGENCY.—The term 'Federal
16	agency' does not include any office of the legisla-
17	tive branch, except that it does include the House
18	of Representatives with respect to an acquisition
19	described in paragraph (2)(C).
20	"(B) Medium duty passenger vehi-
21	CLE.—The term 'medium duty passenger vehicle'
22	has the meaning given that term section 523.2 of
23	title 49 of the Code of Federal Regulations, as in
24	effect on the date of enactment of this paragraph.

"(C) Member's representational al-1 2 LOWANCE.—The term 'Member's Representational Allowance' means the allowance described 3 4 in section 101(a) of the House of Representatives 5 Administrative Reform Technical Corrections 6 Act (2 U.S.C. 57b(a))."(2) Prohibition.— 7 8 "(A) In General.—Except as provided in 9 subparagraph (B), no Federal agency shall ac-10 quire a light duty motor vehicle or medium duty 11 passenger vehicle that is not a low greenhouse 12 gas emitting vehicle. 13 "(B) Exception.—The prohibition in sub-14 paragraph (A) shall not apply to acquisition of 15 a vehicle if the head of the agency certifies in writing, in a separate certification for each indi-16 17 vidual vehicle purchased, either— 18 "(i) that no low greenhouse gas emit-19 ting vehicle is available to meet the func-20 tional needs of the agency and details in 21 writing the functional needs that could not be met with a low greenhouse gas emitting 22 23 vehicle; or

1	"(ii) that the agency has taken specific
2	alternative more cost-effective measures to
3	reduce petroleum consumption that—
4	"(I) have reduced a measured and
5	verified quantity of greenhouse gas
6	emissions equal to or greater than the
7	quantity of greenhouse gas reductions
8	that would have been achieved through
9	acquisition of a low greenhouse gas
10	emitting vehicle over the lifetime of the
11	vehicle; or
12	"(II) will reduce each year a
13	measured and verified quantity of
14	greenhouse gas emissions equal to or
15	greater than the quantity of greenhouse
16	gas reductions that would have been
17	achieved each year through acquisition
18	of a low greenhouse gas emitting vehi-
19	cle.
20	"(C) Special rule for vehicles pro-
21	VIDED BY FUNDS CONTAINED IN MEMBERS' REP-
22	RESENTATIONAL ALLOWANCE.—This paragraph
23	shall apply to the acquisition of a light duty
24	motor vehicle or medium duty passenger vehicle
25	using any portion of a Member's Representa-

tional Allowance, including an acquisition under
 a long-term lease.

"(3) GUIDANCE.—

- "(A) In General.—Each year, the Administrator of the Environmental Protection Agency shall issue guidance identifying the makes and model numbers of vehicles that are low greenhouse gas emitting vehicles.
- "(B) Consideration.—In identifying vehicles under subparagraph (A), the Administrator shall take into account the most stringent standards for vehicle greenhouse gas emissions applicable to and enforceable against motor vehicle manufacturers for vehicles sold anywhere in the United States.
- "(C) REQUIREMENT.—The Administrator shall not identify any vehicle as a low green-house gas emitting vehicle if the vehicle emits greenhouse gases at a higher rate than such standards allow for the manufacturer's fleet average grams per mile of carbon dioxide-equivalent emissions for that class of vehicle, taking into account any emissions allowances and adjustment factors such standards provide."

1	SEC. 142. FEDERAL FLEET CONSERVATION REQUIREMENTS.
2	Part J of title III of the Energy Policy and Conserva-
3	tion Act (42 U.S.C. 6374 et seq.) is amended by adding
4	at the end the following:
5	"SEC. 400FF. FEDERAL FLEET CONSERVATION REQUIRE-
6	MENTS.
7	"(a) Mandatory Reduction in Petroleum Con-
8	SUMPTION.—
9	"(1) In general.—Not later than 18 months
10	after the date of enactment of this section, the Sec-
11	retary shall issue regulations for Federal fleets subject
12	to section 400AA to require that, beginning in fiscal
13	year 2010, each Federal agency shall reduce petro-
14	leum consumption and increase alternative fuel con-
15	sumption each year by an amount necessary to meet
16	the goals described in paragraph (2).
17	"(2) GOALS.—The goals of the requirements
18	under paragraph (1) are that not later than October
19	1, 2015, and for each year thereafter, each Federal
20	agency shall achieve at least a 20 percent reduction
21	in annual petroleum consumption and a 10 percent
22	increase in annual alternative fuel consumption, as
23	calculated from the baseline established by the Sec-
24	retary for fiscal year 2005.
25	"(3) Milestones.—The Secretary shall include
26	in the regulations described in paragraph (1)—

1	"(A) interim numeric milestones to assess
2	annual agency progress towards accomplishing
3	the goals described in that paragraph; and
4	"(B) a requirement that agencies annually
5	report on progress towards meeting each of the
6	milestones and the 2015 goals.
7	"(b) PLAN.—
8	"(1) Requirement.—
9	"(A) In general.—The regulations under
10	subsection (a) shall require each Federal agency
11	to develop a plan, and implement the measures
12	specified in the plan by dates specified in the
13	plan, to meet the required petroleum reduction
14	levels and the alternative fuel consumption in-
15	creases, including the milestones specified by the
16	Secretary.
17	"(B) Inclusions.—The plan shall—
18	"(i) identify the specific measures the
19	agency will use to meet the requirements of
20	subsection (a)(2); and
21	"(ii) quantify the reductions in petro-
22	leum consumption or increases in alter-
23	native fuel consumption projected to be
24	achieved by each measure each year.

1	"(2) Measures.—The plan may allow an agen-
2	cy to meet the required petroleum reduction level
3	through—
4	"(A) the use of alternative fuels;
5	"(B) the acquisition of vehicles with higher
6	fuel economy, including hybrid vehicles, neigh-
7	borhood electric vehicles, electric vehicles, and
8	plug-in hybrid vehicles if the vehicles are com-
9	mercially available;
10	"(C) the substitution of cars for light trucks;
11	"(D) an increase in vehicle load factors;
12	"(E) a decrease in vehicle miles traveled;
13	"(F) a decrease in fleet size; and
14	"(G) other measures.".
15	TITLE II—ENERGY SECURITY
16	THROUGH INCREASED PRO-
17	DUCTION OF BIOFUELS
18	$Subtitle\ A-Renewable\ Fuel$
19	Standard
20	SEC. 201. DEFINITIONS.
21	Section 211(o)(1) of the Clean Air Act (42 U.S.C.
22	7545(o)) is amended to read as follows:
23	"(1) Definitions.—In this section:
24	"(A) Additional renewable fuel.—The
25	term 'additional renewable fuel' means fuel that

1	is produced from renewable biomass and that is
2	used to replace or reduce the quantity of fossil
3	fuel present in home heating oil or jet fuel.
4	"(B) Advanced biofuel.—
5	"(i) In general.—The term 'advanced
6	biofuel' means renewable fuel, other than
7	ethanol derived from corn starch, that has
8	lifecycle greenhouse gas emissions, as deter-
9	mined by the Administrator, after notice
10	and opportunity for comment, that are at
11	least 50 percent less than baseline lifecycle
12	greenhouse gas emissions.
13	"(ii) Inclusions.—The types of fuels
14	eligible for consideration as 'advanced
15	biofuel' may include any of the following:
16	"(I) Ethanol derived from cel-
17	lulose, hemicellulose, or lignin.
18	"(II) Ethanol derived from sugar
19	or starch (other than corn starch).
20	"(III) Ethanol derived from waste
21	material, including crop residue, other
22	vegetative waste material, animal
23	waste, and food waste and yard waste.
24	"(IV) Biomass-based diesel.

1	"(V) Biogas (including landfill
2	gas and sewage waste treatment gas)
3	produced through the conversion of or-
4	ganic matter from renewable biomass.
5	"(VI) Butanol or other alcohols
6	produced through the conversion of or-
7	ganic matter from renewable biomass.
8	"(VII) Other fuel derived from cel-
9	$lulosic\ biomass.$
10	"(C) Baseline lifecycle greenhouse
11	GAS EMISSIONS.—The term baseline lifecycle
12	greenhouse gas emissions' means the average
13	lifecycle greenhouse gas emissions, as determined
14	by the Administrator, after notice and oppor-
15	tunity for comment, for gasoline or diesel
16	(whichever is being replaced by the renewable
17	fuel) sold or distributed as transportation fuel in
18	2005.
19	"(D) BIOMASS-BASED DIESEL.—The term
20	'biomass-based diesel' means renewable fuel that
21	is biodiesel as defined in section 312(f) of the
22	Energy Policy Act of 1992 (42 U.S.C. 13220(f))
23	and that has lifecycle greenhouse gas emissions,
24	as determined by the Administrator, after notice
25	and opportunity for comment, that are at least

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50 percent less than the baseline lifecycle greenhouse gas emissions. Notwithstanding the preceding sentence, renewable fuel derived from coprocessing biomass with a petroleum feedstock
shall be advanced biofuel if it meets the requirements of subparagraph (B), but is not biomassbased diesel.

- "(E) CELLULOSIC BIOFUEL.—The term 'cellulosic biofuel' means renewable fuel derived from any cellulose, hemicellulose, or lignin that is derived from renewable biomass and that has lifecycle greenhouse gas emissions, as determined by the Administrator, that are at least 60 percent less than the baseline lifecycle greenhouse gas emissions.
- "(F) Conventional biofuel' means renewable fuel that is ethanol derived from corn starch.
- "(G) Greenhouse gas.—The term 'greengas' carbondioxide, house means hydrofluorocarbons, methane, nitrousoxide. perfluorocarbons, sulfur hexafluoride. The Administrator mayincludeother anyanthropogenically-emitted gas that is determined

I	by the Administrator, after notice and comment,
2	to contribute to global warming.
3	"(H) Lifecycle greenhouse gas emis-
4	SIONS.—The term 'lifecycle greenhouse gas emis-
5	sions' means the aggregate quantity of green-
6	house gas emissions (including direct emissions
7	and significant indirect emissions such as sig-
8	nificant emissions from land use changes), as de-
9	termined by the Administrator, related to the full
10	fuel lifecycle, including all stages of fuel and
11	feedstock production and distribution, from feed-
12	stock generation or extraction through the dis-
13	tribution and delivery and use of the finished
14	fuel to the ultimate consumer, where the mass
15	values for all greenhouse gases are adjusted to ac-
16	count for their relative global warming potential.
17	"(I) Renewable biomass.—The term 're-
18	newable biomass' means each of the following:
19	"(i) Planted crops and crop residue
20	harvested from agricultural land cleared or
21	cultivated at any time prior to the enact-
22	ment of this sentence that is either actively
23	managed or fallow, and nonforested.
24	"(ii) Planted trees and tree residue
25	from actively managed tree plantations on

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1	non-federal land cleared at any time prior
2	to enactment of this sentence, including
3	land belonging to an Indian tribe or an In-
4	dian individual, that is held in trust by the
5	United States or subject to a restriction
6	against alienation imposed by the United
7	States.
8	"(iii) Animal waste material and ani-
9	mal byproducts.
10	"(iv) Slash and pre-commercial
11	thinnings that are from non-federal
12	forestlands, including forestlands belonging
13	to an Indian tribe or an Indian individual,
14	that are held in trust by the United States
15	or subject to a restriction against alienation
16	imposed by the United States, but not for-
17	ests or forestlands that are ecological com-
18	munities with a global or State ranking of
19	critically imperiled, imperiled, or rare pur-
20	suant to a State Natural Heritage Program,
21	old growth forest, or late successional forest.
22	"(v) Biomass obtained from the imme-
23	diate vicinity of buildings and other areas
24	regularly occupied by people, or of public

infrastructure, at risk from wildfire.

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1	"(vi) Algae.
2	"(vii) Separated yard waste or food
3	waste, including recycled cooking and trap
4	grease.
5	"(J) Renewable fuel.—The term 'renew-
6	able fuel' means fuel that is produced from re-
7	newable biomass and that is used to replace or
8	reduce the quantity of fossil fuel present in a
9	$transportation\ fuel.$
10	"(K) Small refinery.—The term 'small
11	refinery' means a refinery for which the average
12	aggregate daily crude oil throughput for a cal-
13	endar year (as determined by dividing the aggre-
14	gate throughput for the calendar year by the
15	number of days in the calendar year) does not
16	exceed 75,000 barrels.
17	"(L) Transportation fuel.—The term
18	'transportation fuel' means fuel for use in motor
19	vehicles, motor vehicle engines, nonroad vehicles,
20	or nonroad engines (except for ocean-going ves-
21	sels).".
22	SEC. 202. RENEWABLE FUEL STANDARD.
23	(a) Renewable Fuel Program.—Paragraph (2) of
24	section 211(o) (42 U.S.C. 7545(o)(2)) of the Clean Air Act
25	is amended as follows:

1	(1) Regulations.—Clause (i) of subparagraph
2	(A) is amended by adding the following at the end
3	thereof: "Not later than 1 year after the date of enact-
4	ment of this sentence, the Administrator shall revise
5	the regulations under this paragraph to ensure that
6	transportation fuel sold or introduced into commerce
7	in the United States (except in noncontiguous States
8	or territories), on an annual average basis, contains
9	at least the applicable volume of renewable fuel, ad-
10	vanced biofuel, cellulosic biofuel, and biomass-based
11	diesel, determined in accordance with subparagraph
12	(B) and, in the case of any such renewable fuel pro-
13	duced from new facilities that commence construction
14	after the date of enactment of this sentence, achieves
15	at least a 20 percent reduction in lifecycle greenhouse
16	gas emissions compared to baseline lifecycle green-
17	house gas emissions.".
18	(2) Applicable volumes of renewable
19	FUEL.—Subparagraph (B) is amended to read as fol-
20	lows:
21	"(B) Applicable volumes.—
22	"(i) Calendar years after 2005.—
23	"(I) Renewable fuel.—For the
24	purpose of subparagraph (A), the ap-
25	plicable volume of renewable fuel for

1		the calendar years 2006 through 2022
2		shall be determined in accordance with
3		the following table: Applicable volume of
	"O 1 1	renewable fuel
	"Calendar year:	(in billions of gallons):
		9.0
		12.95
		13.95
		22.25
	2017	
	2018	
	2019	
	2020	
	2021	
	2022	36.0
4 5		"(II) ADVANCED BIOFUEL.—For the purpose of subparagraph (A), of the
6		volume of renewable fuel required
7		under subclause (I), the applicable vol-
8		ume of advanced biofuel for the cal-
9		endar years 2009 through 2022 shall be
10		determined in accordance with the fol-
11		lowing table:
		Applicable volume of
	"O 1 1	advanced biofuel
	"Calendar year:	(in billions of gallons):
		0.95
		5.79
		7.25
		9.0

	"Calendar year:	Applicable volume of advanced biofuel (in billions of gallons):
	· · · · · · · · · · · · · · · · · · ·	
	2019	
	2020	
	2022	21.0
1		"(III) Cellulosic biofuel.—
2		For the purpose of subparagraph (A),
3		of the volume of advanced biofuel re-
4		quired under subclause (II), the appli-
5		cable volume of cellulosic biofuel for the
6		calendar years 2010 through 2022 shall
7		be determined in accordance with the
8		following table:
		Applicable volume of
	"Calendar year:	cellulosic biofuel (in billions of gallons):
	•	
		0.25
	2013	
	2014	
	2015	3.0
	2016	4.25
		5.5
		8.5
		10.5
9		"(IV) Biomass-based diesel.—
10		For the purpose of subparagraph (A),
11		of the volume of advanced biofuel re-
12		quired under subclause (II), the appli-
13		cable volume of biomass-based diesel for
14		the calendar years 2009 through 2012

1		shall be determined in accordance with
2		the following table:
	"Calendar year	Applicable volume of biomass-based diesel : (in billions of gallons):
	2009	0.5
	2011	0.80
_	2012	1.0
3		"(ii) Other calendar years.—For
4		the purposes of subparagraph (A), the ap-
5		plicable volumes of each fuel specified in the
6		tables in clause (i) for calendar years after
7		the calendar years specified in the tables
8		shall be determined by the Administrator,
9		in coordination with the Secretary of En-
10		ergy and the Secretary of Agriculture, based
11		on a review of the implementation of the
12		program during calendar years specified in
13		the tables, and an analysis of—
14		"(I) the impact of the production
15		and use of renewable fuels on the envi-
16		ronment, including on air quality, cli-
17		mate change, conversion of wet lands,
18		eco-systems, wildlife habitat, water
19		quality, and water supply;
20		"(II) the impact of renewable fuels
21		on the energy security of the United
22		States;

1	"(III) the expected annual rate of
2	future commercial production of re-
3	newable fuels, including advanced
4	biofuels in each category (cellulosic
5	biofuel and biomass-based diesel);
6	"(IV) the impact of renewable
7	fuels on the infrastructure of the
8	United States, including deliverability
9	of materials, goods, and products other
10	than renewable fuel, and the suffi-
11	ciency of infrastructure to deliver and
12	use renewable fuel;
13	"(V) the impact of the use of re-
14	newable fuels on the cost to consumers
15	of transportation fuel and on the cost
16	to transport goods; and
17	"(VI) the impact of the use of re-
18	newable fuels on other factors, includ-
19	ing job creation, the price and supply
20	of agricultural commodities, rural eco-
21	nomic development, and food prices.
22	The Administrator shall promulgate rules
23	establishing the applicable volumes under
24	this clause no later than 14 months before

1	the first year for which such applicable vol-
2	ume will apply.
3	"(iii) Applicable volume of ad-
4	VANCED BIOFUEL.—For the purpose of mak-
5	ing the determinations in clause (ii), for
6	each calendar year, the applicable volume of
7	advanced biofuel shall be at least the same
8	percentage of the applicable volume of re-
9	newable fuel as in calendar year 2022.
10	"(iv) Applicable volume of cel-
11	LULOSIC BIOFUEL.—For the purpose of
12	making the determinations in clause (ii),
13	for each calendar year, the applicable vol-
14	ume of cellulosic biofuel established by the
15	Administrator shall be based on the as-
16	sumption that the Administrator will not
17	need to issue a waiver for such years under
18	paragraph (7)(D).
19	"(v) Minimum applicable volume of
20	BIOMASS-BASED DIESEL.—For the purpose
21	of making the determinations in clause (ii),
22	the applicable volume of biomass-based die-
23	sel shall not be less than the applicable vol-
24	$ume\ listed\ in\ clause\ (i)(IV)\ for\ calendar$
25	year 2012.".

1	(b) Applicable Percentages.—Paragraph (3) of
2	section 211(o) of the Clean Air Act (42 U.S.C. 7545(o)(3))
3	is amended as follows:
4	(1) In subparagraph (A), by striking "2011"
5	and inserting "2021.".
6	(2) In subparagraph (A), by striking "gasoline"
7	and inserting "transportation fuel, biomass-based die-
8	sel, and cellulosic biofuel".
9	(3) In subparagraph (B), by striking "2012"
10	and inserting "2021" in clause (ii)(I).
11	(4) In subparagraph (B), by striking gasoline"
12	and inserting "transportation fuel" in clause (ii)(II).
13	(c) Modification of Greenhouse Gas Percent-
14	AGES.—Paragraph (4) of section 211(o) of the Clean Air
15	Act (42 U.S.C. $7545(0)(4)$) is amended to read as follows:
16	"(4) Modification of greenhouse gas re-
17	DUCTION PERCENTAGES.—
18	"(A) IN GENERAL.—The Administrator
19	may, in the regulations under the last sentence
20	of paragraph (2)(A)(i), adjust the 20 percent, 50
21	percent, and 60 percent reductions in lifecycle
22	greenhouse gas emissions specified in paragraphs
23	(2)(A)(i)(relating to renewable fuel), (1)(D) (re-
24	lating to biomass-based diesel), $(1)(B)(i)$ (relating
25	to advanced biofuel), and (1)(E) (relating to cel-

lulosic biofuel) to a lower percentage. For the 50 and 60 percent reductions, the Administrator may make such an adjustment only if he determines that generally such reduction is not commercially feasible for fuels made using a variety of feedstocks, technologies, and processes to meet the applicable reduction.

"(B) Amount of adjustment.—In promulgating regulations under this paragraph, the specified 50 percent reduction in greenhouse gas emissions from advanced biofuel and in biomass-based diesel may not be reduced below 40 percent. The specified 20 percent reduction in greenhouse gas emissions from renewable fuel may not be reduced below 10 percent, and the specified 60 percent reduction in greenhouse gas emissions from cellulosic biofuel may not be reduced below 50 percent.

"(C) ADJUSTED REDUCTION LEVELS.—An adjustment under this paragraph to a percent less than the specified 20 percent greenhouse gas reduction for renewable fuel shall be the minimum possible adjustment, and the adjusted greenhouse gas reduction shall be established by the Administrator at the maximum achievable

level, taking cost in consideration, for natural gas fired corn-based ethanol plants, allowing for the use of a variety of technologies and processes.

An adjustment in the 50 or 60 percent greenhouse gas levels shall be the minimum possible adjustment for the fuel or fuels concerned, and the adjusted greenhouse gas reduction shall be established at the maximum achievable level, taking cost in consideration, allowing for the use of a variety of feedstocks, technologies, and processes.

- "(D) 5-YEAR REVIEW.—Whenever the Administrator makes any adjustment under this paragraph, not later than 5 years thereafter he shall review and revise (based upon the same criteria and standards as required for the initial adjustment) the regulations establishing the adjusted level.
- "(E) Subsequent Adjustments.—After the Administrator has promulgated a final rule under the last sentence of paragraph (2)(A)(i) with respect to the method of determining lifecycle greenhouse gas emissions, except as provided in subparagraph (D), the Administrator may not adjust the percent greenhouse gas reduc-

tion levels unless he determines that there has been a significant change in the analytical methodology used for determining the lifecycle greenhouse gas emissions. If he makes such determination, he may adjust the 20, 50, or 60 percent reduction levels through rulemaking using the criteria and standards set forth in this paragraph.

"(F) Limit on upward adjustments.—If, under subparagraph (D) or (E), the Administrator revises a percent level adjusted as provided in subparagraph (A), (B), and (C) to a higher percent, such higher percent may not exceed the applicable percent specified in paragraph (2)(A)(i), (1)(D), (1)(B)(i), or (1)(E).

"(G) APPLICABILITY OF ADJUSTMENTS.—If
the Administrator adjusts, or revises, a percent
level referred to in this paragraph or makes a
change in the analytical methodology used for
determining the lifecycle greenhouse gas emissions, such adjustment, revision, or change (or
any combination thereof) shall only apply to renewable fuel from new facilities that commence
construction after the effective date of such adjustment, revision, or change.".

1	(d) Credits for Additional Renewable Fuel.—
2	Paragraph (5) of section 211(o) of the Clean Air Act (42
3	$U.S.C.\ 7545(o)(5))$ is amended by adding the following new
4	subparagraph at the end thereof:
5	"(E) Credits for additional renew-
6	ABLE FUEL.—The Administrator may issue reg-
7	ulations providing (i) for the generation of an
8	appropriate amount of credits by any person
9	that refines, blends, or imports additional renew-
10	able fuels specified by the Administrator and (ii)
11	for the use of such credits by the generator, or the
12	transfer of all or a portion of the credits to an-
13	other person, for the purpose of complying with
14	paragraph (2).".
15	(e) Waivers.—
16	(1) In General.—Paragraph (7)(A) of section
17	211(o) of the Clean Air Act (42 U.S.C. 7545(o)(7)(A))
18	is amended by inserting ", by any person subject to
19	the requirements of this subsection, or by the Admin-
20	istrator on his own motion" after "one or more
21	States" in subparagraph (A) and by striking out
22	"State" in subparagraph (B).
23	(2) Cellulosic biofuel.—Paragraph (7) of
24	section 211(o) of the Clean Air Act (42 U.S.C.

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7545(o)(7)) is amended by adding the following at the end thereof:

"(D) CELLULOSIC BIOFUEL.—(i) For any calendar year for which the projected volume of cellulosic biofuel production is less than the minimum applicable volume established under paragraph (2)(B), as determined by the Administrator based on the estimate provided under paragraph (3)(A), not later than November 30 of the preceding calendar year, the Administrator shall reduce the applicable volume of cellulosic biofuel required under paragraph (2)(B) to the projected volume available during that calendar year. For any calendar year in which the Administrator makes such a reduction, the Administrator may also reduce the applicable volume of renewable fuel and advanced biofuels requirement established under paragraph (2)(B) by the same or a lesser volume.

"(ii) Whenever the Administrator reduces the minimum cellulosic biofuel volume under this subparagraph, the Administrator shall make available for sale cellulosic biofuel credits at the higher of \$0.25 per gallon or the amount by which \$3.00 per gallon exceeds the average

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wholesale price of a gallon of gasoline in the United States. Such amounts shall be adjusted for inflation by the Administrator for years after 2008.

"(iii) 18 months after date of enactment of this subparagraph, the Administrator shall promulgate regulations to govern the issuance of credits under this subparagraph. The regulations shall set forth the method for determining the exact price of credits in the event of a waiver. The price of such credits shall not be changed more frequently than once each quarter. These regulations shall include such provisions, including limiting the credits' uses and useful life, as the Administrator deems appropriate to assist market liquidity and transparency, to provide appropriate certainty for regulated entities and renewable fuel producers, and to limit any potential misuse of cellulosic biofuel credits to reduce the use of other renewable fuels, and for such other purposes as the Administrator determines will help achieve the goals of this subsection. The regulations shall limit the number of cellulosic biofuel credits for any calendar year to the minimum applicable volume (as reduced

1 under this subparagraph) of cellulosic biofuel for 2 that year.". (3) BIOMASS-BASED DIESEL.—Paragraph (7) of 3 4 section 211(o) of the Clean Air Act (42 U.S.C. 5 7545(o)(7)) is amended by adding the following at the 6 end thereof: 7 "(E) Biomass-based diesel.— 8 "(i) Market evaluation.—The Ad-9 ministrator, in consultation with the Secretary of Energy and the Secretary of Agri-10 11 culture, shall periodically evaluate the im-12 pact of the biomass-based diesel require-13 ments established under this paragraph on 14 the price of diesel fuel. "(ii) Waiver.—If the Administrator 15 16 determines that there is a significant renew-17 able feedstock disruption or other market 18 circumstances that would make the price of 19 biomass-based diesel fuel increase signifi-20 cantly, the Administrator, in consultation 21 with the Secretary of Energy and the Sec-22 retary of Agriculture, shall issue an order to 23 reduce, for up to a 60-day period, the quan-24 tity of biomass-based diesel required under

subparagraph (A) by an appropriate quan-

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tity that does not exceed 15 percent of the applicable annual requirement for biomass-based diesel. For any calendar year in which the Administrator makes a reduction under this subparagraph, the Administrator may also reduce the applicable volume of renewable fuel and advanced biofuels requirement established under paragraph (2)(B) by the same or a lesser volume.

"(iii) Extensions.—If the Administrator determines that the feedstock disruption or circumstances described in clause (ii) is continuing beyond the 60-day period described in clause (ii) or this clause, the Administrator, in consultation with the Secretary of Energy and the Secretary of Agriculture, may issue an order to reduce, for up to an additional 60-day period, the quantity of biomass-based diesel required under subparagraph (A) by an appropriate quantity that does not exceed an additional 15 percent of the applicable annual requirement for biomass-based diesel.

1	"(F) Modification of applicable vol-
2	UMES.—For any of the tables in paragraph
3	(2)(B), if the Administrator waives—
4	"(i) at least 20 percent of the applica-
5	ble volume requirement set forth in any
6	such table for 2 consecutive years; or
7	"(ii) at least 50 percent of such volume
8	requirement for a single year,
9	the Administrator shall promulgate a rule (with-
10	in one year after issuing such waiver) that
11	modifies the applicable volumes set forth in the
12	table concerned for all years following the final
13	year to which the waiver applies, except that no
14	such modification in applicable volumes shall be
15	made for any year before 2016. In promulgating
16	such a rule, the Administrator shall comply with
17	the processes, criteria, and standards set forth in
18	$paragraph\ (2)(B)(ii).$ ".
19	SEC. 203. STUDY OF IMPACT OF RENEWABLE FUEL STAND-
20	ARD.
21	(a) In General.—The Secretary of Energy, in con-
22	sultation with the Secretary of Agriculture and the Admin-
23	$is trator\ of\ the\ Environmental\ Protection\ Agency,\ shall\ enter$
24	into an arrangement with the National Academy of
25	Sciences under which the Academy shall conduct a study

1	to assess the impact of the requirements described in section
2	211(o) of the Clean Air Act on each industry relating to
3	the production of feed grains, livestock, food, forest products,
4	and energy.
5	(b) Participation.—In conducting the study under
6	this section, the National Academy of Sciences shall seek
7	the participation, and consider the input, of—
8	(1) producers of feed grains;
9	(2) producers of livestock, poultry, and pork
10	products;
11	(3) producers of food and food products;
12	(4) producers of energy;
13	(5) individuals and entities interested in issues
14	relating to conservation, the environment, and nutri-
15	tion;
16	(6) users and consumer of renewable fuels;
17	(7) producers and users of biomass feedstocks;
18	and
19	(8) land grant universities.
20	(c) Considerations.—In conducting the study, the
21	National Academy of Sciences shall consider—
22	(1) the likely impact on domestic animal agri-
23	culture feedstocks that, in any crop year, are signifi-
24	cantly below current projections;

1	(2) policy options to alleviate the impact on do-
2	mestic animal agriculture feedstocks that are signifi-
3	cantly below current projections; and
4	(3) policy options to maintain regional agricul-
5	tural and silvicultural capability.
6	(d) Components.—The study shall include—
7	(1) a description of the conditions under which
8	the requirements described in section 211(o) of the
9	Clean Air Act should be suspended or reduced to pre-
10	vent adverse impacts to domestic animal agriculture
11	feedstocks $described$ in $subsection$ $(c)(2)$ or $regional$
12	agricultural and silvicultural capability described in
13	subsection (c)(3); and
14	(2) recommendations for the means by which the
15	Federal Government could prevent or minimize ad-
16	verse economic hardships and impacts.
17	(e) Deadline for Completion of Study.—Not later
18	than 18 months after the date of enactment of this Act, the
19	Secretary shall submit to Congress a report that describes
20	the results of the study under this section.
21	(f) Periodic Reviews.—Section 211(o) of the Clean
22	Air Act is amended by adding the following at the end
23	thereof:
24	"(12) Periodic reviews.—To allow for the ap-
25	propriate adjustment of the requirements described in

1	subparagraph (B) of paragraph (2), the Adminis-
2	trator shall conduct periodic reviews of—
3	"(A) existing technologies;
4	"(B) the feasibility of achieving compliance
5	with the requirements; and
6	"(C) the impacts of the requirements de-
7	scribed in subsection (a)(2) on each individual
8	and entity described in paragraph (2).".
9	SEC. 204. ENVIRONMENTAL AND RESOURCE CONSERVA
10	TION IMPACTS.
11	(a) In General.—Not later than 3 years after the en-
12	actment of this section and every 3 years thereafter, the Ad-
13	ministrator of the Environmental Protection Agency, in
14	consultation with the Secretary of Agriculture and the Sec-
15	retary of Energy, shall assess and report to Congress on
16	the impacts to date and likely future impacts of the require-
17	ments of section 211(o) of the Clean Air Act on the fol-
18	lowing:
19	(1) Environmental issues, including air quality,
20	effects on hypoxia, pesticides, sediment, nutrient and
21	pathogen levels in waters, acreage and function of wa-
22	ters, and soil environmental quality.
23	(2) Resource conservation issues, including soil
24	conservation, water availability, and ecosystem health

- 1 and biodiversity, including impacts on forests, grass-
- 2 lands, and wetlands.
- 3 (3) The growth and use of cultivated invasive or
- 4 noxious plants and their impacts on the environment
- 5 and agriculture.
- 6 In advance of preparing the report required by this sub-
- 7 section, the Administrator may seek the views of the Na-
- 8 tional Academy of Sciences or another appropriate inde-
- 9 pendent research institute. The report shall include the an-
- 10 nual volume of imported renewable fuels and feedstocks for
- 11 renewable fuels, and the environmental impacts outside the
- 12 United States of producing such fuels and feedstocks. The
- 13 report required by this subsection shall include rec-
- 14 ommendations for actions to address any adverse impacts
- 15 found.
- 16 (b) Effect on Air Quality and Other Environ-
- 17 Mental Requirements.—Except as provided in section
- 18 211(o)(13) of the Clean Air Act, nothing in the amendments
- 19 made by this title to section 211(o) of the Clean Air Act
- 20 shall be construed as superseding, or limiting, any more
- 21 environmentally protective requirement under the Clean
- 22 Air Act, or under any other provision of State or Federal
- 23 law or regulation, including any environmental law or reg-
- 24 ulation.

1	SEC. 205. BIOMASS BASED DIESEL AND BIODIESEL LABEL-
2	ING.
3	(a) In General.—Each retail diesel fuel pump shall
4	be labeled in a manner that informs consumers of the per-
5	cent of biomass-based diesel or biodiesel that is contained
6	in the biomass-based diesel blend or biodiesel blend that is
7	offered for sale, as determined by the Federal Trade Com-
8	mission.
9	(b) Labeling Requirements.—Not later than 180
10	days after the date of enactment of this section, the Federal
11	Trade Commission shall promulgate biodiesel labeling re-
12	quirements as follows:
13	(1) Biomass-based diesel blends or biodiesel
14	blends that contain less than or equal to 5 percent
15	biomass-based diesel or biodiesel by volume and that
16	meet ASTM D975 diesel specifications shall not re-
17	quire any additional labels.
18	(2) Biomass based diesel blends or biodiesel
19	blends that contain more than 5 percent biomass-
20	based diesel or biodiesel by volume but not more than
21	20 percent by volume shall be labeled "contains bio-
22	mass-based diesel or biodiesel in quantities between 5
23	percent and 20 percent".
24	(3) Biomass-based diesel or biodiesel blends that
25	contain more than 20 percent biomass based or bio-

1	diesel by volume shall be labeled "contains more than
2	20 percent biomass-based diesel or biodiesel".
3	(c) Definitions.—In this section:
4	(1) ASTM.—The term "ASTM" means the Amer-
5	ican Society of Testing and Materials.
6	(2) Biomass-based diesel.—The term "bio-
7	mass-based diesel" means biodiesel as defined in sec-
8	tion 312(f) of the Energy Policy Act of 1992 (42
9	U.S.C. 13220(f)).
10	(3) Biodiesel.—The term "biodiesel" means the
11	monoalkyl esters of long chain fatty acids derived
12	from plant or animal matter that meet—
13	(A) the registration requirements for fuels
14	and fuel additives under this section; and
15	(B) the requirements of ASTM standard
16	D6751.
17	(4) BIOMASS-BASED DIESEL AND BIODIESEL
18	BLENDS.—The terms "biomass-based diesel blend"
19	and "biodiesel blend" means a blend of "biomass-
20	based diesel" or "biodiesel" fuel that is blended with
21	petroleum based diesel fuel.
22	SEC. 206. STUDY OF CREDITS FOR USE OF RENEWABLE
23	ELECTRICITY IN ELECTRIC VEHICLES.
24	(a) Definition of Electric Vehicle.—In this sec-
25	tion, the term "electric vehicle" means an electric motor ve-

1	hicle (as defined in section 601 of the Energy Policy Act
2	of 1992 (42 U.S.C. 13271)) for which the rechargeable stor-
3	age battery—
4	(1) receives a charge directly from a source of
5	electric current that is external to the vehicle; and
6	(2) provides a minimum of 80 percent of the mo-
7	tive power of the vehicle.
8	(b) Study.—The Administrator of the Environmental
9	Protection Agency shall conduct a study on the feasibility
10	of issuing credits under the program established under sec-
11	tion 211(o) of the Clean Air Act to electric vehicles powered
12	by electricity produced from renewable energy sources.
13	(c) Report.—Not later than 18 months after the date
14	of enactment of this Act, the Administrator shall submit
15	to the Committee on Energy and Natural Resources of the
16	United States Senate and the Committee on Energy and
17	Commerce of the United States House of Representatives a
18	report that describes the results of the study, including a
19	description of—
20	(1) existing programs and studies on the use of
21	renewable electricity as a means of powering electric
22	vehicles; and
23	(2) alternatives for—
24	(A) designing a pilot program to determine
25	the feasibility of using renewable electricity to

1	power electric vehicles as an adjunct to a renew-
2	able fuels mandate;
3	(B) allowing the use, under the pilot pro-
4	gram designed under subparagraph (A), of elec-
5	tricity generated from nuclear energy as an ad-
6	ditional source of supply;
7	(C) identifying the source of electricity used
8	to power electric vehicles; and
9	(D) equating specific quantities of elec-
10	tricity to quantities of renewable fuel under sec-
11	tion 211(o) of the Clean Air Act.
12	SEC. 207. GRANTS FOR PRODUCTION OF ADVANCED
13	BIOFUELS.
14	(a) In General.—The Secretary of Energy shall es-
15	tablish a grant program to encourage the production of ad-
16	vanced biofuels.
17	(b) Requirements and Priority.—In making
18	grants under this section, the Secretary—
19	(1) shall make awards to the proposals for ad-
20	vanced biofuels with the greatest reduction in lifecycle
21	greenhouse gas emissions compared to the comparable
22	motor vehicle fuel lifecycle emissions during calendar
23	year 2005; and

1	(2) shall not make an award to a project that
2	does not achieve at least a 80 percent reduction in
3	such lifecycle greenhouse gas emissions.
4	(c) Authorization of Appropriations.—There is
5	authorized to be appropriated to carry out this section
6	\$500,000,000 for the period of fiscal years 2008 through
7	2015.
8	SEC. 208. INTEGRATED CONSIDERATION OF WATER QUAL-
9	ITY IN DETERMINATIONS ON FUELS AND
10	FUEL ADDITIVES.
11	Section 211(c)(1) of the Clean Air Act (42 U.S.C.
12	7545(c)(1)) is amended as follows:
13	(1) By striking "nonroad vehicle (A) if in the
14	judgment of the Administrator" and inserting
15	"nonroad vehicle if, in the judgment of the Adminis-
16	trator, any fuel or fuel additive or"; and
17	(2) In subparagraph (A), by striking "air pollu-
18	tion which" and inserting "air pollution or water
19	pollution (including any degradation in the quality
20	of groundwater) that".
21	SEC. 209. ANTI-BACKSLIDING.
22	Section 211 of the Clean Air Act (42 U.S.C. 7545) is
23	amended by adding at the end the following:
24	"(v) Prevention of Air Quality Deteriora-
25	TION.—

1	"(1) STUDY.—
2	"(A) In General.—Not later than 18
3	months after the date of enactment of this sub-
4	section, the Administrator shall complete a study
5	to determine whether the renewable fuel volumes
6	required by this section will adversely impact air
7	quality as a result of changes in vehicle and en-
8	gine emissions of air pollutants regulated under
9	$this\ Act.$
10	"(B) Considerations.—The study shall
11	include consideration of—
12	"(i) different blend levels, types of re-
13	newable fuels, and available vehicle tech-
14	$nologies;\ and$
15	"(ii) appropriate national, regional,
16	and local air quality control measures.
17	"(2) REGULATIONS.—Not later than 3 years
18	after the date of enactment of this subsection, the Ad-
19	ministrator shall—
20	"(A) promulgate fuel regulations to imple-
21	ment appropriate measures to mitigate, to the
22	greatest extent achievable, considering the results
23	of the study under paragraph (1), any adverse
24	impacts on air quality, as the result of the re-
25	newable volumes required by this section: or

1	"(B) make a determination that no such
2	measures are necessary.".
3	SEC. 210. EFFECTIVE DATE, SAVINGS PROVISION, AND
4	TRANSITION RULES.
5	(a) Transition Rules.—(1) For calendar year 2008,
6	transportation fuel sold or introduced into commerce in the
7	United States (except in noncontiguous States or terri-
8	tories), that is produced from facilities that commence con-
9	struction after the date of enactment of this Act shall be
10	treated as renewable fuel within the meaning of section
11	211(o) of the Clean Air Act only if it achieves at least a
12	20 percent reduction in lifecycle greenhouse gas emissions
13	compared to baseline lifecycle greenhouse gas emissions. For
14	calendar years 2008 and 2009, any ethanol plant that is
15	fired with natural gas, biomass, or any combination thereof
16	is deemed to be in compliance with such 20 percent reduc-
17	tion requirement and with the 20 percent reduction require-
18	ment of section 211(o)(1) of the Clean Air Act. The terms
19	used in this subsection shall have the same meaning as pro-
20	vided in the amendment made by this Act to section 211(o)
21	of the Clean Air Act.
22	(2) Until January 1, 2009, the Administrator of the
23	Environmental Protection Agency shall implement section
24	211(o) of the Clean Air Act and the rules promulgated
25	under that section in accordance with the provisions of that

- 1 section as in effect before the enactment of this Act and in
- 2 accordance with the rules promulgated before the enactment
- 3 of this Act, except that for calendar year 2008, the number
- 4 "8.5" shall be substituted for the number "5.4" in the table
- 5 in section 211(o)(2)(B) and in the corresponding rules pro-
- 6 mulgated to carry out those provisions. The Administrator
- 7 is authorized to take such other actions as may be necessary
- 8 to carry out this paragraph notwithstanding any other pro-
- 9 vision of law.
- 10 (b) SAVINGS CLAUSE.—Section 211(o) of the Clean Air
- 11 Act (42 U.S.C. 7545(o)) is amended by adding the following
- 12 new paragraph at the end thereof:
- 13 "(13) Effect on other provisions.—Nothing
- in this subsection, or regulations issued pursuant to
- this subsection, shall affect or be construed to affect
- 16 the regulatory status of carbon dioxide or any other
- 17 greenhouse gas, or to expand or limit regulatory au-
- 18 thority regarding carbon dioxide or any other green-
- 19 house gas, for purposes of other provisions (including
- section 165) of this Act. The previous sentence shall
- 21 not affect implementation and enforcement of this
- 22 subsection.".
- 23 (c) Effective Date.—The amendments made by this
- 24 title to section 211(o) of the Clean Air Act shall take effect
- 25 January 1, 2009, except that the Administrator shall pro-

- 1 mulgate regulations to carry out such amendments not later
- 2 than one year after the enactment of this Act.

3 Subtitle B—Biofuels Research and

4 **Development**

- 5 SEC. 221. BIODIESEL.
- 6 (a) BIODIESEL STUDY.—Not later than 180 days after
- 7 the date of enactment of this Act, the Secretary, in consulta-
- 8 tion with the Administrator of the Environmental Protec-
- 9 tion Agency, shall submit to Congress a report on any re-
- 10 search and development challenges inherent in increasing
- 11 the proportion of diesel fuel sold in the United States that
- 12 is biodiesel.
- 13 (b) Material for the Establishment of Stand-
- 14 ARDS.—The Director of the National Institute of Standards
- 15 and Technology, in consultation with the Secretary, shall
- 16 make publicly available the physical property data and
- 17 characterization of biodiesel and other biofuels as appro-
- 18 priate.
- 19 SEC. 222. BIOGAS.
- Not later than 180 days after the date of enactment
- 21 of this Act, the Secretary, in consultation with the Adminis-
- 22 trator of the Environmental Protection Agency, shall sub-
- 23 mit to Congress a report on any research and development
- 24 challenges inherent in increasing the amount of transpor-

1	tation fuels sold in the United States that are fuel with
2	biogas or a blend of biogas and natural gas.
3	SEC. 223. GRANTS FOR BIOFUEL PRODUCTION RESEARCH
4	AND DEVELOPMENT IN CERTAIN STATES.
5	(a) In General.—The Secretary shall provide grants
6	to eligible entities for research, development, demonstration,
7	and commercial application of biofuel production tech-
8	nologies in States with low rates of ethanol production, in-
9	cluding low rates of production of cellulosic biomass eth-
10	anol, as determined by the Secretary.
11	(b) Eligibility.—To be eligible to receive a grant
12	under this section, an entity shall—
13	(1)(A) be an institution of higher education (as
14	defined in section 2 of the Energy Policy Act of 2005
15	(42 U.S.C. 15801)), including tribally controlled col-
16	leges or universities, located in a State described in
17	subsection (a); or
18	(B) be a consortium including at least 1 such in-
19	stitution of higher education, and industry, State
20	agencies, Indian tribal agencies, National Labora-
21	tories, or local government agencies located in the
22	State; and
23	(2) have proven experience and capabilities with
24	relevant technologies.

- 1 (c) Authorization of Appropriations.—There are
- 2 authorized to be appropriated to the Secretary to carry out
- 3 this section \$25,000,000 for each of fiscal years 2008
- 4 through 2010.
- 5 SEC. 224. BIOREFINERY ENERGY EFFICIENCY.
- 6 Section 932 of Energy Policy Act of 2005 (42 U.S.C.
- 7 16232) is amended by adding at the end the following new
- 8 subsections:
- 9 "(q) Biorefinery Energy Efficiency.—The Sec-
- 10 retary shall establish a program of research, development,
- 11 demonstration, and commercial application for increasing
- 12 energy efficiency and reducing energy consumption in the
- 13 operation of biorefinery facilities.
- 14 "(h) Retrofit Technologies for the Develop-
- 15 Ment of Ethanol From Cellulosic Materials.—The
- 16 Secretary shall establish a program of research, develop-
- 17 ment, demonstration, and commercial application on tech-
- 18 nologies and processes to enable biorefineries that exclu-
- 19 sively use corn grain or corn starch as a feedstock to
- 20 produce ethanol to be retrofitted to accept a range of bio-
- 21 mass, including lignocellulosic feedstocks.".
- 22 SEC. 225. STUDY OF OPTIMIZATION OF FLEXIBLE FUELED
- 23 **VEHICLES TO USE E-85 FUEL.**
- 24 (a) In General.—The Secretary, in consultation with
- 25 the Secretary of Transportation and the Administrator of

- 1 the Environmental Protection Agency, shall conduct a
- 2 study of whether optimizing flexible fueled vehicles to oper-
- 3 ate using E-85 fuel would increase the fuel efficiency of
- 4 flexible fueled vehicles.
- 5 (b) REPORT.—Not later than 180 days after the date
- 6 of enactment of this Act, the Secretary shall submit to the
- 7 Committee on Science and Technology and the Committee
- 8 on Energy and Commerce of the House of Representatives,
- 9 and to the Committee on Energy and Natural Resources,
- 10 the Committee on Environment and Public Works, and the
- 11 Committee on Commerce, Science, and Transportation of
- 12 the Senate, a report that describes the results of the study
- 13 under this section, including any recommendations of the
- 14 Secretary.
- 15 SEC. 226. STUDY OF ENGINE DURABILITY AND PERFORM-
- 16 ANCE ASSOCIATED WITH THE USE OF BIO-
- 17 DIESEL.
- 18 (a) In General.—Not later than 30 days after the
- 19 date of enactment of this Act, the Secretary, in consultation
- 20 with the Administrator of the Environmental Protection
- 21 Agency, shall initiate a study on the effects of the use of
- 22 biodiesel on the performance and durability of engines and
- 23 engine systems.
- 24 (b) Components.—The study under this section shall
- 25 include—

1	(1) an assessment of whether the use of biodiesel
2	lessens the durability and performance of conven-
3	tional diesel engines and engine systems; and
4	(2) an assessment of the effects referred to in sub-
5	section (a) with respect to biodiesel blends at varying
6	concentrations, including the following percentage
7	concentrations of biodiesel:
8	(A) 5 percent biodiesel.
9	(B) 10 percent biodiesel.
10	(C) 20 percent biodiesel.
11	(D) 30 percent biodiesel.
12	(E) 100 percent biodiesel.
13	(c) Report.—Not later than 24 months after the date
14	of enactment of this Act, the Secretary shall submit to the
15	Committee on Science and Technology and the Committee
16	on Energy and Commerce of the House of Representatives,
17	and to the Committee on Energy and Natural Resources
18	and the Committee on Environment and Public Works of
19	the Senate, a report that describes the results of the study
20	under this section, including any recommendations of the
21	Secretary.
22	SEC. 227. STUDY OF OPTIMIZATION OF BIOGAS USED IN
23	NATURAL GAS VEHICLES.
24	(a) In General.—The Secretary, in consultation with
25	the Administrator of the Environmental Protection Agency

- 1 and the Secretary of Transportation, shall conduct a study
- 2 of methods of increasing the fuel efficiency of vehicles using
- 3 biogas by optimizing natural gas vehicle systems that can
- 4 operate on biogas, including the advancement of vehicle fuel
- 5 systems and the combination of hybrid-electric and plug-
- 6 in hybrid electric drive platforms with natural gas vehicle
- 7 systems using biogas.
- 8 (b) Report.—Not later than 180 days after the date
- 9 of enactment of this Act, the Secretary shall submit to the
- 10 Committee on Energy and Natural Resources, the Com-
- 11 mittee on Environment and Public Works, and the Com-
- 12 mittee on Commerce, Science, and Transportation of the
- 13 Senate, and to the Committee on Science and Technology
- 14 and the Committee on Energy and Commerce of the House
- 15 of Representatives, a report that describes the results of the
- 16 study, including any recommendations of the Secretary.
- 17 SEC. 228. ALGAL BIOMASS.
- 18 (a) In General.—Not later than 90 days after the
- 19 date of enactment of this Act, the Secretary shall submit
- 20 to the Committee on Science and Technology of the House
- 21 of Representatives and the Committee on Energy and Nat-
- 22 ural Resources of the Senate a report on the progress of
- 23 the research and development that is being conducted on
- 24 the use of algae as a feedstock for the production of biofuels.

1	(b) Contents.—The report shall identify continuing
2	research and development challenges and any regulatory or
3	other barriers found by the Secretary that hinder the use
4	of this resource, as well as recommendations on how to en-
5	courage and further its development as a viable transpor-
6	tation fuel.
7	SEC. 229. BIOFUELS AND BIOREFINERY INFORMATION CEN-
8	TER.
9	(a) In General.—The Secretary, in cooperation with
10	the Secretary of Agriculture, shall establish a biofuels and
11	biorefinery information center to make available to inter-
12	ested parties information on—
13	(1) renewable fuel feedstocks, including the vari-
14	eties of fuel capable of being produced from various
15	feeds tocks;
16	(2) biorefinery processing techniques related to
17	various renewable fuel feedstocks;
18	(3) the distribution, blending, storage, and retail
19	dispensing infrastructure necessary for the transport
20	and use of renewable fuels;
21	(4) Federal and State laws and incentives re-
22	lated to renewable fuel production and use;
23	(5) renewable fuel research and development ad-
24	vancements;

1	(6) renewable fuel development and biorefinery
2	processes and technologies;
3	(7) renewable fuel resources, including informa-
4	tion on programs and incentives for renewable fuels;
5	(8) renewable fuel producers;
6	(9) renewable fuel users; and
7	(10) potential renewable fuel users.
8	(b) Administration.—In administering the biofuels
9	and biorefinery information center, the Secretary shall—
10	(1) continually update information provided by
11	the center;
12	(2) make information available relating to proc-
13	esses and technologies for renewable fuel production;
14	(3) make information available to interested par-
15	ties on the process for establishing a biorefinery; and
16	(4) make information and assistance provided by
17	the center available through a toll-free telephone num-
18	ber and website.
19	(c) Coordination and Nonduplication.—To max-
20	imum extent practicable, the Secretary shall ensure that the
21	activities under this section are coordinated with, and do
22	not duplicate the efforts of, centers at other government
23	agencies.

1	(d) AUTHORIZATION OF APPROPRIATIONS.—There are
2	authorized to be appropriated such sums as are necessary
3	to carry out this section.
4	SEC. 230. CELLULOSIC ETHANOL AND BIOFUELS RE-
5	SEARCH.
6	(a) Definition of Eligible Entity.—In this sec-
7	tion, the term "eligible entity" means—
8	(1) an 1890 Institution (as defined in section 2
9	of the Agricultural Research, Extension, and Edu-
10	cation Reform Act of 1998 (7 U.S.C. 7061));
11	(2) a part B institution (as defined in section
12	322 of the Higher Education Act of 1965 (20 U.S.C.
13	1061)) (commonly referred to as "Historically Black
14	Colleges and Universities");
15	(3) a tribal college or university (as defined in
16	section 316(b) of the Higher Education Act of 1965
17	(20 U.S.C. $1059c(b)$); or
18	(4) a Hispanic-serving institution (as defined in
19	section 502(a) of the Higher Education Act of 1965
20	$(20\ U.S.C.\ 1101a(a)).$
21	(b) Grants.—The Secretary shall make cellulosic eth-
22	anol and biofuels research and development grants to 10
23	eligible entities selected by the Secretary to receive a grant
24	under this section through a peer-reviewed competitive proc-
25	ess.

1	(c) Collaboration.—An eligible entity that is se-
2	lected to receive a grant under subsection (b) shall collabo-
3	rate with 1 of the Bioenergy Research Centers of the Office
4	of Science of the Department.
5	(d) Authorization of Appropriations.—There is
6	authorized to be appropriated to the Secretary to make
7	grants described in subsection (b) \$50,000,000 for fiscal
8	year 2008, to remain available until expended.
9	SEC. 231. BIOENERGY RESEARCH AND DEVELOPMENT, AU-
10	THORIZATION OF APPROPRIATION.
11	Section 931 of the Energy Policy Act of 2005 (42
12	U.S.C. 16231) is amended—
13	(1) in subsection (b)—
14	(A) in paragraph (2), by striking "and" at
15	$the\ end;$
16	(B) in paragraph (3), by striking the period
17	at the end and inserting "; and"; and
18	(C) by adding at the end the following:
19	"(4) \$963,000,000 for fiscal year 2010."; and
20	(2) in subsection (c)—
21	(A) in paragraph (2)—
22	(i) by striking "\$251,000,000" and in-
23	serting "\$377,000,000"; and
24	(ii) by striking "and" at the end;
25	(B) in paragraph (3)—

1	(i) by striking "\$274,000,000" and in-
2	serting "\$398,000,000"; and
3	(ii) by striking the period at the end
4	and inserting "; and"; and
5	(C) by adding at the end the following:
6	"(4) \$419,000,000 for fiscal year 2010, of which
7	\$150,000,000 shall be for section 932(d).".
8	SEC. 232. ENVIRONMENTAL RESEARCH AND DEVELOPMENT.
9	(a) In General.—Section 977 of the Energy Policy
10	Act of 2005 (42 U.S.C. 16317) is amended—
11	(1) in subsection (a)(1), by striking "and com-
12	putational biology" and inserting "computational bi-
13	ology, and environmental science"; and
14	(2) in subsection (b)—
15	(A) in paragraph (1), by inserting "in sus-
16	tainable production systems that reduce green-
17	house gas emissions" after "hydrogen";
18	(B) in paragraph (3), by striking "and" at
19	$the\ end;$
20	(C) by redesignating paragraph (4) as
21	paragraph (5); and
22	(D) by inserting after paragraph (3) the fol-
23	lowing:
24	"(4) develop cellulosic and other feedstocks that
25	are less resource and land intensive and that promote

1	sustainable use of resources, including soil, water, en-
2	ergy, forests, and land, and ensure protection of air,
3	water, and soil quality; and".
4	(b) Tools and Evaluation.—Section 307(d) of the
5	Biomass Research and Development Act of 2000 (7 U.S.C.
6	8606(d)) is amended—
7	(1) in paragraph (3)(E), by striking "and" at
8	$the\ end;$
9	(2) in paragraph (4), by striking the period at
10	the end and inserting a semicolon; and
11	(3) by adding at the end the following:
12	"(5) the improvement and development of ana-
13	lytical tools to facilitate the analysis of life-cycle en-
14	ergy and greenhouse gas emissions, including emis-
15	sions related to direct and indirect land use changes,
16	attributable to all potential biofuel feedstocks and pro-
17	duction processes; and
18	"(6) the systematic evaluation of the impact of
19	expanded biofuel production on the environment, in-
20	cluding forest lands, and on the food supply for hu-
21	mans and animals.".
22	(c) Small-Scale Production and Use of
23	Biofuels.—Section 307(e) of the Biomass Research and
24	Development Act of 2000 (7 U.S.C. 8606(e)) is amended—

1	(1) in paragraph (2), by striking "and" at the
2	end;
3	(2) in paragraph (3), by striking the period at
4	the end and inserting "; and"; and
5	(3) by adding at the end the following:
6	"(4) to facilitate small-scale production, local,
7	and on-farm use of biofuels, including the develop-
8	ment of small-scale gasification technologies for pro-
9	duction of biofuel from cellulosic feedstocks.".
10	SEC. 233. BIOENERGY RESEARCH CENTERS.
11	Section 977 of the Energy Policy Act of 2005 (42
12	U.S.C. 16317) is amended by adding at the end the fol-
13	lowing:
14	"(f) Bioenergy Research Centers.—
15	"(1) Establishment of centers.—In car-
16	rying out the program under subsection (a), the Sec-
17	retary shall establish at least 7 bioenergy research
18	centers, which may be of varying size.
19	"(2) Geographic distribution.—The Sec-
20	retary shall establish at least 1 bioenergy research
21	center in each Petroleum Administration for Defense
22	District or Subdistrict of a Petroleum Administration
23	for Defense District.
24	"(3) GOALS.—The goals of the centers established
25	under this subsection shall be to apple rate basic

1	transformational research and development of
2	biofuels, including biological processes.
3	"(4) Selection and duration.—
4	"(A) In General.—A center under this
5	subsection shall be selected on a competitive basis
6	for a period of 5 years.
7	"(B) REAPPLICATION.—After the end of the
8	period described in subparagraph (A), a grantee
9	may reapply for selection on a competitive basis.
10	"(5) Inclusion.—A center that is in existence
11	on the date of enactment of this subsection—
12	"(A) shall be counted towards the require-
13	ment for establishment of at least 7 bioenergy re-
14	search centers; and
15	"(B) may continue to receive support for a
16	period of 5 years beginning on the date of estab-
17	lishment of the center.".
18	SEC. 234. UNIVERSITY BASED RESEARCH AND DEVELOP-
19	MENT GRANT PROGRAM.
20	(a) Establishment.—The Secretary shall establish a
21	competitive grant program, in a geographically diverse
22	manner, for projects submitted for consideration by institu-
23	tions of higher education to conduct research and develop-
24	ment of renewable energy technologies. Each grant made
25	shall not exceed \$2,000,000.

1	(b) Eligibility.—Priority shall be given to institu-
2	tions of higher education with—
3	(1) established programs of research in renewable
4	energy;
5	(2) locations that are low income or outside of
6	an urbanized area;
7	(3) a joint venture with an Indian tribe; and
8	(4) proximity to trees dying of disease or insect
9	infestation as a source of woody biomass.
10	(c) AUTHORIZATION OF APPROPRIATIONS.—There are
11	authorized to be appropriated to the Secretary \$25,000,000
12	for carrying out this section.
13	(d) Definitions.—In this section:
14	(1) Indian tribe" has
15	the meaning as defined in section 126(c) of the En-
16	ergy Policy Act of 2005.
17	(2) Renewable energy.—The term "renewable
18	energy" has the meaning as defined in section 902 of
19	the Energy Policy Act of 2005.
20	(3) Urbanized Area.—The term "urbanized
21	area" has the mean as defined by the U.S. Bureau of
22	the Census.

1	Subtitle C—Biofuels Infrastructure
2	SEC. 241. PROHIBITION ON FRANCHISE AGREEMENT RE-
3	STRICTIONS RELATED TO RENEWABLE FUEL
4	INFRASTRUCTURE.
5	(a) In General.—Title I of the Petroleum Marketing
6	Practices Act (15 U.S.C. 2801 et seq.) is amended by adding
7	at the end the following:
8	"SEC. 107. PROHIBITION ON RESTRICTION OF INSTALLA-
9	TION OF RENEWABLE FUEL PUMPS.
10	"(a) Definition.—In this section:
11	"(1) Renewable fuel.—The term 'renewable
12	fuel' means any fuel—
13	"(A) at least 85 percent of the volume of
14	which consists of ethanol; or
15	"(B) any mixture of biodiesel and diesel or
16	renewable diesel (as defined in regulations adopt-
17	ed pursuant to section 211(o) of the Clean Air
18	Act (40 CFR, Part 80)), determined without re-
19	gard to any use of kerosene and containing at
20	least 20 percent biodiesel or renewable diesel.
21	"(2) Franchise-related document.—The
22	term 'franchise-related document' means—
23	"(A) a franchise under this Act; and

1	"(B) any other contract or directive of a
2	franchisor relating to terms or conditions of the
3	sale of fuel by a franchisee.
4	"(b) Prohibitions.—
5	"(1) In General.—No franchise-related docu-
6	ment entered into or renewed on or after the date of
7	enactment of this section shall contain any provision
8	allowing a franchisor to restrict the franchisee or any
9	affiliate of the franchisee from—
10	"(A) installing on the marketing premises
11	of the franchisee a renewable fuel pump or tank,
12	except that the franchisee's franchisor may re-
13	strict the installation of a tank on leased mar-
14	keting premises of such franchisor;
15	"(B) converting an existing tank or pump
16	on the marketing premises of the franchisee for
17	renewable fuel use, so long as such tank or pump
18	and the piping connecting them are either war-
19	ranted by the manufacturer or certified by a rec-
20	ognized standards setting organization to be
21	suitable for use with such renewable fuel;
22	"(C) advertising (including through the use
23	of signage) the sale of any renewable fuel;
24	"(D) selling renewable fuel in any specified
25	area on the marketing premises of the franchisee

1	(including any area in which a name or logo of
2	a franchisor or any other entity appears);
3	"(E) purchasing renewable fuel from sources
4	other than the franchisor if the franchisor does
5	not offer its own renewable fuel for sale by the
6	franchisee;
7	"(F) listing renewable fuel availability or
8	prices, including on service station signs, fuel
9	dispensers, or light poles; or
10	"(G) allowing for payment of renewable fuel
11	with a credit card,
12	so long as such activities described in subparagraphs
13	(A) through (G) do not constitute mislabeling, mis-
14	branding, willful adulteration, or other trademark
15	violations by the franchisee.
16	"(2) Effect of provision.—Nothing in this
17	section shall be construed to preclude a franchisor
18	from requiring the franchisee to obtain reasonable in-
19	demnification and insurance policies.
20	"(c) Exception to 3-Grade Requirement.—No
21	franchise-related document that requires that 3 grades of
22	gasoline be sold by the applicable franchisee shall prevent
23	the franchisee from selling an renewable fuel in lieu of 1,
24	and only 1, grade of gasoline.".

1	(b) Enforcement.—Section 105 of the Petroleum
2	Marketing Practices Act (15 U.S.C. 2805) is amended by
3	striking "102 or 103" each place it appears and inserting
4	"102, 103, or 107".
5	(c) Conforming Amendments.—
6	(1) In general.—Section 101(13) of the Petro-
7	leum Marketing Practices Act (15 U.S.C. 2801(13)) is
8	amended by aligning the margin of subparagraph (C)
9	with subparagraph (B).
10	(2) Table of contents.—The table of contents
11	of the Petroleum Marketing Practices Act (15 U.S.C.
12	2801 note) is amended—
13	(A) by inserting after the item relating to
14	section 106 the following:
	"Sec. 107. Prohibition on restriction of installation of renewable fuel pumps."; and
15	(B) by striking the item relating to section
16	202 and inserting the following:
	"Sec. 202. Automotive fuel rating testing and disclosure requirements.".
17	SEC. 242. RENEWABLE FUEL DISPENSER REQUIREMENTS.
18	(a) Market Penetration Reports.—The Secretary,
19	in consultation with the Secretary of Transportation, shall
20	determine and report to Congress annually on the market
21	penetration for flexible-fuel vehicles in use within geo-
22	graphic regions to be established by the Secretary.

1	(b) Dispenser Feasibility Study.—Not later than
2	24 months after the date of enactment of this Act, the Sec-
3	retary, in consultation with the Department of Transpor-
4	tation, shall report to the Congress on the feasibility of re-
5	quiring motor fuel retailers to install $E-85$ compatible dis-
6	pensers and related systems at retail fuel facilities in re-
7	gions where flexible-fuel vehicle market penetration has
8	reached 15 percent of motor vehicles. In conducting such
9	study, the Secretary shall consider and report on the fol-
10	lowing factors:
11	(1) The commercial availability of $E-85$ fuel
12	and the number of competing $E ext{}85$ wholesale sup-
13	pliers in a given region.
14	(2) The level of financial assistance provided on
15	an annual basis by the Federal Government, State
16	governments, and nonprofit entities for the installa-
17	$tion\ of\ E-85\ compatible\ infrastructure.$
18	(3) The number of retailers whose retail locations
19	are unable to support more than 2 underground stor-
20	age tank dispensers.
21	(4) The expense incurred by retailers in the in-
22	stallation and sale of $E ext{}85$ compatible dispensers and
23	related systems and any potential effects on the price
24	of motor vehicle fuel.

1 SEC. 243. ETHANOL PIPELINE FEASIBILITY STUDY.

2	(a) In General.—The Secretary, in coordination
3	with the Secretary of Transportation, shall conduct a study
4	of the feasibility of the construction of pipelines dedicated
5	to the transportation of ethanol.
6	(b) Factors for Consideration.—In conducting the
7	study under subsection (a), the Secretary shall take into
8	consideration—
9	(1) the quantity of ethanol production that
10	would make dedicated pipelines economically viable;
11	(2) existing or potential barriers to the construc-
12	tion of pipelines dedicated to the transportation of
13	ethanol, including technical, siting, financing, and
14	regulatory barriers;
15	(3) market risk (including throughput risk) and
16	means of mitigating the risk;
17	(4) regulatory, financing, and siting options that
18	would mitigate the risk and help ensure the construc-
19	tion of 1 or more pipelines dedicated to the transpor-
20	tation of ethanol;
21	(5) financial incentives that may be necessary
22	for the construction of pipelines dedicated to the
23	transportation of ethanol, including the return on eq-
24	uity that sponsors of the initial dedicated ethanol
25	ninelines will require to invest in the ninelines:

1	(6) technical factors that may compromise the
2	safe transportation of ethanol in pipelines, including
3	identification of remedial and preventive measures to
4	ensure pipeline integrity; and
5	(7) such other factors as the Secretary considers
6	to be appropriate.
7	(c) Report.—Not later than 15 months after the date
8	of enactment of this Act, the Secretary shall submit to Con-
9	gress a report describing the results of the study conducted
10	under this section.
11	(d) Authorization of Appropriations.—There is
12	authorized to be appropriated to the Secretary to carry out
13	this section \$1,000,000 for each of fiscal years 2008 and
14	2009, to remain available until expended.
15	SEC. 244. RENEWABLE FUEL INFRASTRUCTURE GRANTS.
16	(a) Definition of Renewable Fuel Blend.—For
17	purposes of this section, the term "renewable fuel blend"
18	means gasoline blend that contain not less than 11 percent,
19	and not more than 85 percent, renewable fuel or diesel fuel
20	that contains at least 10 percent renewable fuel.
21	(b) Infrastructure Development Grants.—
22	(1) Establishment.—The Secretary shall estab-
23	lish a program for making grants for providing as-
24	sistance to retail and wholesale motor fuel dealers or
25	other entities for the installation, replacement, or con-

1	version of motor fuel storage and dispensing infra-
2	structure to be used exclusively to store and dispense
3	renewable fuel blends.
4	(2) Selection criteria.—Not later than 12
5	months after the date of enactment of this Act, the
6	Secretary shall establish criteria for evaluating appli-
7	cations for grants under this subsection that will
8	maximize the availability and use of renewable fuel
9	blends, and that will ensure that renewable fuel blends
10	are available across the country. Such criteria shall
11	provide for—
12	(A) consideration of the public demand for
13	each renewable fuel blend in a particular geo-
14	graphic area based on State registration records
15	showing the number of flexible-fuel vehicles;
16	(B) consideration of the opportunity to cre-
17	ate or expand corridors of renewable fuel blend
18	stations along interstate or State highways;
19	(C) consideration of the experience of each
20	applicant with previous, similar projects;
21	(D) consideration of population, number of
22	flexible-fuel vehicles, number of retail fuel outlets,
23	and saturation of flexible-fuel vehicles; and
24	(E) priority consideration to applications
25	that—

1	(i) are most likely to maximize dis-
2	placement of petroleum consumption, meas-
3	ured as a total quantity and a percentage;
4	(ii) are best able to incorporate exist-
5	ing infrastructure while maximizing, to the
6	extent practicable, the use of renewable fuel
7	blends; and
8	(iii) demonstrate the greatest commit-
9	ment on the part of the applicant to ensure
10	funding for the proposed project and the
11	greatest likelihood that the project will be
12	maintained or expanded after Federal as-
13	sistance under this subsection is completed.
14	(3) Limitations.—Assistance provided under
15	this subsection shall not exceed—
16	(A) 33 percent of the estimated cost of the
17	installation, replacement, or conversion of motor
18	fuel storage and dispensing infrastructure; or
19	(B) \$180,000 for a combination of equip-
20	ment at any one retail outlet location.
21	(4) Operation of renewable fuel blend
22	STATIONS.—The Secretary shall establish rules that
23	set forth requirements for grant recipients under this
24	section that include providing to the public the renew-
25	able fuel blends, establishina a marketina plan that

- informs consumers of the price and availability of the
 renewable fuel blends, clearly labeling the dispensers
 and related equipment, and providing periodic reports on the status of the renewable fuel blend sales,
 the type and amount of the renewable fuel blends dispensed at each location, and the average price of such
 fuel.
 - than the date on which each renewable fuel blend station begins to offer renewable fuel blends to the public, the grant recipient that used grant funds to construct or upgrade such station shall notify the Secretary of such opening. The Secretary shall add each new renewable fuel blend station to the renewable fuel blend station locator on its Website when it receives notification under this subsection.
 - (6) Double counting.—No person that receives a credit under section 30C of the Internal Revenue Code of 1986 may receive assistance under this section.
 - (7) RESERVATION OF FUNDS.—The Secretary shall reserve funds appropriated for the renewable fuel blends infrastructure development grant program for technical and marketing assistance described in subsection (c).

1	(c) Retail Technical and Marketing Assist-
2	ANCE.—The Secretary shall enter into contracts with enti-
3	ties with demonstrated experience in assisting retail fueling
4	stations in installing refueling systems and marketing re-
5	$newable\ fuel\ blends\ nationally, for\ the\ provision\ of\ technical$
6	and marketing assistance to recipients of grants under this
7	section. Such assistance shall include—
8	(1) technical advice for compliance with applica-
9	ble Federal and State environmental requirements;
10	(2) help in identifying supply sources and secur-
11	ing long-term contracts; and
12	(3) provision of public outreach, education, and
13	labeling materials.
14	(d) Refueling Infrastructure Corridors.—
15	(1) In General.—The Secretary shall establish
16	a competitive grant pilot program (referred to in this
17	subsection as the "pilot program"), to be administered
18	through the Vehicle Technology Deployment Program
19	of the Department, to provide not more than 10 geo-
20	graphically-dispersed project grants to State govern-
21	ments, Indian tribal governments, local governments,
22	metropolitan transportation authorities, or partner-
23	ships of those entities to carry out 1 or more projects
24	for the purposes described in paragraph (2).

1	(2) Grant purposes.—A grant under this sub-
2	section shall be used for the establishment of refueling
3	infrastructure corridors, as designated by the Sec-
4	retary, for renewable fuel blends, including—
5	(A) installation of infrastructure and equip-
6	ment necessary to ensure adequate distribution of
7	renewable fuel blends within the corridor;
8	(B) installation of infrastructure and
9	equipment necessary to directly support vehicles
10	powered by renewable fuel blends; and
11	(C) operation and maintenance of infra-
12	structure and equipment installed as part of a
13	project funded by the grant.
14	(3) Applications.—
15	(A) Requirements.—
16	(i) In general.—Subject to clause
17	(ii), not later than 90 days after the date of
18	enactment of this Act, the Secretary shall
19	issue requirements for use in applying for
20	grants under the pilot program.
21	(ii) Minimum requirements.—At a
22	minimum, the Secretary shall require that
23	an application for a grant under this sub-
24	section—
25	(I) be submitted by—

1	(aa) the head of a State, trib-
2	al, or local government or a met-
3	ropolitan transportation author-
4	ity, or any combination of those
5	entities; and
6	(bb) a registered participant
7	in the Vehicle Technology Deploy-
8	ment Program of the Department;
9	and
10	(II) include—
11	(aa) a description of the
12	project proposed in the applica-
13	tion, including the ways in which
14	the project meets the requirements
15	of this subsection;
16	(bb) an estimate of the degree
17	of use of the project, including the
18	estimated size of fleet of vehicles
19	operated with renewable fuels
20	blend available within the geo-
21	graphic region of the corridor,
22	measured as a total quantity and
23	a percentage;
24	(cc) an estimate of the poten-
25	tial petroleum displaced as a re-

1	sult of the project (measured as a
2	total quantity and a percentage),
3	and a plan to collect and dissemi-
4	nate petroleum displacement and
5	other relevant data relating to the
6	project to be funded under the
7	grant, over the expected life of the
8	project;
9	(dd) a description of the
10	means by which the project will be
11	sustainable without Federal as-
12	sistance after the completion of
13	the term of the grant;
14	(ee) a complete description of
15	the costs of the project, including
16	acquisition, construction, oper-
17	ation, and maintenance costs over
18	the expected life of the project; and
19	(ff) a description of which
20	costs of the project will be sup-
21	ported by Federal assistance
22	under this subsection.
23	(B) Partners.—An applicant under sub-
24	paragraph (A) may carry out a project under

1	the pilot program in partnership with public
2	and private entities.
3	(4) Selection Criteria.—In evaluating appli-
4	cations under the pilot program, the Secretary
5	shall—
6	(A) consider the experience of each appli-
7	cant with previous, similar projects; and
8	(B) give priority consideration to applica-
9	tions that—
10	(i) are most likely to maximize dis-
11	placement of petroleum consumption, meas-
12	ured as a total quantity and a percentage;
13	(ii) are best able to incorporate exist-
14	ing infrastructure while maximizing, to the
15	extent practicable, the use of advanced
16	biofuels;
17	(iii) demonstrate the greatest commit-
18	ment on the part of the applicant to ensure
19	funding for the proposed project and the
20	greatest likelihood that the project will be
21	maintained or expanded after Federal as-
22	sistance under this subsection is completed;
23	(iv) represent a partnership of public
24	and private entities; and

1	(v) exceed the minimum requirements
2	of paragraph $(3)(A)(ii)$.
3	(5) Pilot project requirements.—
4	(A) Maximum amount.—The Secretary
5	shall provide not more than \$20,000,000 in Fed-
6	eral assistance under the pilot program to any
7	applicant.
8	(B) Cost sharing.—The non-Federal share
9	of the cost of any activity relating to renewable
10	fuel blend infrastructure development carried out
11	using funds from a grant under this subsection
12	shall be not less than 20 percent.
13	(C) Maximum period of grants.—The
14	Secretary shall not provide funds to any appli-
15	cant under the pilot program for more than 2
16	years.
17	(D) Deployment and distribution.—The
18	Secretary shall seek, to the maximum extent
19	practicable, to ensure a broad geographic dis-
20	tribution of project sites funded by grants under
21	this subsection.
22	(E) Transfer of information and
23	Knowledge.—The Secretary shall establish
24	mechanisms to ensure that the information and
25	knowledge gained by participants in the pilot

1	program are transferred among the pilot pro-
2	gram participants and to other interested par-
3	ties, including other applicants that submitted
4	applications.
5	(6) Schedule.—
6	(A) Initial grants.—
7	(i) In general.—Not later than 90
8	days after the date of enactment of this Act,
9	the Secretary shall publish in the Federal
10	Register, Commerce Business Daily, and
11	such other publications as the Secretary
12	considers to be appropriate, a notice and re-
13	quest for applications to carry out projects
14	under the pilot program.
15	(ii) Deadline.—An application de-
16	scribed in clause (i) shall be submitted to
17	the Secretary by not later than 180 days
18	after the date of publication of the notice
19	under that clause.
20	(iii) Initial selection.—Not later
21	than 90 days after the date by which appli-
22	cations for grants are due under clause (ii),
23	the Secretary shall select by competitive,
24	peer-reviewed proposal up to 5 applications

1	for projects to be awarded a grant under the
2	pilot program.
3	(B) Additional grants.—
4	(i) In general.—Not later than 2
5	years after the date of enactment of this Act,
6	the Secretary shall publish in the Federal
7	Register, Commerce Business Daily, and
8	such other publications as the Secretary
9	considers to be appropriate, a notice and re-
10	quest for additional applications to carry
11	out projects under the pilot program that
12	incorporate the information and knowledge
13	obtained through the implementation of the
14	first round of projects authorized under the
15	pilot program.
16	(ii) Deadline.—An application de-
17	scribed in clause (i) shall be submitted to
18	the Secretary by not later than 180 days
19	after the date of publication of the notice
20	under that clause.
21	(iii) Initial selection.—Not later
22	than 90 days after the date by which appli-
23	cations for grants are due under clause (ii),
24	the Secretary shall select by competitive,

peer-reviewed proposal such additional ap-

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1	plications for projects to be awarded a
2	grant under the pilot program as the Sec-
3	retary determines to be appropriate.
4	(7) Reports to congress.—
5	(A) Initial report.—Not later than 60
6	days after the date on which grants are awarded
7	under this subsection, the Secretary shall submit
8	to Congress a report containing—
9	(i) an identification of the grant re-
10	cipients and a description of the projects to
11	be funded under the pilot program;
12	(ii) an identification of other appli-
13	cants that submitted applications for the
14	pilot program but to which funding was not
15	provided; and
16	(iii) a description of the mechanisms
17	used by the Secretary to ensure that the in-
18	formation and knowledge gained by partici-
19	pants in the pilot program are transferred
20	among the pilot program participants and
21	to other interested parties, including other
22	applicants that submitted applications.
23	(B) Evaluation.—Not later than 2 years
24	after the date of enactment of this Act, and an-
25	nually thereafter until the termination of the

1	pilot program, the Secretary shall submit to
2	Congress a report containing an evaluation of
3	the effectiveness of the pilot program, including
4	an assessment of the petroleum displacement and
5	benefits to the environment derived from the
6	projects included in the pilot program.
7	(e) Restriction.—No grant shall be provided under
8	subsection (b) or (c) to a large, vertically integrated oil com-
9	pany.
10	(f) AUTHORIZATION OF APPROPRIATIONS.—There are
11	authorized to be appropriated to the Secretary for carrying
12	out this section \$200,000,000 for each of the fiscal years
13	2008 through 2014.
14	SEC. 245. STUDY OF THE ADEQUACY OF TRANSPORTATION
15	OF DOMESTICALLY-PRODUCED RENEWABLE
16	FUEL BY RAILROADS AND OTHER MODES OF
17	TRANSPORTATION.
18	(a) Study.—
19	(1) In General.—The Secretary, in coordina-
20	tion with the Secretary of Transportation, shall joint-
21	ly conduct a study of the adequacy of transportation
22	of domestically-produced renewable fuels by railroad
23	and other modes of transportation as designated by
24	the Secretaries.

1	(2) Components.—In conducting the study
2	under paragraph (1), the Secretaries shall—
3	(A) consider the adequacy of existing rail-
4	road and other transportation and distribution
5	infrastructure, equipment, service and capacity
6	to move the necessary quantities of domestically-
7	produced renewable fuel within the timeframes;
8	(B)(i) consider the projected costs of moving
9	the domestically-produced renewable fuel by rail-
10	road and other modes transportation; and
11	(ii) consider the impact of the projected
12	costs on the marketability of the domestically-
13	produced renewable fuel;
14	(C) identify current and potential impedi-
15	ments to the reliable transportation and dis-
16	tribution of adequate supplies of domestically-
17	produced renewable fuel at reasonable prices, in-
18	cluding practices currently utilized by domestic
19	producers, shippers, and receivers of renewable
20	fuels;
21	(D) consider whether adequate competition
22	exists within and between modes of transpor-
23	tation for the transportation and distribution of
24	domestically-produced renewable fuel and, wheth-
25	er inadequate competition leads to an unfair

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- price for the transportation and distribution of domestically-produced renewable fuel or unacceptable service for transportation of domestically-produced renewable fuel;
 - (E) consider whether Federal agencies have adequate legal authority to address instances of inadequate competition when inadequate competition is found to prevent domestic producers for renewable fuels from obtaining a fair and reasonable transportation price or acceptable service for the transportation and distribution of domestically-produced renewable fuels;
 - (F) consider whether Federal agencies have adequate legal authority to address railroad and transportation service problems that may be resulting in inadequate supplies of domesticallyproduced renewable fuel in any area of the United States;
 - (G) consider what transportation infrastructure capital expenditures may be necessary to ensure the reliable transportation of adequate supplies of domestically-produced renewable fuel at reasonable prices within the United States and which public and private entities should be responsible for making such expenditures; and

1	(H) provide recommendations on ways to
2	facilitate the reliable transportation of adequate
3	supplies of domestically-produced renewable fuel
4	at reasonable prices.
5	(b) REPORT.—Not later than 180 days after the date
6	of enactment of this Act, the Secretaries shall jointly submit
7	to the Committee on Commerce, Science and Transpor-
8	tation, the Committee on Energy and Natural Resources,
9	and the Committee on Environment and Public Works of
10	the Senate and the Committee on Transportation and In-
11	frastructure and the Committee on Energy and Commerce
12	of the House of Representatives a report that describes the
13	results of the study conducted under subsection (a).
14	SEC. 246. FEDERAL FLEET FUELING CENTERS.
15	(a) In General.—Not later than January 1, 2010,
16	the head of each Federal agency shall install at least 1 re-
17	newable fuel pump at each Federal fleet fueling center in
18	the United States under the jurisdiction of the head of the
19	Federal agency.
20	(b) Report.—Not later than October 31 of the first
21	calendar year beginning after the date of the enactment of
22	this Act, and each October 31 thereafter, the President shall
23	submit to Congress a report that describes the progress to-
24	ward complying with subsection (a), including identi-

fying—

1	(1) the number of Federal fleet fueling centers
2	that contain at least 1 renewable fuel pump; and
3	(2) the number of Federal fleet fueling centers
4	that do not contain any renewable fuel pumps.
5	(c) Department of Defense Facility.—This sec-
6	tion shall not apply to a Department of Defense fueling cen-
7	ter with a fuel turnover rate of less than 100,000 gallons
8	of fuel per year.
9	(d) Authorization of Appropriations.—There are
10	authorized to be appropriated such sums as are necessary
11	to carry out this section.
12	SEC. 247. STANDARD SPECIFICATIONS FOR BIODIESEL.
13	Section 211 of the Clean Air Act (42 U.S.C. 7545) is
14	amended by redesignating subsection (s) as subsection (t),
15	redesignating subsection (r) (relating to conversion assist-
16	ance for cellulosic biomass, waste-derived ethanol, approved
17	renewable fuels) as subsection (s) and by adding the fol-
18	lowing new subsection at the end thereof:
19	"(u) Standard Specifications for Biodiesel.—
20	(1) Unless the American Society for Testing and Materials
21	has adopted a standard for diesel fuel containing 20 percent
22	biodiesel (commonly known as 'B20') within 1 year after
23	the date of enactment of this subsection, the Administrator
24	shall initiate a rulemaking to establish a uniform per gal-
25	lon fuel standard for such fuel and designate an identifica-

- 1 tion number so that vehicle manufacturers are able to de-
- 2 sign engines to use fuel meeting such standard.
- 3 "(2) Unless the American Society for Testing and Ma-
- 4 terials has adopted a standard for diesel fuel containing
- 5 5 percent biodiesel (commonly known as 'B5') within 1 year
- 6 after the date of enactment of this subsection, the Adminis-
- 7 trator shall initiate a rulemaking to establish a uniform
- 8 per gallon fuel standard for such fuel and designate an
- 9 identification so that vehicle manufacturers are able to de-
- 10 sign engines to use fuel meeting such standard.
- 11 "(3) Whenever the Administrator is required to ini-
- 12 tiate a rulemaking under paragraph (1) or (2), the Admin-
- 13 istrator shall promulgate a final rule within 18 months
- 14 after the date of the enactment of this subsection.
- 15 "(4) Not later than 180 days after the enactment of
- 16 this subsection, the Administrator shall establish an annual
- 17 inspection and enforcement program to ensure that diesel
- 18 fuel containing biodiesel sold or distributed in interstate
- 19 commerce meets the standards established under regulations
- 20 under this section, including testing and certification for
- 21 compliance with applicable standards of the American So-
- 22 ciety for Testing and Materials. There are authorized to be
- 23 appropriated to carry out the inspection and enforcement
- 24 program under this paragraph \$3,000,000 for each of fiscal
- 25 years 2008 through 2010.

1	"(5) For purposes of this subsection, the term bio-
2	diesel' has the meaning provided by section 312(f) of Energy
3	Policy Act of 1992 (42 U.S.C. 13220(f)).".
4	SEC. 248. BIOFUELS DISTRIBUTION AND ADVANCED
5	BIOFUELS INFRASTRUCTURE.
6	(a) In General.—The Secretary, in coordination
7	with the Secretary of Transportation and in consultation
8	with the Administrator of the Environmental Protection
9	Agency, shall carry out a program of research, development,
10	and demonstration relating to existing transportation fuel
11	distribution infrastructure and new alternative distribution
12	in frastructure.
13	(b) Focus.—The program described in subsection (a)
14	shall focus on the physical and chemical properties of
15	biofuels and efforts to prevent or mitigate against adverse
16	impacts of those properties in the areas of—
17	(1) corrosion of metal, plastic, rubber, cork, fi-
18	berglass, glues, or any other material used in pipes
19	and storage tanks;
20	(2) dissolving of storage tank sediments;
21	(3) clogging of filters;
22	(4) contamination from water or other
23	adulterants or pollutants;
24	(5) poor flow properties related to low tempera-
25	tures;

1	(6) oxidative and thermal instability in long-
2	term storage and uses;
3	(7) microbial contamination;
4	(8) problems associated with electrical conduc-
5	tivity; and
6	(9) such other areas as the Secretary considers
7	appropriate.
8	$Subtitle\ D-Environmental$
9	Safeguards
10	SEC. 251. WAIVER FOR FUEL OR FUEL ADDITIVES.
11	Section 211(f)(4) of the Clean Air Act (42 U.S.C.
12	7545(f)) is amended to read as follows:
13	"(4) The Administrator, upon application of any
14	manufacturer of any fuel or fuel additive, may waive the
15	prohibitions established under paragraph (1) or (3) of this
16	subsection or the limitation specified in paragraph (2) of
17	this subsection, if he determines that the applicant has es-
18	tablished that such fuel or fuel additive or a specified con-
19	centration thereof, and the emission products of such fuel
20	or fuel additive or specified concentration thereof, will not
21	cause or contribute to a failure of any emission control de-
22	vice or system (over the useful life of the motor vehicle,
23	motor vehicle engine, nonroad engine or nonroad vehicle in
24	which such device or system is used) to achieve compliance
25	by the vehicle or engine with the emission standards with

1	respect to which it has been certified pursuant to sections
2	206 and 213(a). The Administrator shall take final action
3	to grant or deny an application submitted under this para-
4	graph, after public notice and comment, within 270 days
5	of the receipt of such an application.".
6	TITLE III—ENERGY SAVINGS
7	THROUGH IMPROVED STAND-
8	ARDS FOR APPLIANCE AND
9	LIGHTING
10	Subtitle A—Appliance Energy
11	<i>Efficiency</i>
12	SEC. 301. EXTERNAL POWER SUPPLY EFFICIENCY STAND-
13	ARDS.
14	(a) Definitions.—Section 321 of the Energy Policy
15	and Conservation Act (42 U.S.C. 6291) is amended—
16	(1) in paragraph (36)—
17	(A) by striking "(36) The" and inserting
18	$the\ following:$
19	"(36) External power supply.—
20	"(A) In GENERAL.—The"; and
21	(B) by adding at the end the following:
22	"(B) ACTIVE MODE.—The term 'active
23	mode' means the mode of operation when an ex-
24	ternal power supply is connected to the main

1	electricity supply and the output is connected to
2	a load.
3	"(C) Class a external power supply.—
4	"(i) In general.—The term 'class A
5	external power supply' means a device
6	that—
7	"(I) is designed to convert line
8	$voltage \ AC \ input \ into \ lower \ voltage \ AC$
9	$or\ DC\ output;$
10	"(II) is able to convert to only 1
11	AC or DC output voltage at a time;
12	"(III) is sold with, or intended to
13	be used with, a separate end-use prod-
14	uct that constitutes the primary load;
15	"(IV) is contained in a separate
16	physical enclosure from the end-use
17	product;
18	"(V) is connected to the end-use
19	product via a removable or hard-wired
20	male/female electrical connection, cable,
21	cord, or other wiring; and
22	"(VI) has nameplate output power
23	that is less than or equal to 250 watts.

1	"(ii) Exclusions.—The term 'class A
2	external power supply' does not include any
3	device that—
4	"(I) requires Federal Food and
5	Drug Administration listing and ap-
6	proval as a medical device in accord-
7	ance with section 513 of the Federal
8	Food, Drug, and Cosmetic Act (21
9	U.S.C. 360c); or
10	"(II) powers the charger of a de-
11	tachable battery pack or charges the
12	battery of a product that is fully or
13	primarily motor operated.
14	"(D) No-load mode.—The term 'no-load
15	mode' means the mode of operation when an ex-
16	ternal power supply is connected to the main
17	electricity supply and the output is not con-
18	nected to a load."; and
19	(2) by adding at the end the following:
20	"(52) Detachable Battery.—The term 'de-
21	tachable battery' means a battery that is—
22	"(A) contained in a separate enclosure from
23	the product; and
24	"(B) intended to be removed or disconnected
25	from the product for recharging.".

1	(b) Test Procedures.—Section 323(b) of the Energy	
2	Policy and Conservation Act (42 U.S.C. 6293(b)) is amend-	
3	ed by adding at the end the following:	
4	"(17) Class a external power supplies.—	
5	Test procedures for class A external power supplies	
6	shall be based on the 'Test Method for Calculating the	
7	Energy Efficiency of Single-Voltage External AC-DC	
8	and AC-AC Power Supplies' published by the Envi-	
9	ronmental Protection Agency on August 11, 2004, ex-	
10	cept that the test voltage specified in section 4(d) of	
11	that test method shall be only 115 volts, 60 Hz.".	
12	(c) Efficiency Standards for Class A External	
13	Power Supplies.—Section 325(u) of the Energy Policy	
14	and Conservation Act (42 U.S.C. 6295(u)) is amended by	
15	adding at the end the following:	
16	"(6) Efficiency standards for class a ex-	
17	TERNAL POWER SUPPLIES.—	
18	"(A) In general.—Subject to subpara-	
19	graphs (B) through (D), a class A external power	
20	supply manufactured on or after the later of	
21	July 1, 2008, or the date of enactment of this	
22	paragraph shall meet the following standards:	

"Actiu	ve Mode
"Nameplate Output	Required Efficiency (decimal equivalent of a per- centage)
Less than 1 watt	0.5 times the Nameplate Output
From 1 watt to not more than 51 watts	The sum of 0.09 times the Natural Logarithm of the Nameplate Output and 0.5
Greater than 51 watts	0.85
"No-Lo	ad Mode
"Nameplate Output	Maximum Consumption
Not more than 250 watts	0.5 watts

"(B) Noncovered supplies.—A class A 1 2 external power supply shall not be subject to subparagraph (A) if the class A external power sup-3 4 ply is— "(i) manufactured during the period 5 beginning on July 1, 2008, and ending on 6 7 June 30, 2015; and "(ii) made available by the manufac-8 turer as a service part or a spare part for 9 an end-use product— 10 "(I) that constitutes the primary 11 12 load; and 13 "(II) was manufactured before 14 July 1, 2008. "(C) Marking.—Any class A external 15 16 power supply manufactured on or after the later of July 1, 2008 or the date of enactment of this 17

1	paragraph shall be clearly and permanently
2	marked in accordance with the External Power
3	Supply International Efficiency Marking Pro-
4	tocol, as referenced in the Energy Star Program
5	Requirements for Single Voltage External AC-
6	DC and AC-AC Power Supplies, version 1.1'
7	published by the Environmental Protection
8	Agency.
9	"(D) Amendment of standards.—
10	"(i) Final rule by July 1, 2011.—
11	"(I) In general.—Not later than
12	July 1, 2011, the Secretary shall pub-
13	lish a final rule to determine whether
14	the standards established under sub-
15	paragraph (A) should be amended.
16	"(II) Administration.—The
17	final rule shall—
18	"(aa) contain any amended
19	standards; and
20	"(bb) apply to products man-
21	ufactured on or after July 1,
22	2013.
23	"(ii) Final rule by July 1, 2015.—
24	"(I) In general.—Not later than
25	July 1, 2015 the Secretary shall pub-

1	lish a final rule to determine whether
2	the standards then in effect should be
3	amended.
4	"(II) Administration.—The
5	final rule shall—
6	"(aa) contain any amended
7	standards; and
8	"(bb) apply to products man-
9	ufactured on or after July 1,
10	2017.
11	"(7) End-use products.—An energy conserva-
12	tion standard for external power supplies shall not
13	constitute an energy conservation standard for the
14	separate end-use product to which the external power
15	supplies is connected.".
16	SEC. 302. UPDATING APPLIANCE TEST PROCEDURES.
17	(a) Consumer Appliances.—Section 323(b)(1) of the
18	Energy Policy and Conservation Act (42 U.S.C. 6293(b)(1))
19	is amended by striking "(1)" and all that follows through
20	the end of the paragraph and inserting the following:
21	"(1) Test procedures.—
22	"(A) Amendment.—At least once every 7
23	years, the Secretary shall review test procedures
24	for all covered products and—

1	"(i) amend test procedures with respect
2	to any covered product, if the Secretary de-
3	termines that amended test procedures
4	would more accurately or fully comply with
5	the requirements of paragraph (3); or
6	"(ii) publish notice in the Federal Reg-
7	ister of any determination not to amend a
8	test procedure.".
9	(b) Industrial Equipment.—Section 343(a) of the
10	Energy Policy and Conservation Act (42 U.S.C. 6313(a))
11	is amended by striking "(a)" and all that follows through
12	the end of paragraph (1) and inserting the following:
13	"(a) Prescription by Secretary; Require-
14	MENTS.—
15	"(1) Test procedures.—
16	"(A) Amendment.—At least once every 7
17	years, the Secretary shall conduct an evaluation
18	of each class of covered equipment and—
19	"(i) if the Secretary determines that
20	amended test procedures would more accu-
21	rately or fully comply with the requirements
22	of paragraphs (2) and (3), shall prescribe
23	test procedures for the class in accordance
24	with this section: or

1	"(ii) shall publish notice in the Federal
2	Register of any determination not to amend
3	a test procedure.".
4	SEC. 303. RESIDENTIAL BOILERS.
5	Section 325(f) of the Energy Policy and Conservation
6	Act (42 U.S.C. 6295(f)) is amended—
7	(1) in the subsection heading, by inserting "AND
8	Boilers" after "Furnaces";
9	(2) by redesignating paragraph (3) as para-
10	graph (4); and
11	(3) by inserting after paragraph (2) the fol-
12	lowing:
13	"(3) Boilers.—
14	"(A) In general.—Subject to subpara-
15	graphs (B) and (C), boilers manufactured on or
16	after September 1, 2012, shall meet the following
17	requirements:

Boiler Type	Minimum Annual Fuel Utilization Efficiency	Design Requirements
Gas Hot Water	82%	No Constant Burning Pilot, Automatic Means for Adjusting Water Tem- perature
Gas Steam	80%	No Constant Burning Pilot
Oil Hot Water	84%	Automatic Means for Adjusting Temperature

Boiler Type	Minimum Annual Fuel Utilization Efficiency	Design Requirements
Oil Steam	82%	None
Electric Hot Water	None	Automatic Means for Adjusting Temperature
Electric Steam	None	None

"(B) Automatic means for adjusting water temperature.—

"(i) In General.—The manufacturer shall equip each gas, oil, and electric hot water boiler (other than a boiler equipped with a tankless domestic water heating coil) with automatic means for adjusting the temperature of the water supplied by the boiler to ensure that an incremental change in inferred heat load produces a corresponding incremental change in the temperature of water supplied.

"(ii) SINGLE INPUT RATE.—For a boiler that fires at 1 input rate, the requirements of this subparagraph may be satisfied by providing an automatic means that allows the burner or heating element to fire only when the means has determined that the inferred heat load cannot be met by the residual heat of the water in the system.

1	"(iii) No inferred heat load.—
2	When there is no inferred heat load with re-
3	spect to a hot water boiler, the automatic
4	means described in clause (i) and (ii) shall
5	limit the temperature of the water in the
6	boiler to not more than 140 degrees Fahr-
7	enheit.
8	"(iv) Operation.—A boiler described
9	in clause (i) or (ii) shall be operable only
10	when the automatic means described in
11	clauses (i), (ii), and (iii) is installed.
12	"(C) Exception.—A boiler that is manu-
13	factured to operate without any need for elec-
14	tricity or any electric connection, electric gauges,
15	electric pumps, electric wires, or electric devices
16	shall not be required to meet the requirements of
17	this paragraph.".
18	SEC. 304. FURNACE FAN STANDARD PROCESS.
19	Paragraph (4)(D) of section 325(f) of the Energy Pol-
20	icy and Conservation Act (42 U.S.C. 6295(f)) (as redesig-
21	nated by section 303(4)) is amended by striking "the Sec-
22	retary may" and inserting "not later than December 31,
23	2013, the Secretary shall".

1	SEC. 305. IMPROVING SCHEDULE FOR STANDARDS UPDAT-
2	ING AND CLARIFYING STATE AUTHORITY.
3	(a) Consumer Appliances.—Section 325 of the En-
4	ergy Policy and Conservation Act (42 U.S.C. 6295) is
5	amended by striking subsection (m) and inserting the fol-
6	lowing:
7	"(m) Amendment of Standards.—
8	"(1) In general.—Not later than 6 years after
9	issuance of any final rule establishing or amending a
10	standard, as required for a product under this part,
11	the Secretary shall publish—
12	"(A) a notice of the determination of the
13	Secretary that standards for the product do not
14	need to be amended, based on the criteria estab-
15	lished under subsection $(n)(2)$; or
16	"(B) a notice of proposed rulemaking in-
17	cluding new proposed standards based on the cri-
18	teria established under subsection (o) and the
19	procedures established under subsection (p).
20	"(2) Notice.—If the Secretary publishes a no-
21	tice under paragraph (1), the Secretary shall—
22	"(A) publish a notice stating that the anal-
23	ysis of the Department is publicly available; and
24	"(B) provide an opportunity for written
25	comment.

1	"(3) Amendment of standard; new deter-
2	MINATION.—
3	"(A) Amendment of standard.—Not later
4	than 2 years after a notice is issued under para-
5	graph (1)(B), the Secretary shall publish a final
6	rule amending the standard for the product.
7	"(B) New Determination.—Not later than
8	3 years after a determination under paragraph
9	(1)(A), the Secretary shall make a new deter-
10	mination and publication under subparagraph
11	(A) or (B) of paragraph (1).
12	"(4) Application to products.—
13	"(A) In general.—Except as provided in
14	subparagraph (B), an amendment prescribed
15	under this subsection shall apply to—
16	"(i) with respect to refrigerators, re-
17	frigerator-freezers, freezers, room air condi-
18	tioners, dishwashers, clothes washers, clothes
19	dryers, fluorescent lamp ballasts, and kitch-
20	en ranges and ovens, such a product that is
21	manufactured after the date that is 3 years
22	after publication of the final rule estab-
23	lishing an applicable standard; and
24	"(ii) with respect to central air condi-
25	tioners, heat pumps, water heaters, pool

1	heaters, direct heating equipment, and fur-
2	naces, such a product that is manufactured
3	after the date that is 5 years after publica-
4	tion of the final rule establishing an appli-
5	$cable\ standard.$
6	"(B) Other New Standards.—A manu-
7	facturer shall not be required to apply new
8	standards to a product with respect to which
9	other new standards have been required during
10	the prior 6-year period.
11	"(5) Reports.—The Secretary shall promptly
12	submit to the Committee on Energy and Commerce of
13	the House of Representatives and the Committee on
14	Energy and Natural Resources of the Senate—
15	"(A) a progress report every 180 days on
16	compliance with this section, including a specific
17	plan to remedy any failures to comply with
18	deadlines for action established under this sec-
19	tion; and
20	"(B) all required reports to the Court or to
21	any party to the Consent Decree in State of New
22	York v Bodman, Consolidated Civil Actions
23	No.05 Civ. 7807 and No.05 Civ. 7808.".

1	(b) Industrial Equipment.—Section 342(a)(6) of
2	the Energy Policy and Conservation Act (42 U.S.C.
3	6313(a)(6)) is amended—
4	(1) by redesignating subparagraph (C) as sub-
5	paragraph (D); and
6	(2) by striking "(6)(A)(i)" and all that follows
7	through the end of subparagraph (B) and inserting
8	$the\ following:$
9	"(6) Amended energy efficiency stand-
10	ARDS.—
11	"(A) In general.—
12	"(i) Analysis of potential energy
13	SAVINGS.—If ASHRAE/IES Standard 90.1
14	is amended with respect to any small com-
15	mercial package air conditioning and heat-
16	ing equipment, large commercial package
17	air conditioning and heating equipment,
18	very large commercial package air condi-
19	tioning and heating equipment, packaged
20	terminal air conditioners, packaged ter-
21	minal heat pumps, warm-air furnaces,
22	packaged boilers, storage water heaters, in-
23	stantaneous water heaters, or unfired hot
24	water storage tanks, not later than 180 days
25	after the amendment of the standard, the

1	Secretary shall publish in the Federal Reg-
2	ister for public comment an analysis of the
3	energy savings potential of amended energy
4	efficiency standards.
5	"(ii) Amended uniform national
6	STANDARD FOR PRODUCTS.—
7	"(I) In general.—Except as pro-
8	vided in subclause (II), not later than
9	18 months after the date of publication
10	of the amendment to the ASHRAE/
11	IES Standard 90.1 for a product de-
12	scribed in clause (i), the Secretary
13	shall establish an amended uniform
14	national standard for the product at
15	the minimum level specified in the
16	amended ASHRAE/IES Standard
17	90.1.
18	"(II) More stringent stand-
19	ARD.—Subclause (I) shall not apply if
20	the Secretary determines, by rule pub-
21	lished in the Federal Register, and
22	supported by clear and convincing evi-
23	dence, that adoption of a uniform na-
24	tional standard more stringent than
25	the amended ASHRAE/IES Standard

1	90.1 for the product would result in
2	significant additional conservation of
3	energy and is technologically feasible
4	and economically justified.
5	"(B) RULE.—If the Secretary makes a de-
6	termination described in clause (ii)(II) for a
7	product described in clause (i), not later than 30
8	months after the date of publication of the
9	amendment to the ASHRAE/IES Standard 90.1
10	for the product, the Secretary shall issue the rule
11	establishing the amended standard.
12	"(C) Amendment of standard.—
13	"(i) In general.—Not later than 6
14	years after issuance of any final rule estab-
15	lishing or amending a standard, as required
16	for a product under this part, the Secretary
17	shall publish—
18	"(I) a notice of the determination
19	of the Secretary that standards for the
20	product do not need to be amended,
21	based on the criteria established under
22	$subparagraph\ (A);\ or$
23	"(II) a notice of proposed rule-
24	making including new proposed stand-
25	ards based on the criteria and proce-

1	dures established under subparagraph
2	(B).
3	"(ii) Notice.—If the Secretary pub-
4	lishes a notice under clause (i), the Sec-
5	retary shall—
6	"(I) publish a notice stating that
7	the analysis of the Department is pub-
8	licly available; and
9	"(II) provide an opportunity for
10	written comment.
11	"(iii) Amendment of standard; new
12	DETERMINATION.—
13	"(I) Amendment of stand-
14	ARD.—Not later than 2 years after a
15	notice is issued under clause (i)(II),
16	the Secretary shall publish a final rule
17	amending the standard for the product.
18	"(II) New Determination.—Not
19	later than 3 years after a determina-
20	tion under clause (i)(I), the Secretary
21	shall make a new determination and
22	publication under subclause (I) or (II)
23	of clause (i) .
24	"(iv) Application to products.—An
25	amendment prescribed under this subsection

1	shall apply to products manufactured after
2	a date that is the later of—
3	"(I) the date that is 3 years after
4	publication of the final rule estab-
5	lishing a new standard; or
6	"(II) the date that is 6 years after
7	the effective date of the current stand-
8	ard for a covered product.
9	"(v) Reports.—The Secretary shall
10	promptly submit to the Committee on En-
11	ergy and Commerce of the House of Rep-
12	resentatives and the Committee on Energy
13	and Natural Resources of the Senate a
14	progress report every 180 days on compli-
15	ance with this subparagraph, including a
16	specific plan to remedy any failures to com-
17	ply with deadlines for action established
18	under this subparagraph.".
19	SEC. 306. REGIONAL STANDARDS FOR FURNACES, CENTRAL
20	AIR CONDITIONERS, AND HEAT PUMPS.
21	(a) In General.—Section 325(o) of the Energy Policy
22	and Conservation Act (42 U.S.C. 6295(o)) is amended by
23	adding at the end the following:
24	"(6) Regional standards for furnaces, cen-
25	TRAL AIR CONDITIONERS, AND HEAT PUMPS.—

1	"(A) In general.—In any rulemaking to
2	establish a new or amended standard, the Sec-
3	retary may consider the establishment of sepa-
4	rate standards by geographic region for furnaces
5	(except boilers), central air conditioners, and
6	heat pumps.
7	"(B) National and regional stand-
8	ARDS.—
9	"(i) National standard.—If the Sec-
10	retary establishes a regional standard for a
11	product, the Secretary shall establish a base
12	national standard for the product.
13	"(ii) Regional standards.—If the
14	Secretary establishes a regional standard
15	for a product, the Secretary may establish
16	more restrictive standards for the product
17	by geographic region as follows:
18	"(I) For furnaces, the Secretary
19	may establish 1 additional standard
20	that is applicable in a geographic re-
21	gion defined by the Secretary.
22	"(II) For any cooling product, the
23	Secretary may establish 1 or 2 addi-
24	tional standards that are applicable in

1	1 or 2 geographic regions as may be
2	defined by the Secretary.
3	"(C) Boundaries of Geographic Re-
4	GIONS.—
5	"(i) In general.—Subject to clause
6	(ii), the boundaries of additional geographic
7	regions established by the Secretary under
8	this paragraph shall include only contig-
9	uous States.
10	"(ii) Alaska and Hawaii.—The States
11	of Alaska and Hawaii may be included
12	under this paragraph in a geographic re-
13	gion that the States are not contiguous to.
14	"(iii) Individual states.—Indi-
15	vidual States shall be placed only into a
16	single region under this paragraph.
17	"(D) Prerequisites.—In establishing ad-
18	ditional regional standards under this para-
19	graph, the Secretary shall—
20	"(i) establish additional regional
21	standards only if the Secretary determines
22	that—
23	"(I) the establishment of addi-
24	tional regional standards will produce
25	significant energy savings in compari-

1	son to establishing only a single na-
2	tional standard; and
3	"(II) the additional regional
4	standards are economically justified
5	under this paragraph; and
6	"(ii) consider the impact of the addi-
7	tional regional standards on consumers,
8	manufacturers, and other market partici-
9	pants, including product distributors, deal-
10	ers, contractors, and installers.
11	"(E) Application; effective date.—
12	"(i) Base national standard.—Any
13	base national standard established for a
14	product under this paragraph shall—
15	"(I) be the minimum standard for
16	the product; and
17	"(II) apply to all products manu-
18	factured or imported into the United
19	States on and after the effective date
20	for the standard.
21	"(ii) Regional standards.—Any ad-
22	ditional and more restrictive regional
23	standard established for a product under
24	this paragraph shall apply to any such
25	product installed on or after the effective

1	date of the standard in States in which the
2	Secretary has designated the standard to
3	apply.
4	"(F) Continuation of regional stand-
5	ARDS.—
6	"(i) In general.—In any subsequent
7	rulemaking for any product for which a re-
8	gional standard has been previously estab-
9	lished, the Secretary shall determine wheth-
10	er to continue the establishment of separate
11	regional standards for the product.
12	"(ii) Regional standard no longer
13	APPROPRIATE.—Except as provided in
14	clause (iii), if the Secretary determines that
15	regional standards are no longer appro-
16	priate for a product, beginning on the effec-
17	tive date of the amended standard for the
18	product—
19	"(I) there shall be 1 base national
20	standard for the product with Federal
21	$enforcement;\ and$
22	"(II) State authority for enforcing
23	a regional standard for the product
24	$shall\ terminate.$

1	"(iii) Regional standard appro-
2	PRIATE BUT STANDARD OR REGION
3	CHANGED.—
4	"(I) State no longer con-
5	TAINED IN REGION.—Subject to sub-
6	clause (III), if a State is no longer
7	contained in a region in which a re-
8	gional standard that is more stringent
9	than the base national standard ap-
10	plies, the authority of the State to en-
11	force the regional standard shall termi-
12	nate.
13	"(II) Standard or region re-
14	VISED SO THAT EXISTING REGIONAL
15	STANDARD EQUALS BASE NATIONAL
16	STANDARD.—If the Secretary revises a
17	base national standard for a product
18	or the geographic definition of a region
19	so that an existing regional standard
20	for a State is equal to the revised base
21	national standard—
22	"(aa) the authority of the
23	State to enforce the regional
24	standard shall terminate on the

1	effective date of the revised base
2	national standard; and
3	"(bb) the State shall be sub-
4	ject to the revised base national
5	standard.
6	"(III) Standard or region re-
7	VISED SO THAT EXISTING REGIONAL
8	STANDARD EQUALS BASE NATIONAL
9	STANDARD.—If the Secretary revises a
10	base national standard for a product
11	or the geographic definition of a region
12	so that the standard for a State is
13	lower than the previously approved re-
14	gional standard, the State may con-
15	tinue to enforce the previously ap-
16	proved standard level.
17	"(iv) Waiver of federal preemp-
18	tion.—Nothing in this paragraph dimin-
19	ishes the authority of a State to enforce a
20	State regulation for which a waiver of Fed-
21	eral preemption has been granted under sec-
22	tion $327(d)$.
23	"(G) Enforcement.—
24	"(i) Base national standard.—

1	"(I) In General.—The Secretary
2	shall enforce any base national stand-
3	ard.
4	"(II) Trade association cer-
5	TIFICATION PROGRAMS.—In enforcing
6	the base national standard, the Sec-
7	retary shall use, to the maximum ex-
8	tent practicable, national standard na-
9	tionally recognized certification pro-
10	grams of trade associations.
11	"(ii) Regional standards.—
12	"(I) Enforcement plan.—Not
13	later than 90 days after the date of the
14	issuance of a final rule that establishes
15	a regional standard, the Secretary
16	shall initiate a rulemaking to develop
17	and implement an effective enforcement
18	plan for regional standards for the
19	products that are covered by the final
20	rule.
21	"(II) Responsible entities.—
22	Any rules regarding enforcement of a
23	regional standard shall clearly specify
24	which entities are legally responsible
25	for compliance with the standards and

1	for making any required information
2	or labeling disclosures.
3	"(III) Final rule.—Not later
4	than 15 months after the date of the
5	issuance of a final rule that establishes
6	a regional standard for a product, the
7	Secretary shall promulgate a final rule
8	covering enforcement of regional stand-
9	ards for the product.
10	"(IV) Incorporation by states
11	and localities.—A State or locality
12	may incorporate any Federal regional
13	standard into State or local building
14	codes or State appliance standards.
15	"(V) State enforcement.—A
16	State agency may seek enforcement of
17	a Federal regional standard in a Fed-
18	eral court of competent jurisdiction.
19	"(H) Information disclosure.—
20	"(i) In general.—Not later than 90
21	days after the date of the publication of a
22	final rule that establishes a regional stand-
23	ard for a product, the Federal Trade Com-
24	mission shall undertake a rulemaking to de-
25	termine the appropriate 1 or more methods

1	for disclosing information so that con-
2	sumers, distributors, contractors, and in-
3	stallers can easily determine whether a spe-
4	cific piece of equipment that is installed in
5	a specific building is in conformance with
6	the regional standard that applies to the
7	building.
8	"(ii) Methods.—A method of dis-
9	closing information under clause (i) may
10	include—
11	"(I) modifications to the Energy
12	Guide label; or
13	"(II) other methods that make it
14	easy for consumers and installers to
15	use and understand at the point of in-
16	stallation.
17	"(iii) Completion of Rulemaking.—
18	The rulemaking shall be completed not later
19	15 months after the date of the publication
20	of a final rule that establishes a regional
21	standard for a product.".
22	(b) Prohibited Acts.—Section 332(a) of the Energy
23	Policy and Conservation Act (42 U.S.C. 6302(a)) is amend-
24	ed—

1	(1) in paragraph (4), by striking "or" after the
2	semicolon at the end;
3	(2) in paragraph (5), by striking "part." and
4	inserting "part, except to the extent that the new cov-
5	ered product is covered by a regional standard that
6	is more stringent than the base national standard;
7	or"; and
8	(3) by adding at the end the following:
9	"(6) for any manufacturer or private labeler to
10	knowingly sell a product to a distributor, contractor,
11	or dealer with knowledge that the entity routinely vio-
12	lates any regional standard applicable to the prod-
13	uct.".
14	(c) Consideration of Prices and Operating Pat-
15	TERNS.—Section 342(a)(6)(B) of the Energy Policy and
16	Conservation Act (42 U.S.C. 6313(a)(6)(B)) is amended by
17	adding at the end the following:
18	"(iii) Consideration of prices and
19	OPERATING PATTERNS.—If the Secretary is
20	considering revised standards for air-cooled
21	3-phase central air conditioners and central
22	air conditioning heat pumps with less
23	65,000 Btu per hour (cooling capacity), the
24	Secretary shall use commercial energy

1	prices and operating patterns in all anal-
2	yses conducted by the Secretary.".
3	SEC. 307. PROCEDURE FOR PRESCRIBING NEW OR AMEND-
4	ED STANDARDS.
5	Section 325(p) of the Energy Policy and Conservation
6	Act (42 U.S.C. 6925(p)) is amended—
7	(1) by striking paragraph (1); and
8	(2) by redesignating paragraphs (2) through (4)
9	as paragraphs (1) through (3), respectively.
10	SEC. 308. EXPEDITED RULEMAKINGS.
11	(a) Procedure for Prescribing New or Amended
12	Standards.—Section 325(p) of the Energy Policy and
13	Conservation Act (42 U.S.C. 6295(p)) (as amended by sec-
14	tion 307) is amended by adding at the end the following:
15	"(4) Direct final rules.—
16	"(A) In general.—On receipt of a state-
17	ment that is submitted jointly by interested per-
18	sons that are fairly representative of relevant
19	points of view (including representatives of man-
20	ufacturers of covered products, States, and effi-
21	ciency advocates), as determined by the Sec-
22	retary, and contains recommendations with re-
23	spect to an energy or water conservation stand-
24	ard—

1	"(i) if the Secretary determines that
2	the recommended standard contained in the
3	statement is in accordance with subsection
4	(o) or section $342(a)(6)(B)$, as applicable,
5	the Secretary may issue a final rule that es-
6	tablishes an energy or water conservation
7	standard and is published simultaneously
8	with a notice of proposed rulemaking that
9	proposes a new or amended energy or water
10	conservation standard that is identical to
11	the standard established in the final rule to
12	establish the recommended standard (re-
13	ferred to in this paragraph as a 'direct
14	final rule'); or
15	"(ii) if the Secretary determines that a
16	direct final rule cannot be issued based on
17	the statement, the Secretary shall publish a
18	notice of the determination, together with
19	an explanation of the reasons for the deter-
20	mination.
21	"(B) Public comment.—The Secretary
22	shall solicit public comment for a period of at
23	least 110 days with respect to each direct final
24	rule issued by the Secretary under subparagraph
25	(A)(i).

1	"(C) Withdrawal of direct final
2	RULES.—
3	"(i) In general.—Not later than 120
4	days after the date on which a direct final
5	rule issued under subparagraph $(A)(i)$ is
6	published in the Federal Register, the Sec-
7	retary shall withdraw the direct final rule
8	if—
9	"(I) the Secretary receives 1 or
10	more adverse public comments relating
11	to the direct final rule under subpara-
12	$graph\ (B)(i)$ or any alternative joint
13	recommendation; and
14	"(II) based on the rulemaking
15	record relating to the direct final rule,
16	the Secretary determines that such ad-
17	verse public comments or alternative
18	joint recommendation may provide a
19	reasonable basis for withdrawing the
20	direct final rule under subsection (o),
21	section $342(a)(6)(B)$, or any other ap-
22	$plicable\ law.$
23	"(ii) Action on withdrawal.—On
24	withdrawal of a direct final rule under
25	clause (i), the Secretary shall—

1	``(I) proceed with the notice of
2	proposed rulemaking published simul-
3	taneously with the direct final rule as
4	described in subparagraph $(A)(i)$; and
5	"(II) publish in the Federal Reg-
6	ister the reasons why the direct final
7	rule was withdrawn.
8	"(iii) Treatment of withdrawn di-
9	RECT FINAL RULES.—A direct final rule
10	that is withdrawn under clause (i) shall not
11	be considered to be a final rule for purposes
12	$of\ subsection\ (o).$
13	"(D) Effect of paragraph.—Nothing in
14	this paragraph authorizes the Secretary to issue
15	a direct final rule based solely on receipt of more
16	than 1 statement containing recommended
17	standards relating to the direct final rule.".
18	(b) Conforming Amendment.—Section 345(b)(1) of
19	the Energy Policy and Conservation Act (42 U.S.C.
20	6316(b)(1)) is amended in the first sentence by inserting
21	"section $325(p)(5)$," after "The provisions of".
22	SEC. 309. BATTERY CHARGERS.
23	Section $325(u)(1)(E)$ of the Energy Policy and Con-
24	servation Act (42 U.S.C. 6295(u)(1)(E)) is amended—

1	(1) by striking "(E)(i) Not" and inserting the
2	following:
3	"(E) External power supplies and bat-
4	TERY CHARGERS.—
5	"(i) Energy conservation stand-
6	ARDS.—
7	"(I) External power sup-
8	PLIES.— Not ";
9	(2) by striking "3 years" and inserting "2
10	years";
11	(3) by striking "battery chargers and" each place
12	it appears; and
13	(4) by adding at the end the following:
14	"(II) Battery Chargers.—Not
15	later than July 1, 2011, the Secretary
16	shall issue a final rule that prescribes
17	energy conservation standards for bat-
18	tery chargers or classes of battery char-
19	gers or determine that no energy con-
20	servation standard is technically fea-
21	sible and economically justified.".
22	SEC. 310. STANDBY MODE.
23	Section 325 of the Energy Policy and Conservation Act
24	(42 U.S.C. 6295) is amended—
25	(1) in subsection (u)—

1	(A) by striking paragraphs (2), (3), and
2	(4); and
3	(B) by redesignating paragraph (5) and (6)
4	as paragraphs (2) and (3), respectively;
5	(2) by redesignating subsection (gg) as subsection
6	(hh);
7	(3) by inserting after subsection (ff) the fol-
8	lowing:
9	"(gg) Standby Mode Energy Use.—
10	"(1) Definitions.—
11	"(A) In General.—Unless the Secretary
12	determines otherwise pursuant to subparagraph
13	(B), in this subsection:
14	"(i) ACTIVE MODE.—The term 'active
15	mode' means the condition in which an en-
16	ergy-using product—
17	"(I) is connected to a main power
18	source;
19	"(II) has been activated; and
20	"(III) provides 1 or more main
21	functions.
22	"(ii) Off Mode.—The term 'off mode'
23	means the condition in which an energy-
24	using product—

1	"(I) is connected to a main power
2	source; and
3	"(II) is not providing any stand-
4	by or active mode function.
5	"(iii) Standby mode.—The term
6	'standby mode' means the condition in
7	which an energy-using product—
8	"(I) is connected to a main power
9	source; and
10	"(II) offers 1 or more of the fol-
11	lowing user-oriented or protective func-
12	tions:
13	"(aa) To facilitate the acti-
14	vation or deactivation of other
15	functions (including active mode)
16	by remote switch (including re-
17	mote control), internal sensor, or
18	timer.
19	"(bb) Continuous functions,
20	including information or status
21	displays (including clocks) or sen-
22	$sor\mbox{-}based\ functions.$
23	"(B) Amended definitions.—The Sec-
24	retary may, by rule, amend the definitions under
25	subparagraph (A), taking into consideration the

1	most current versions of Standards 62301 and
2	62087 of the International Electrotechnical Com-
3	mission.
4	"(2) Test procedures.—
5	"(A) In general.—Test procedures for all
6	covered products shall be amended pursuant to
7	section 323 to include standby mode and off
8	mode energy consumption, taking into consider-
9	ation the most current versions of Standards
10	62301 and 62087 of the International Electro-
11	technical Commission, with such energy con-
12	sumption integrated into the overall energy effi-
13	ciency, energy consumption, or other energy
14	descriptor for each covered product, unless the
15	Secretary determines that—
16	"(i) the current test procedures for a
17	covered product already fully account for
18	and incorporate the standby mode and off
19	mode energy consumption of the covered
20	product; or
21	"(ii) such an integrated test procedure
22	is technically infeasible for a particular
23	covered product, in which case the Secretary

 $shall\ prescribe\ a\ separate\ standby\ mode\ and$

24

1	off mode energy use test procedure for the
2	covered product, if technically feasible.
3	"(B) Deadlines.—The test procedure
4	amendments required by subparagraph (A) shall
5	be prescribed in a final rule no later than the
6	following dates:
7	"(i) December 31, 2008, for battery
8	chargers and external power supplies.
9	"(ii) March 31, 2009, for clothes dry-
10	ers, room air conditioners, and fluorescent
11	lamp ballasts.
12	"(iii) June 30, 2009, for residential
13	clothes washers.
14	"(iv) September 30, 2009, for residen-
15	tial furnaces and boilers.
16	"(v) March 31, 2010, for residential
17	water heaters, direct heating equipment,
18	and pool heaters.
19	"(vi) March 31, 2011, for residential
20	dishwashers, ranges and ovens, microwave
21	ovens, and dehumidifiers.
22	"(C) Prior product standards.—The
23	test procedure amendments adopted pursuant to
24	subparagraph (B) shall not be used to determine
25	compliance with product standards established

1	prior to the adoption of the amended test proce-
2	dures.
3	"(3) Incorporation into standard.—
4	"(A) In general.—Subject to subpara-
5	graph (B), based on the test procedures required
6	under paragraph (2), any final rule establishing
7	or revising a standard for a covered product,
8	adopted after July 1, 2010, shall incorporate
9	standby mode and off mode energy use into a
10	single amended or new standard, pursuant to
11	subsection (o), if feasible.
12	"(B) Separate standards.—If not fea-
13	sible, the Secretary shall prescribe within the
14	final rule a separate standard for standby mode
15	and off mode energy consumption, if justified
16	under subsection (o)."; and
17	(4) in paragraph (2) of subsection (hh) (as redes-
18	ignated by paragraph (2)), by striking "(ff)" each
19	place it appears and inserting "(gg)".
20	SEC. 311. ENERGY STANDARDS FOR HOME APPLIANCES.
21	(a) Appliances.—
22	(1) Dehumidifiers.—Section 325(cc) of the En-
23	ergy Policy and Conservation Act (42 U.S.C.
24	6295(cc)) is amended by striking paragraph (2) and
25	inserting the following:

1	"(2) Dehumidifiers manufactured on or
2	AFTER OCTOBER 1, 2012.—Dehumidifiers manufac-
3	tured on or after October 1, 2012, shall have an En-
4	ergy Factor that meets or exceeds the following values.
	"Product Capacity (pints/day): Minimum Energy Factor (liters/ KWh)
	Up to 35.00
	35.01-45.00
	45.01-54.00
	54.01-75.00
5	(2) Residential clothes washers and resi-
6	DENTIAL DISHWASHERS.—Section 325(g) of the En-
7	ergy Policy and Conservation Act (42 U.S.C. 6295(g))
8	is amended by adding at the end the following:
9	"(9) Residential clothes washers manufac-
10	TURED ON OR AFTER JANUARY 1, 2011.—
11	"(A) In general.—A top-loading or front-
12	loading standard-size residential clothes washer
13	manufactured on or after January 1, 2011, shall
14	have—
15	"(i) a Modified Energy Factor of at
16	least 1.26; and
17	"(ii) a water factor of not more than
18	9.5.
19	"(B) Amendment of standards.—
20	"(i) In general.—Not later than De-
21	cember 31, 2011, the Secretary shall publish

1	a final rule determining whether to amend
2	the standards in effect for clothes washers
3	manufactured on or after January 1, 2015.
4	"(ii) Amended standards.—The
5	final rule shall contain any amended stand-
6	ards.
7	"(10) Residential dishwashers manufac-
8	TURED ON OR AFTER JANUARY 1, 2010.—
9	"(A) In general.—A dishwasher manufac-
10	tured on or after January 1, 2010, shall—
11	"(i) for a standard size dishwasher not
12	exceed 355 kwh/year and 6.5 gallon per
13	cycle; and
14	"(ii) for a compact size dishwasher not
15	exceed 260 kwh/year and 4.5 gallons per
16	cycle.
17	"(B) Amendment of standards.—
18	"(i) In general.—Not later than Jan-
19	uary 1, 2015, the Secretary shall publish a
20	final rule determining whether to amend the
21	standards for dishwashers manufactured on
22	or after January 1, 2018.
23	"(ii) Amended standards.—The
24	final rule shall contain any amended stand-
25	ards.".

1	(3) Refrigerators and freezers.—Section
2	325(b) of the Energy Policy and Conservation Act (42
3	U.S.C. 6295(b)) is amended by adding at the end the
4	following:
5	"(4) Refrigerators and freezers manufac-
6	TURED ON OR AFTER JANUARY 1, 2014.—
7	"(A) In General.—Not later than Decem-
8	ber 31, 2010, the Secretary shall publish a final
9	rule determining whether to amend the stand-
10	ards in effect for refrigerators, refrigerator-freez-
11	ers, and freezers manufactured on or after Janu-
12	ary 1, 2014.
13	"(B) Amended standards.—The final
14	rule shall contain any amended standards.".
15	(b) Energy Star.—Section 324A(d)(2) of the Energy
16	Policy and Conservation Act (42 U.S.C. 6294a(d)(2)) is
17	amended by striking "January 1, 2010" and inserting
18	"July 1, 2009".
19	SEC. 312. WALK-IN COOLERS AND WALK-IN FREEZERS.
20	(a) Definitions.—Section 340 of the Energy Policy
21	and Conservation Act (42 U.S.C. 6311) is amended—
22	(1) in paragraph (1)—
23	(A) by redesignating subparagraphs (G)
24	through (K) as subparagraphs (H) through (L),
25	respectively; and

1	(B) by inserting after subparagraph (F) the
2	following:
3	"(G) Walk-in coolers and walk-in freezers.";
4	(2) by redesignating paragraphs (20) and (21)
5	as paragraphs (21) and (22), respectively; and
6	(3) by inserting after paragraph (19) the fol-
7	lowing:
8	"(20) Walk-in cooler; walk-in freezer.—
9	"(A) In GENERAL.—The terms 'walk-in
10	cooler' and 'walk-in freezer' mean an enclosed
11	storage space refrigerated to temperatures, re-
12	spectively, above, and at or below 32 degrees
13	Fahrenheit that can be walked into, and has a
14	total chilled storage area of less than 3,000
15	$square\ feet.$
16	"(B) Exclusion.—The terms 'walk-in cool-
17	er' and 'walk-in freezer' do not include products
18	designed and marketed exclusively for medical,
19	scientific, or research purposes.".
20	(b) Standards.—Section 342 of the Energy Policy
21	and Conservation Act (42 U.S.C. 6313) is amended by add-
22	ing at the end the following:
23	"(f) Walk-in Coolers and Walk-in Freezers.—

1	"(1) In General.—Subject to paragraphs (2)
2	through (5), each walk-in cooler or walk-in freezer
3	manufactured on or after January 1, 2009, shall—
4	"(A) have automatic door closers that firm-
5	ly close all walk-in doors that have been closed
6	to within 1 inch of full closure, except that this
7	subparagraph shall not apply to doors wider
8	than 3 feet 9 inches or taller than 7 feet;
9	"(B) have strip doors, spring hinged doors,
10	or other method of minimizing infiltration when
11	doors are open;
12	"(C) contain wall, ceiling, and door insula-
13	tion of at least R –25 for coolers and R –32 for
14	freezers, except that this subparagraph shall not
15	apply to glazed portions of doors nor to struc-
16	$tural\ members;$
17	"(D) contain floor insulation of at least R -
18	28 for freezers;
19	"(E) for evaporator fan motors of under 1
20	horsepower and less than 460 volts, use—
21	"(i) electronically commutated motors
22	(brushless direct current motors); or
23	"(ii) 3-phase motors;
24	"(F) for condenser fan motors of under 1
25	horsepower, use—

1	"(i) electronically commutated motors;
2	"(ii) permanent split capacitor-type
3	motors; or
4	"(iii) 3-phase motors; and
5	"(G) for all interior lights, use light sources
6	with an efficacy of 40 lumens per watt or more,
7	including ballast losses (if any), except that light
8	sources with an efficacy of 40 lumens per watt
9	or less, including ballast losses (if any), may be
10	used in conjunction with a timer or device that
11	turns off the lights within 15 minutes of when
12	the walk-in cooler or walk-in freezer is not occu-
13	pied by people.
14	"(2) Electronically commutated motors.—
15	"(A) In General.—The requirements of
16	paragraph (1)(E)(i) for electronically com-
17	mutated motors shall take effect January 1,
18	2009, unless, prior to that date, the Secretary de-
19	termines that such motors are only available
20	from 1 manufacturer.
21	"(B) Other types of motors.—In car-
22	rying out $paragraph$ (1)(E)(i) and $subpara-$
23	graph (A), the Secretary may allow other types
24	of motors if the Secretary determines that, on av-
25	erage, those other motors use no more energy in

1	evaporator fan applications than electronically
2	commutated motors.
3	"(C) Maximum energy consumption
4	LEVEL.—The Secretary shall establish the max-
5	imum energy consumption level under subpara-
6	graph (B) not later than January 1, 2010.
7	"(3) Additional specifications.—Each walk-
8	in cooler or walk-in freezer with transparent reach-in
9	doors manufactured on or after January 1, 2009,
10	shall also meet the following specifications:
11	"(A) Transparent reach-in doors for walk-
12	in freezers and windows in walk-in freezer doors
13	shall be of triple-pane glass with either heat-re-
14	flective treated glass or gas fill.
15	"(B) Transparent reach-in doors for walk-
16	in coolers and windows in walk-in cooler doors
17	shall be—
18	"(i) double-pane glass with heat-reflec-
19	tive treated glass and gas fill; or
20	"(ii) triple-pane glass with either heat-
21	reflective treated glass or gas fill.
22	"(C) If the appliance has an antisweat
23	heater without antisweat heat controls, the appli-
24	ance shall have a total door rail, glass, and
25	frame heater power draw of not more than 7.1

1	watts per square foot of door opening (for freez-
2	ers) and 3.0 watts per square foot of door open-
3	ing (for coolers).
4	"(D) If the appliance has an antisweat
5	heater with antisweat heat controls, and the total
6	door rail, glass, and frame heater power draw is
7	more than 7.1 watts per square foot of door
8	opening (for freezers) and 3.0 watts per square
9	foot of door opening (for coolers), the antisweat
10	heat controls shall reduce the energy use of the
11	antisweat heater in a quantity corresponding to
12	the relative humidity in the air outside the door
13	or to the condensation on the inner glass pane.
14	"(4) Performance-based standards.—
15	"(A) In general.—Not later than January
16	1, 2012, the Secretary shall publish performance-
17	based standards for walk-in coolers and walk-in
18	freezers that achieve the maximum improvement
19	in energy that the Secretary determines is tech-
20	nologically feasible and economically justified.
21	"(B) Application.—
22	"(i) In general.—Except as provided
23	in clause (ii), the standards shall apply to
24	products described in subparagraph (A)
25	that are manufactured beginning on the

1	date that is 3 years after the final rule is
2	published.
3	"(ii) Delayed effective date.—If
4	the Secretary determines, by rule, that a 3-
5	year period is inadequate, the Secretary
6	may establish an effective date for products
7	manufactured beginning on the date that is
8	not more than 5 years after the date of pub-
9	lication of a final rule for the products.
10	"(5) Amendment of standards.—
11	"(A) In general.—Not later than January
12	1, 2020, the Secretary shall publish a final rule
13	to determine if the standards established under
14	paragraph (4) should be amended.
15	"(B) Application.—
16	"(i) In general.—Except as provided
17	in clause (ii), the rule shall provide that the
18	standards shall apply to products manufac-
19	tured beginning on the date that is 3 years
20	after the final rule is published.
21	"(ii) Delayed effective date.—If
22	the Secretary determines, by rule, that a 3-
23	year period is inadequate, the Secretary
24	may establish an effective date for products
25	manufactured beginning on the date that is

1	not more than 5 years after the date of pub-
2	lication of a final rule for the products.".
3	(c) Test Procedures.—Section 343(a) of the Energy
4	Policy and Conservation Act (42 U.S.C. 6314(a)) is amend-
5	ed by adding at the end the following:
6	"(9) Walk-in coolers and walk-in freez-
7	ERS.—
8	"(A) In general.—For the purpose of test
9	procedures for walk-in coolers and walk-in freez-
10	ers:
11	"(i) The R value shall be the 1/ K factor
12	multiplied by the thickness of the panel.
13	"(ii) The K factor shall be based on
14	ASTM test procedure C518-2004.
15	"(iii) For calculating the R value for
16	freezers, the K factor of the foam at 20 °F
17	(average foam temperature) shall be used.
18	"(iv) For calculating the R value for
19	coolers, the K factor of the foam at $55^{\circ}F$
20	(average foam temperature) shall be used.
21	"(B) Test procedure.—
22	"(i) In general.—Not later than Jan-
23	uary 1, 2010, the Secretary shall establish
24	a test procedure to measure the energy-use
25	of walk-in coolers and walk-in freezers.

1	"(ii) Computer modeling.—The test
2	procedure may be based on computer mod-
3	eling, if the computer model or models have
4	been verified using the results of laboratory
5	tests on a significant sample of walk-in
6	coolers and walk-in freezers.".
7	(d) Labeling.—Section 344(e) of the Energy Policy
8	and Conservation Act (42 U.S.C. 6315(e)) is amended by
9	inserting "walk-in coolers and walk-in freezers," after
10	"commercial clothes washers," each place it appears.
11	(e) Administration, Penalties, Enforcement, and
12	Preemption.—Section 345 of the Energy Policy and Con-
13	servation Act (42 U.S.C. 6316) is amended—
14	(1) by striking "subparagraphs (B), (C), (D),
15	(E), and (F)" each place it appears and inserting
16	"subparagraphs (B) through (G)"; and
17	(2) by adding at the end the following:
18	"(h) Walk-in Coolers and Walk-in Freezers.—
19	"(1) Covered types.—
20	"(A) Relationship to other law.—
21	"(i) In general.—Except as otherwise
22	provided in this subsection, section 327
23	shall apply to walk-in coolers and walk-in
24	freezers for which standards have been es-
25	tablished under paragraphs (1), (2), and (3)

1	of section 342(f) to the same extent and in
2	the same manner as the section applies
3	under part A on the date of enactment of
4	$this\ subsection.$
5	"(ii) State standards.—Any State
6	standard prescribed before the date of enact-
7	ment of this subsection shall not be pre-
8	empted until the standards established
9	under paragraphs (1) and (2) of section
10	342(f) take effect.
11	"(B) Administration.—In applying sec-
12	tion 327 to equipment under subparagraph (A),
13	paragraphs (1), (2), and (3) of subsection (a)
14	shall apply.
15	"(2) Final rule not timely.—
16	"(A) In General.—If the Secretary does
17	not issue a final rule for a specific type of walk-
18	in cooler or walk-in freezer within the time
19	frame established under paragraph (4) or (5) of
20	section 342(f), subsections (b) and (c) of section
21	327 shall no longer apply to the specific type of
22	walk-in cooler or walk-in freezer during the pe-
23	riod—
24	"(i) beginning on the day after the
25	scheduled date for a final rule; and

1	"(ii) ending on the date on which the
2	Secretary publishes a final rule covering the
3	specific type of walk-in cooler or walk-in
4	freezer.
5	"(B) State standards.—Any State stand-
6	ard issued before the publication of the final rule
7	shall not be preempted until the standards estab-
8	lished in the final rule take effect.
9	"(3) California.—Any standard issued in the
10	State of California before January 1, 2011, under
11	title 20 of the California Code of Regulations, that re-
12	fers to walk-in coolers and walk-in freezers, for which
13	standards have been established under paragraphs
14	(1), (2), and (3) of section 342(f), shall not be pre-
15	empted until the standards established under section
16	342(f)(3) take effect.".
17	SEC. 313. ELECTRIC MOTOR EFFICIENCY STANDARDS.
18	(a) Definitions.—Section 340(13) of the Energy Pol-
19	icy and Conservation Act (42 U.S.C. 6311(13)) is amend-
20	ed—
21	(1) by redesignating subparagraphs (B) through
22	(H) as subparagraphs (C) through (I), respectively;
23	and

1	(2) by striking "(13)(A)" and all that follows
2	through the end of subparagraph (A) and inserting
3	$the\ following:$
4	"(13) Electric motor.—
5	"(A) General purpose electric motor
6	(SUBTYPE 1).—The term 'general purpose electric
7	motor (subtype I)' means any motor that meets
8	the definition of 'General Purpose' as established
9	in the final rule issued by the Department of
10	Energy entitled Energy Efficiency Program for
11	Certain Commercial and Industrial Equipment:
12	Test Procedures, Labeling, and Certification Re-
13	quirements for Electric Motors' (10 C.F.R. 431),
14	as in effect on the date of enactment of the En-
15	ergy Independence and Security Act of 2007.
16	"(B) General purpose electric motor
17	(SUBTYPE II).—The term 'general purpose elec-
18	tric motor (subtype II)' means motors incor-
19	porating the design elements of a general purpose
20	electric motor (subtype I) that are configured as
21	1 of the following:
22	"(i) A U-Frame Motor.
23	"(ii) A Design C Motor.
24	"(iii) A close-coupled pump motor.
25	"(iv) A Footless motor.

1	"(v) A vertical solid shaft normal
2	thrust motor (as tested in a horizontal con-
3	figuration).
4	"(vi) An 8-pole motor (900 rpm).
5	"(vii) A poly-phase motor with voltage
6	of not more than 600 volts (other than 230
7	or 460 volts.".
8	(b) Standards.—
9	(1) Amendment.—Section 342(b) of the Energy
10	Policy and Conservation Act (42 U.S.C. 6313(b)) is
11	amended—
12	(A) by redesignating paragraphs (2) and
13	(3) as paragraphs (3) and (4), respectively; and
14	(B) by inserting after paragraph (1) the fol-
15	lowing:
16	"(2) Electric motors.—
17	"(A) General purpose electric motors
18	(Subtype 1).—Except as provided in subpara-
19	graph (B), each general purpose electric motor
20	(subtype I) with a power rating of 1 horsepower
21	or greater, but not greater than 200 horsepower,
22	manufactured (alone or as a component of an-
23	other piece of equipment) after the 3-year period
24	beginning on the date of enactment of the Energy
25	Independence and Security Act of 2007, shall

have a nominal full load efficiency that is not less than as defined in NEMA MG-1 (2006) Table 12-12.

"(B) FIRE PUMP MOTORS.—Each fire pump motor manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of enactment of the Energy Independence and Security Act of 2007 shall have nominal full load efficiency that is not less than as defined in NEMA MG-1 (2006) Table 12–11.

"(C) GENERAL PURPOSE ELECTRIC MOTORS
(SUBTYPE II).—Each general purpose electric
motor (subtype II) with a power rating of 1
horsepower or greater, but not greater than 200
horsepower, manufactured (alone or as a component of another piece of equipment) after the 3year period beginning on the date of enactment
of the Energy Independence and Security Act of
2007, shall have a nominal full load efficiency
that is not less than as defined in NEMA MG—
1 (2006) Table 12–11.

"(D) NEMA DESIGN B, GENERAL PURPOSE ELECTRIC MOTORS.—Each NEMA Design B, general purpose electric motor with a power rat-

1	ing of more than 200 horsepower, but not greater
2	than 500 horsepower, manufactured (alone or as
3	a component of another piece of equipment) after
4	the 3-year period beginning on the date of enact-
5	ment of the Energy Independence and Security
6	Act of 2007, shall have a nominal full load effi-
7	ciency that is not less than as defined in NEMA
8	MG-1 (2006) Table 12-11.".
9	(2) Effective date.—The amendments made
10	by paragraph (1) take effect on the date that is 3
11	years after the date of enactment of this Act.
12	SEC. 314. STANDARDS FOR SINGLE PACKAGE VERTICAL AIR
13	CONDITIONERS AND HEAT PUMPS.
13 14	CONDITIONERS AND HEAT PUMPS. (a) Definitions.—Section 340 of the Energy Policy
14	(a) Definitions.—Section 340 of the Energy Policy
14 15	(a) Definitions.—Section 340 of the Energy Policy and Conservation Act (42 U.S.C. 6311) is amended by add-
14 15 16	(a) Definitions.—Section 340 of the Energy Policy and Conservation Act (42 U.S.C. 6311) is amended by adding at the end the following:
14 15 16 17	(a) Definitions.—Section 340 of the Energy Policy and Conservation Act (42 U.S.C. 6311) is amended by adding at the end the following: "(22) Single Package Vertical Air condi-
14 15 16 17	(a) Definitions.—Section 340 of the Energy Policy and Conservation Act (42 U.S.C. 6311) is amended by adding at the end the following: "(22) Single Package Vertical Air conditioner.—The term 'single package vertical air condi-
114 115 116 117 118	(a) Definitions.—Section 340 of the Energy Policy and Conservation Act (42 U.S.C. 6311) is amended by adding at the end the following: "(22) Single Package Vertical Air Conditioner' means air-cooled commercial package air continuous means air-cooled commercial package air con-
14 15 16 17 18 19 20	(a) Definitions.—Section 340 of the Energy Policy and Conservation Act (42 U.S.C. 6311) is amended by adding at the end the following: "(22) Single Package Vertical Air conditioner.—The term 'single package vertical air conditioner' means air-cooled commercial package air conditioning and heating equipment that—
14 15 16 17 18 19 20 21	(a) Definitions.—Section 340 of the Energy Policy and Conservation Act (42 U.S.C. 6311) is amended by adding at the end the following: "(22) Single Package Vertical Air conditioner.—The term 'single package vertical air conditioner' means air-cooled commercial package air conditioning and heating equipment that— "(A) is factory-assembled as a single pack-

1	"(ii) is an encased combination of cool-
2	ing and optional heating components; and
3	"(iii) is intended for exterior mounting
4	on, adjacent interior to, or through an out-
5	$side\ wall;$
6	"(B) is powered by a single- or 3-phase cur-
7	rent;
8	"(C) may contain 1 or more separate in-
9	door grilles, outdoor louvers, various ventilation
10	options, indoor free air discharges, ductwork,
11	well plenum, or sleeves; and
12	"(D) has heating components that may in-
13	clude electrical resistance, steam, hot water, or
14	gas, but may not include reverse cycle refrigera-
15	tion as a heating means.
16	"(23) Single package vertical heat pump.—
17	The term 'single package vertical heat pump' means
18	a single package vertical air conditioner that—
19	"(A) uses reverse cycle refrigeration as its
20	primary heat source; and
21	"(B) may include secondary supplemental
22	heating by means of electrical resistance, steam,
23	hot water, or gas.".
24	(b) Standards.—Section 342(a) of the Energy Policy
25	and Conservation Act (42 U.S.C. 6313(a)) is amended—

1	(1) in the first sentence of each of paragraphs (1)
2	and (2), by inserting "(including single package
3	vertical air conditioners and single package vertical
4	heat pumps)" after "heating equipment" each place it
5	appears;
6	(2) in paragraph (1), by striking "but before
7	January 1, 2010,";
8	(3) in the first sentence of each of paragraphs
9	(7), (8), and (9), by inserting "(other than single
10	package vertical air conditioners and single package
11	vertical heat pumps)" after "heating equipment" each
12	place it appears;
13	(4) in paragraph (7)—
14	(A) by striking "manufactured on or after
15	January 1, 2010,";
16	(B) in each of subparagraphs (A), (B), and
17	(C), by striking "The" and inserting "For equip-
18	ment manufactured on or after January 1, 2010,
19	the"; and
20	(C) by adding at the end the following:
21	"(D) For equipment manufactured on or after
22	the later of January 1, 2008, or the date that is 180
23	days after the date of enactment of the Energy Inde-
24	pendence and Security Act of 2007—

1	"(i) the minimum seasonal energy efficiency
2	ratio of air-cooled 3-phase electric central air
3	conditioners and central air conditioning heat
4	pumps less than 65,000 Btu per hour (cooling
5	capacity), split systems, shall be 13.0;
6	"(ii) the minimum seasonal energy effi-
7	ciency ratio of air-cooled 3-phase electric central
8	air conditioners and central air conditioning
9	heat pumps less than 65,000 Btu per hour (cool-
10	ing capacity), single package, shall be 13.0;
11	"(iii) the minimum heating seasonal per-
12	formance factor of air-cooled 3-phase electric cen-
13	tral air conditioning heat pumps less than
14	65,000 Btu per hour (cooling capacity), split
15	systems, shall be 7.7; and
16	"(iv) the minimum heating seasonal per-
17	formance factor of air-cooled three-phase electric
18	central air conditioning heat pumps less than
19	65,000 Btu per hour (cooling capacity), single
20	package, shall be 7.7."; and
21	(5) by adding at the end the following:
22	"(10) Single package vertical air condi-
23	TIONERS AND SINGLE PACKAGE VERTICAL HEAT
24	PUMPS.—

1	"(A) In General.—Single package vertical
2	air conditioners and single package vertical heat
3	pumps manufactured on or after January 1,
4	2010, shall meet the following standards:
5	"(i) The minimum energy efficiency
6	ratio of single package vertical air condi-
7	tioners less than 65,000 Btu per hour (cool-
8	ing capacity), single-phase, shall be 9.0.
9	"(ii) The minimum energy efficiency
10	ratio of single package vertical air condi-
11	tioners less than 65,000 Btu per hour (cool-
12	ing capacity), three-phase, shall be 9.0.
13	"(iii) The minimum energy efficiency
14	ratio of single package vertical air condi-
15	tioners at or above 65,000 Btu per hour
16	(cooling capacity) but less than 135,000 Btu
17	per hour (cooling capacity), shall be 8.9.
18	"(iv) The minimum energy efficiency
19	ratio of single package vertical air condi-
20	tioners at or above 135,000 Btu per hour
21	(cooling capacity) but less than 240,000 Btu
22	per hour (cooling capacity), shall be 8.6.
23	"(v) The minimum energy efficiency
24	ratio of single package vertical heat pumps
25	less than 65,000 Btu per hour (cooling ca-

1	pacity), single-phase, shall be 9.0 and the
2	minimum coefficient of performance in the
3	heating mode shall be 3.0.
4	"(vi) The minimum energy efficiency
5	ratio of single package vertical heat pumps
6	less than 65,000 Btu per hour (cooling ca-
7	pacity), three-phase, shall be 9.0 and the
8	minimum coefficient of performance in the
9	heating mode shall be 3.0.
10	"(vii) The minimum energy efficiency
11	ratio of single package vertical heat pumps
12	at or above 65,000 Btu per hour (cooling
13	capacity) but less than 135,000 Btu per
14	hour (cooling capacity), shall be 8.9 and the
15	minimum coefficient of performance in the
16	heating mode shall be 3.0.
17	"(viii) The minimum energy efficiency
18	ratio of single package vertical heat pumps
19	at or above 135,000 Btu per hour (cooling
20	capacity) but less than 240,000 Btu per
21	hour (cooling capacity), shall be 8.6 and the
22	minimum coefficient of performance in the
23	heating mode shall be 2.9.
24	"(B) Review.—Not later than 3 years after
25	the date of enactment of this paragraph, the Sec-

1	retary shall review the most recently published
2	ASHRAE/IES Standard 90.1 with respect to
3	single package vertical air conditioners and sin-
4	gle package vertical heat pumps in accordance
5	with the procedures established under paragraph
6	(6).".
7	SEC. 315. IMPROVED ENERGY EFFICIENCY FOR APPLIANCES
8	AND BUILDINGS IN COLD CLIMATES.
9	(a) Research.—Section 911(a)(2) of the Energy Pol-
10	icy Act of 2005 (42 U.S.C. 16191(a)(2)) is amended—
11	(1) in subparagraph (C), by striking "and" at
12	$the\ end;$
13	(2) in subparagraph (D), by striking the period
14	at the end and inserting "; and"; and
15	(3) by adding at the end the following:
16	"(E) technologies to improve the energy effi-
17	ciency of appliances and mechanical systems for
18	buildings in cold climates, including combined
19	heat and power units and increased use of re-
20	newable resources, including fuel.".
21	(b) Rebates.—Section 124 of the Energy Policy Act
22	of 2005 (42 U.S.C. 15821) is amended—
23	(1) in subsection (b)(1), by inserting ", or prod-
24	ucts with improved energy efficiency in cold cli-
25	mates," after "residential Energy Star products"; and

1	(2) in subsection (e), by inserting "or product
2	with improved energy efficiency in a cold climate"
3	after "residential Energy Star product" each place it
4	appears.
5	SEC. 316. TECHNICAL CORRECTIONS.
6	(a) Definition of F96T12 Lamp.—
7	(1) In General.—Section 135(a)(1)(A)(ii) of the
8	Energy Policy Act of 2005 (Public Law 109–58; 119
9	Stat. 624) is amended by striking "C78.1-
10	1978(R1984)" and inserting "C78.3–1978(R1984)".
11	(2) Effective date.—The amendment made by
12	paragraph (1) takes effect on August 8, 2005.
13	(b) Definition of Fluorescent Lamp.—Section
14	321(30)(B)(viii) of the Energy Policy and Conservation Act
15	(42 U.S.C. 6291(30)(B)(viii)) is amended by striking "82"
16	and inserting "87".
17	(c) Mercury Vapor Lamp Ballasts.—
18	(1) Definitions.—Section 321 of the Energy
19	Policy and Conservation Act (42 U.S.C. 6291) (as
20	amended by section $301(a)(2)$) is amended—
21	(A) by striking paragraphs (46) through
22	(48) and inserting the following:
23	"(46) High intensity discharge lamp.—

1	"(A) In general.—The term high inten-
2	sity discharge lamp' means an electric-discharge
3	lamp in which—
4	"(i) the light-producing arc is sta-
5	bilized by the arc tube wall temperature;
6	and
7	"(ii) the arc tube wall loading is in ex-
8	cess of 3 Watts/cm ² .
9	"(B) Inclusions.—The term high inten-
10	sity discharge lamp' includes mercury vapor,
11	metal halide, and high-pressure sodium lamps
12	$described\ in\ subparagraph\ (A).$
13	"(47) MERCURY VAPOR LAMP.—
14	"(A) In General.—The term 'mercury
15	vapor lamp' means a high intensity discharge
16	lamp in which the major portion of the light is
17	produced by radiation from mercury typically
18	operating at a partial vapor pressure in excess
19	of 100,000 Pa (approximately 1 atm).
20	"(B) Inclusions.—The term 'mercury
21	vapor lamp' includes clear, phosphor-coated, and
22	self-ballasted screw base lamps described in sub-
23	paragraph (A).
24	"(48) MERCURY VAPOR LAMP BALLAST.—The
25	term 'mercuru vanor lamp ballast' means a device

1	that is designed and marketed to start and operate
2	mercury vapor lamps intended for general illumina-
3	tion by providing the necessary voltage and current.";
4	and
5	(B) by adding at the end the following:
6	"(53) Specialty application mercury vapor
7	LAMP BALLAST.—The term 'specialty application
8	mercury vapor lamp ballast' means a mercury vapor
9	lamp ballast that—
10	"(A) is designed and marketed for operation
11	of mercury vapor lamps used in quality inspec-
12	tion, industrial processing, or scientific use, in-
13	cluding fluorescent microscopy and ultraviolet
14	curing; and
15	"(B) in the case of a specialty application
16	mercury vapor lamp ballast, the label of which—
17	"(i) provides that the specialty appli-
18	cation mercury vapor lamp ballast is 'For
19	specialty applications only, not for general
20	illumination'; and
21	"(ii) specifies the specific applications
22	for which the ballast is designed.".
23	(2) Standard setting authority.—Section
24	325(ee) of the Energy Policy and Conservation Act
25	(42 U.S.C. 6295(ee)) is amended by inserting "(other

1	than specialty application mercury vapor lamp bal-
2	lasts)" after "ballasts".
3	(d) Energy Conservation Standards.—Section
4	325 of the Energy Policy and Conservation Act (42 U.S.C.
5	6295) is amended—
6	(1) in subsection (v)—
7	(A) in the subsection heading, by striking
8	"Ceiling Fans and";
9	(B) by striking paragraph (1); and
10	(C) by redesignating paragraphs (2)
11	through (4) as paragraphs (1) through (3), re-
12	spectively; and
13	(2) in subsection (ff)—
14	(A) in paragraph $(1)(A)$ —
15	(i) by striking clause (iii);
16	(ii) by redesignating clause (iv) as
17	clause (iii); and
18	(iii) in clause (iii)(II) (as so redesig-
19	nated), by inserting "fans sold for" before
20	"outdoor"; and
21	(B) in paragraph $(4)(C)$ —
22	(i) in the matter preceding clause (i),
23	by striking "subparagraph (B)" and insert-
24	ing "subparagraph (A)"; and

1	(ii) by striking clause (ii) and insert-
2	ing the following:
3	"(ii) shall be packaged with lamps to fill all
4	sockets.";
5	(C) in paragraph (6), by redesignating sub-
6	paragraphs (C) and (D) as clauses (i) and (ii),
7	respectively, of subparagraph (B); and
8	(D) in paragraph (7), by striking "327" the
9	second place it appears and inserting "324".
10	Subtitle B—Lighting Energy
11	Efficiency
12	SEC. 321. EFFICIENT LIGHT BULBS.
13	(a) Energy Efficiency Standards for General
14	Service Incandescent Lamps.—
15	(1) Definition of General Service incan-
16	Descent lamp.—Section 321(30) of the Energy Pol-
17	icy and Conservation Act (42 U.S.C. 6291(30)) is
18	amended—
19	(A) by striking subparagraph (D) and in-
20	serting the following:
21	"(D) General service incandescent
22	LAMP.—
23	"(i) In General.—The term 'general
24	service incandescent lamp' means a stand-

1	ard incandescent or halogen type lamp
2	that—
3	"(I) is intended for general service
4	applications;
5	"(II) has a medium screw base;
6	"(III) has a lumen range of not
7	less than 310 lumens and not more
8	than 2,600 lumens; and
9	"(IV) is capable of being operated
10	at a voltage range at least partially
11	within 110 and 130 volts.
12	"(ii) Exclusions.—The term 'general
13	service incandescent lamp' does not include
14	the following incandescent lamps:
15	"(I) An appliance lamp.
16	"(II) A black light lamp.
17	"(III) A bug lamp.
18	$"(IV)\ A\ colored\ lamp.$
19	"(V) An infrared lamp.
20	"(VI) A left-hand thread lamp.
21	"(VII) A marine $lamp$.
22	"(VIII) A marine signal service
23	lamp.
24	"(IX) A mine service lamp.
25	"(X) A plant light lamp.

1	"(XI) A reflector $lamp$.
2	"(XII) A rough service lamp.
3	"(XIII) A shatter-resistant lamp
4	(including a shatter-proof lamp and a
5	$shatter-protected\ lamp).$
6	"(XIV) A sign service lamp.
7	"(XV) A silver bowl lamp.
8	$``(XVI)\ A\ showcase\ lamp.$
9	"(XVII) A 3-way incandescent
10	lamp.
11	"(XVIII) A traffic signal lamp.
12	"(XIX) A vibration service lamp.
13	"(XX) A G shape lamp (as de-
14	fined in ANSI C78.20–2003 and
15	C79.1–2002 with a diameter of 5
16	inches or more.
17	"(XXI) A T shape lamp (as de-
18	fined in ANSI C78.20–2003 and
19	C79.1–2002) and that uses not more
20	than 40 watts or has a length of more
21	than 10 inches.
22	"(XXII) A B, BA, CA, F, G16–1/
23	2, G-25, G30, S, or M-14 lamp (as de-
24	fined in ANSI C79.1–2002 and ANSI
25	C78.20-2003) of 40 watts or less."; and

1	(B) by adding at the end the following:
2	"(T) Appliance lamp.—The term 'appli-
3	ance lamp' means any lamp that—
4	"(i) is specifically designed to operate
5	in a household appliance, has a maximum
6	wattage of 40 watts, and is sold at retail,
7	including an oven lamp, refrigerator lamp,
8	and vacuum cleaner lamp; and
9	"(ii) is designated and marketed for
10	the intended application, with—
11	"(I) the designation on the lamp
12	packaging; and
13	"(II) marketing materials that
14	identify the lamp as being for appli-
15	ance use.
16	"(U) Candelabra base incandescent
17	LAMP.—The term 'candelabra base incandescent
18	lamp' means a lamp that uses candelabra screw
19	base as described in ANSI C81.61–2006, Speci-
20	fications for Electric Bases, common designa-
21	tions E11 and E12.
22	"(V) Intermediate base incandescent
23	LAMP.—The term 'intermediate base incandes-
24	cent lamp' means a lamp that uses an inter-
25	mediate screw base as described in ANSI

1	C81.61–2006, Specifications for Electric Bases,
2	$common\ designation\ E17.$
3	"(W) Modified spectrum.—The term
4	'modified spectrum' means, with respect to an
5	incandescent lamp, an incandescent lamp that—
6	"(i) is not a colored incandescent
7	lamp; and
8	"(ii) when operated at the rated volt-
9	age and wattage of the incandescent lamp—
10	"(I) has a color point with (x,y)
11	chromaticity coordinates on the Com-
12	mission Internationale de l'Eclairage
13	(C.I.E.) 1931 chromaticity diagram
14	that lies below the black-body locus;
15	and
16	"(II) has a color point with (x,y)
17	chromaticity coordinates on the C.I.E.
18	1931 chromaticity diagram that lies at
19	least 4 MacAdam steps (as referenced
20	in IESNA LM16) distant from the
21	color point of a clear lamp with the
22	same filament and bulb shape, oper-
23	ated at the same rated voltage and
24	wattage.

1	"(X) Rough service lamp.—The term
2	'rough service lamp' means a lamp that—
3	"(i) has a minimum of 5 supports
4	with filament configurations that are C-7A,
5	C-11, C-17, and C-22 as listed in Figure
6	6-12 of the 9th edition of the IESNA Light-
7	ing handbook, or similar configurations
8	where lead wires are not counted as sup-
9	ports; and
10	"(ii) is designated and marketed spe-
11	cifically for 'rough service' applications,
12	with—
13	"(I) the designation appearing on
14	the lamp packaging; and
15	"(II) marketing materials that
16	identify the lamp as being for rough
17	service.
18	"(Y) 3-WAY INCANDESCENT LAMP.—The
19	term '3-way incandescent lamp' includes an in-
20	candescent lamp that—
21	"(i) employs 2 filaments, operated sep-
22	arately and in combination, to provide 3
23	light levels; and

1	"(ii) is designated on the lamp pack-
2	aging and marketing materials as being a
3	3-way incandescent lamp.
4	"(Z) Shatter-resistant lamp, shatter-
5	PROOF LAMP, OR SHATTER-PROTECTED LAMP.—
6	The terms 'shatter-resistant lamp', 'shatter-proof
7	lamp', and 'shatter-protected lamp' mean a lamp
8	that—
9	"(i) has a coating or equivalent tech-
10	nology that is compliant with NSF/ANSI
11	51 and is designed to contain the glass if
12	the glass envelope of the lamp is broken; and
13	"(ii) is designated and marketed for
14	the intended application, with—
15	"(I) the designation on the lamp
16	packaging; and
17	"(II) marketing materials that
18	identify the lamp as being shatter-re-
19	sistant, shatter-proof, or shatter-pro-
20	tected.
21	"(AA) VIBRATION SERVICE LAMP.—The
22	term 'vibration service lamp' means a lamp
23	that—
24	"(i) has filament configurations that
25	are C-5. C-7A, or C-9, as listed in Figure

1	6–12 of the 9th Edition of the IESNA
2	Lighting Handbook or similar configura-
3	tions;
4	"(ii) has a maximum wattage of 60
5	watts;
6	"(iii) is sold at retail in packages of 2
7	lamps or less; and
8	"(iv) is designated and marketed spe-
9	cifically for vibration service or vibration-
10	resistant applications, with—
11	"(I) the designation appearing on
12	the lamp packaging; and
13	"(II) marketing materials that
14	identify the lamp as being vibration
15	$service\ only.$
16	"(BB) General service lamp.—
17	"(i) In GENERAL.—The term 'general
18	service lamp' includes—
19	"(I) general service incandescent
20	lamps;
21	$``(II)\ compact\ fluorescent\ lamps;$
22	"(III) general service light-emit-
23	ting diode (LED or OLED) lamps;
24	and

1	"(IV) any other lamps that the
2	Secretary determines are used to sat-
3	isfy lighting applications traditionally
4	served by general service incandescent
5	lamps.
6	"(ii) Exclusions.—The term 'general
7	service lamp' does not include—
8	"(I) any lighting application or
9	bulb shape described in any of sub-
10	clauses (I) through (XXII) of subpara-
11	$graph\ (D)(ii);\ or$
12	"(II) any general service fluores-
13	cent lamp or incandescent reflector
14	lamp.
15	"(CC) Light-emitting diode; led.—
16	"(i) In general.—The terms light-
17	emitting diode' and 'LED' means a p-n
18	junction solid state device the radiated out-
19	put of which is a function of the physical
20	construction, material used, and exciting
21	current of the device.
22	"(ii) Output.—The output of a light-
23	emitting diode may be in—
24	"(I) the infrared region;
25	"(II) the visible region; or

1	"(III) the ultraviolet region.
2	"(DD) Organic light-emitting diode;
3	OLED.—The terms 'organic light-emitting diode'
4	and 'OLED' mean a thin-film light-emitting de-
5	vice that typically consists of a series of organic
6	layers between 2 electrical contacts (electrodes).
7	"(EE) COLORED INCANDESCENT LAMP.—
8	The term 'colored incandescent lamp' means an
9	incandescent lamp designated and marketed as a
10	colored lamp that has—
11	"(i) a color rendering index of less
12	than 50, as determined according to the test
13	method given in C.I.E. publication 13.3-
14	1995; or
15	"(ii) a correlated color temperature of
16	less than 2,500K, or greater than 4,600K,
17	where correlated temperature is computed
18	according to the Journal of Optical Society
19	of America, Vol. 58, pages 1528–1595
20	(1986).".
21	(2) Coverage.—Section 322(a)(14) of the En-
22	ergy Policy and Conservation Act (42 U.S.C.
23	6292(a)(14)) is amended by inserting ", general serv-
24	ice incandescent lamps," after "fluorescent lamps".

1	(3) Energy conservation standards.—Sec-
2	tion 325 of the Energy Policy and Conservation Act
3	(42 U.S.C. 6295) is amended—
4	(A) in subsection (i)—
5	(i) in the section heading, by inserting
6	", General Service Incandescent
7	Lamps, Intermediate Base Incandes-
8	CENT LAMPS, CANDELABRA BASE INCAN-
9	DESCENT LAMPS," after "Fluorescent
10	LAMPS";
11	(ii) in paragraph (1)—
12	(I) in subparagraph (A)—
13	(aa) by inserting ", general
14	service incandescent lamps, inter-
15	mediate base incandescent lamps,
16	candelabra base incandescent
17	lamps," after "fluorescent lamps";
18	(bb) by inserting ", new
19	maximum wattage," after 'lamp
20	efficacy"; and
21	(cc) by inserting after the
22	table entitled "Incandescent re-
23	FLECTOR LAMPS" the following:

222
"GENERAL SERVICE INCANDESCENT LAMPS

Rated Lumen Ranges	Maximum Rate Wattage	$egin{aligned} Minimum \ Rate\ Life- \ time \end{aligned}$	Effective Date
1490–2600	72	1,000 hrs	1/1/2012
1050–1489	53	$1,000\ hrs$	1/1/2013
750–1049	43	1,000 hrs	1/1/2014
310–749	29	1,000 hrs	1/1/2014

"MODIFIED SPECTRUM GENERAL SERVICE INCANDESCENT LAMPS

Rated Lumen Ranges	Maximum Rate Wattage	Minimum Rate Life- time	Effective Date
1118–1950	72	1,000 hrs	1/1/2012
788–1117	53	1,000 hrs	1/1/2013
563-787	43	$1,000\ hrs$	1/1/2014
232-562	29	1,000 hrs	1/1/2014";

1	and
2	(II) by striking subparagraph (B)
3	and inserting the following:
4	"(B) Application.—
5	"(i) Application criteria.—This
6	subparagraph applies to each lamp that—
7	"(I) is intended for a general
8	service or general illumination appli-
9	cation (whether incandescent or not);
10	"(II) has a medium screw base or
11	any other screw base not defined in
12	ANSI C81.61–2006;
13	"(III) is capable of being operated
14	at a voltage at least partially within
15	the range of 110 to 130 volts; and

1	"(IV) is manufactured or im-
2	ported after December 31, 2011.
3	"(ii) Requirement.—For purposes of
4	this paragraph, each lamp described in
5	clause (i) shall have a color rendering index
6	that is greater than or equal to—
7	"(I) 80 for nonmodified spectrum
8	lamps; or
9	"(II) 75 for modified spectrum
10	lamps.
11	"(C) Candelabra incandescent lamps
12	AND INTERMEDIATE BASE INCANDESCENT
13	LAMPS.—
14	"(i) Candelabra base incandescent
15	LAMPS.—A candelabra base incandescent
16	lamp shall not exceed 60 rated watts.
17	"(ii) Intermediate base incandes-
18	CENT LAMPS.—An intermediate base incan-
19	descent lamp shall not exceed 40 rated
20	watts.
21	"(D) Exemptions.—
22	"(i) Petition.—Any person may peti-
23	tion the Secretary for an exemption for a
24	type of general service lamp from the re-
25	quirements of this subsection.

1	"(ii) Criteria.—The Secretary may
2	grant an exemption under clause (i) only to
3	the extent that the Secretary finds, after a
4	hearing and opportunity for public com-
5	ment, that it is not technically feasible to
6	serve a specialized lighting application
7	(such as a military, medical, public safety,
8	or certified historic lighting application)
9	using a lamp that meets the requirements of
10	this subsection.
11	"(iii) Additional criterion.—To
12	grant an exemption for a product under
13	this subparagraph, the Secretary shall in-
14	clude, as an additional criterion, that the
15	exempted product is unlikely to be used in
16	a general service lighting application.
17	"(E) Extension of coverage.—
18	"(i) Petition.—Any person may peti-
19	tion the Secretary to establish standards for
20	lamp shapes or bases that are excluded from
21	the definition of general service lamps.
22	"(ii) Increased sales of exempted
23	LAMPS.—The petition shall include evidence
24	that the availability or sales of exempted in-
25	candescent lamps have increased signifi-

1	cantly since the date on which the stand-
2	ards on general service incandescent lamps
3	were established.
4	"(iii) Criteria.—The Secretary shall
5	grant a petition under clause (i) if the Sec-
6	retary finds that—
7	"(I) the petition presents evidence
8	that demonstrates that commercial
9	availability or sales of exempted incan-
10	descent lamp types have increased sig-
11	nificantly since the standards on gen-
12	eral service lamps were established and
13	likely are being widely used in general
14	lighting applications; and
15	"(II) significant energy savings
16	could be achieved by covering exempted
17	products, as determined by the Sec-
18	retary based on sales data provided to
19	the Secretary from manufacturers and
20	importers.
21	"(iv) No presumption.—The grant of
22	a petition under this subparagraph shall
23	create no presumption with respect to the
24	determination of the Secretary with respect

1	to any criteria under a rulemaking con-
2	ducted under this section.
3	"(v) Expedited proceeding.—If the
4	Secretary grants a petition for a lamp
5	shape or base under this subparagraph, the
6	Secretary shall—
7	"(I) conduct a rulemaking to de-
8	termine standards for the exempted
9	lamp shape or base; and
10	"(II) complete the rulemaking not
11	later than 18 months after the date on
12	which notice is provided granting the
13	petition.
14	"(F) Definition of Effective date.—In
15	this paragraph, except as otherwise provided in
16	a table contained in subparagraph (A), the term
17	'effective date' means the last day of the month
18	specified in the table that follows October 24,
19	1992.";
20	(iii) in paragraph (5), in the first sen-
21	tence, by striking "and general service in-
22	candescent lamps";
23	(iv) by redesignating paragraphs (6)
24	and (7) as paragraphs (7) and (8), respec-
25	tively; and

1	(v) by inserting after paragraph (5)
2	$the\ following:$
3	"(6) Standards for general service
4	LAMPS.—
5	"(A) RULEMAKING BEFORE JANUARY 1,
6	2014.—
7	"(i) In general.—Not later than Jan-
8	uary 1, 2014, the Secretary shall initiate a
9	rulemaking procedure to determine wheth-
10	er—
11	"(I) standards in effect for general
12	service lamps should be amended to es-
13	tablish more stringent standards than
14	the standards specified in paragraph
15	(1)(A); and
16	"(II) the exemptions for certain
17	incandescent lamps should be main-
18	tained or discontinued based, in part,
19	on exempted lamp sales collected by the
20	Secretary from manufacturers.
21	"(ii) Scope.—The rulemaking—
22	"(I) shall not be limited to incan-
23	descent lamp technologies; and

1	"(II) shall include consideration
2	of a minimum standard of 45 lumens
3	per watt for general service lamps.
4	"(iii) Amended standards.—If the
5	Secretary determines that the standards in
6	effect for general service incandescent lamps
7	should be amended, the Secretary shall pub-
8	lish a final rule not later than January 1,
9	2017, with an effective date that is not ear-
10	lier than 3 years after the date on which the
11	final rule is published.
12	"(iv) Phased-in effective dates.—
13	The Secretary shall consider phased-in effec-
14	tive dates under this subparagraph after
15	considering—
16	"(I) the impact of any amend-
17	ment on manufacturers, retiring and
18	repurposing existing equipment,
19	stranded investments, labor contracts,
20	workers, and raw materials; and
21	"(II) the time needed to work with
22	retailers and lighting designers to re-
23	vise sales and marketing strategies.
24	"(v) Backstop requirement.—If the
25	Secretary fails to complete a rulemakina in

1	accordance with clauses (i) through (iv) or
2	if the final rule does not produce savings
3	that are greater than or equal to the savings
4	from a minimum efficacy standard of 45
5	lumens per watt, effective beginning Janu-
6	ary 1, 2020, the Secretary shall prohibit the
7	sale of any general service lamp that does
8	not meet a minimum efficacy standard of
9	45 lumens per watt.
10	"(vi) State preemption.—Neither
11	section 327(b) nor any other provision of
12	law shall preclude California or Nevada
13	from adopting, effective beginning on or
14	after January 1, 2018—
15	"(I) a final rule adopted by the
16	Secretary in accordance with clauses
17	(i) through (iv);
18	"(II) if a final rule described in
19	subclause (I) has not been adopted, the
20	backstop requirement under clause (v);
21	or
22	"(III) in the case of California, if
23	a final rule described in subclause (I)
24	has not been adopted, any California
25	regulations relating to these covered

1	products adopted pursuant to State
2	statute in effect as of the date of enact-
3	ment of the Energy Independence and
4	Security Act of 2007.
5	"(B) RULEMAKING BEFORE JANUARY 1,
6	2020.—
7	"(i) In general.—Not later than Jan-
8	uary 1, 2020, the Secretary shall initiate a
9	rulemaking procedure to determine wheth-
10	er—
11	"(I) standards in effect for general
12	service incandescent lamps should be
13	amended to reflect lumen ranges with
14	more stringent maximum wattage than
15	the standards specified in paragraph
16	(1)(A); and
17	"(II) the exemptions for certain
18	incandescent lamps should be main-
19	tained or discontinued based, in part,
20	on exempted lamp sales data collected
21	by the Secretary from manufacturers.
22	"(ii) Scope.—The rulemaking shall
23	not be limited to incandescent lamp tech-
24	nologies.

1	"(iii) Amended standards.—If the
2	Secretary determines that the standards in
3	effect for general service incandescent lamps
4	should be amended, the Secretary shall pub-
5	lish a final rule not later than January 1,
6	2022, with an effective date that is not ear-
7	lier than 3 years after the date on which the
8	final rule is published.
9	"(iv) Phased-in effective dates.—
10	The Secretary shall consider phased-in effec-
11	tive dates under this subparagraph after
12	considering—
13	"(I) the impact of any amend-
14	ment on manufacturers, retiring and
15	repurposing existing equipment,
16	stranded investments, labor contracts,
17	workers, and raw materials; and
18	"(II) the time needed to work with
19	retailers and lighting designers to re-
20	vise sales and marketing strategies.";
21	and
22	(B) in subsection (l), by adding at the end
23	$the\ following:$
24	"(4) Energy efficiency standards for cer-
25	TAIN LAMPS —

1	"(A) In General.—The Secretary shall
2	prescribe an energy efficiency standard for rough
3	service lamps, vibration service lamps, 3-way in-
4	candescent lamps, 2,601–3,300 lumen general
5	service incandescent lamps, and shatter-resistant
6	lamps only in accordance with this paragraph.
7	"(B) Benchmarks.—Not later than 1 year
8	after the date of enactment of this paragraph, the
9	Secretary, in consultation with the National
10	Electrical Manufacturers Association, shall—
11	"(i) collect actual data for United
12	States unit sales for each of calendar years
13	1990 through 2006 for each of the 5 types
14	of lamps described in subparagraph (A) to
15	determine the historical growth rate of the
16	type of lamp; and
17	"(ii) construct a model for each type of
18	lamp based on coincident economic indica-
19	tors that closely match the historical annual
20	growth rate of the type of lamp to provide
21	a neutral comparison benchmark to model
22	future unit sales after calendar year 2006.
23	"(C) Actual sales data.—
24	"(i) In general.—Effective for each of
25	calendar years 2010 through 2025, the Sec-

1	retary, in consultation with the National
2	Electrical Manufacturers Association,
3	shall—
4	"(I) collect actual United States
5	unit sales data for each of 5 types of
6	lamps described in subparagraph (A);
7	and
8	"(II) not later than 90 days after
9	the end of each calendar year, compare
10	the lamp sales in that year with the
11	sales predicted by the comparison
12	benchmark for each of the 5 types of
13	lamps described in subparagraph (A).
14	"(ii) Continuation of tracking.—
15	"(I) Determination.—Not later
16	than January 1, 2023, the Secretary
17	shall determine if actual sales data
18	should be tracked for the lamp types
19	described in subparagraph (A) after
20	calendar year 2025.
21	"(II) Continuation.—If the Sec-
22	retary finds that the market share of a
23	lamp type described in subparagraph
24	(A) could significantly erode the mar-
25	ket share for general service lamps, the

1	Secretary shall continue to track the
2	actual sales data for the lamp type.
3	"(D) Rough service lamps.—
4	"(i) In General.—Effective beginning
5	with the first year that the reported annual
6	sales rate for rough service lamps dem-
7	onstrates actual unit sales of rough service
8	lamps that achieve levels that are at least
9	100 percent higher than modeled unit sales
10	for that same year, the Secretary shall—
11	"(I) not later than 90 days after
12	the end of the previous calendar year,
13	issue a finding that the index has been
14	exceeded; and
15	"(II) not later than the date that
16	is 1 year after the end of the previous
17	calendar year, complete an accelerated
18	rulemaking to establish an energy con-
19	servation standard for rough service
20	lamps.
21	"(ii) Backstop requirement.—If the
22	Secretary fails to complete an accelerated
23	rulemaking in accordance with clause
24	(i)(II), effective beginning 1 year after the
25	date of the issuance of the finding under

1	clause $(i)(I)$, the Secretary shall require
2	rough service lamps to—
3	"(I) have a shatter-proof coating
4	or equivalent technology that is com-
5	pliant with NSF/ANSI 51 and is de-
6	signed to contain the glass if the glass
7	envelope of the lamp is broken and to
8	provide effective containment over the
9	life of the lamp;
10	"(II) have a maximum 40-watt
11	limitation; and
12	"(III) be sold at retail only in a
13	package containing 1 lamp.
14	"(E) VIBRATION SERVICE LAMPS.—
15	"(i) In General.—Effective beginning
16	with the first year that the reported annual
17	sales rate for vibration service lamps dem-
18	onstrates actual unit sales of vibration serv-
19	ice lamps that achieve levels that are at
20	least 100 percent higher than modeled unit
21	sales for that same year, the Secretary
22	shall—
23	"(I) not later than 90 days after
24	the end of the previous calendar year,

1	issue a finding that the index has been
2	exceeded; and
3	"(II) not later than the date that
4	is 1 year after the end of the previous
5	calendar year, complete an accelerated
6	rulemaking to establish an energy con-
7	servation standard for vibration service
8	lamps.
9	"(ii) Backstop requirement.—If the
10	Secretary fails to complete an accelerated
11	rulemaking in accordance with clause
12	(i)(II), effective beginning 1 year after the
13	date of the issuance of the finding under
14	clause (i)(I), the Secretary shall require vi-
15	bration service lamps to—
16	"(I) have a maximum 40-watt
17	limitation; and
18	"(II) be sold at retail only in a
19	package containing 1 lamp.
20	"(F) 3-WAY INCANDESCENT LAMPS.—
21	"(i) In General.—Effective beginning
22	with the first year that the reported annual
23	sales rate for 3-way incandescent lamps
24	demonstrates actual unit sales of 3-way in-
25	candescent lamps that achieve levels that

1	are at least 100 percent higher than mod-
2	eled unit sales for that same year, the Sec-
3	retary shall—
4	"(I) not later than 90 days after
5	the end of the previous calendar year,
6	issue a finding that the index has been
7	exceeded; and
8	"(II) not later than the date that
9	is 1 year after the end of the previous
10	calendar year, complete an accelerated
11	rulemaking to establish an energy con-
12	servation standard for 3-way incandes-
13	cent lamps.
14	"(ii) Backstop requirement.—If the
15	Secretary fails to complete an accelerated
16	rulemaking in accordance with clause
17	(i)(II), effective beginning 1 year after the
18	date of issuance of the finding under clause
19	(i)(I), the Secretary shall require that—
20	"(I) each filament in a 3-way in-
21	candescent lamp meet the new max-
22	imum wattage requirements for the re-
23	spective lumen range established under
24	subsection $(i)(1)(A)$; and

1	"(II) 3-way tamps be sold at re-
2	tail only in a package containing 1
3	lamp.
4	"(G) 2,601–3,300 Lumen general service
5	INCANDESCENT LAMPS.—Effective beginning
6	with the first year that the reported annual sales
7	rate demonstrates actual unit sales of 2,601-
8	3,300 lumen general service incandescent lamps
9	in the lumen range of 2,601 through 3,300
10	lumens (or, in the case of a modified spectrum,
11	in the lumen range of 1,951 through 2,475
12	lumens) that achieve levels that are at least 100
13	percent higher than modeled unit sales for that
14	same year, the Secretary shall impose—
15	"(i) a maximum 95-watt limitation on
16	general service incandescent lamps in the
17	lumen range of 2,601 through 3,300 lumens;
18	and
19	"(ii) a requirement that those lamps be
20	sold at retail only in a package containing
21	1 lamp.
22	"(H) Shatter-resistant lamps.—
23	"(i) In General.—Effective beginning
24	with the first year that the reported annual
25	sales rate for shatter-resistant lamps dem-

1	onstrates actual unit sales of shatter-resist-
2	ant lamps that achieve levels that are at
3	least 100 percent higher than modeled unit
4	sales for that same year, the Secretary
5	shall—
6	"(I) not later than 90 days after
7	the end of the previous calendar year,
8	issue a finding that the index has been
9	exceeded; and
10	"(II) not later than the date that
11	is 1 year after the end of the previous
12	calendar year, complete an accelerated
13	rulemaking to establish an energy con-
14	servation standard for shatter-resistant
15	lamps.
16	"(ii) Backstop requirement.—If the
17	Secretary fails to complete an accelerated
18	rulemaking in accordance with clause
19	(i)(II), effective beginning 1 year after the
20	date of issuance of the finding under clause
21	(i)(I), the Secretary shall impose—
22	"(I) a maximum wattage limita-
23	tion of 40 watts on shatter resistant
24	lamps; and

1	"(II) a requirement that those
2	lamps be sold at retail only in a pack-
3	age containing 1 lamp.
4	"(I) Rulemakings before January 1,
5	2025.—
6	"(i) In general.—Except as provided
7	in clause (ii), if the Secretary issues a final
8	rule prior to January 1, 2025, establishing
9	an energy conservation standard for any of
10	the 5 types of lamps for which data collec-
11	tion is required under any of subpara-
12	graphs (D) through (G), the requirement to
13	collect and model data for that type of lamp
14	shall terminate unless, as part of the rule-
15	making, the Secretary determines that con-
16	tinued tracking is necessary.
17	"(ii) Backstop requirement.—If the
18	Secretary imposes a backstop requirement
19	as a result of a failure to complete an accel-
20	erated rulemaking in accordance with
21	clause (i)(II) of any of subparagraphs (D)
22	through (G), the requirement to collect and
23	model data for the applicable type of lamp
24	shall continue for an additional 2 years

1	after the effective date of the backstop re-
2	quirement.".
3	(b) Consumer Education and Lamp Labeling.—
4	Section 324(a)(2)(C) of the Energy Policy and Conserva-
5	tion Act (42 U.S.C. 6294(a)(2)(C)) is amended by adding
6	at the end the following:
7	"(iii) Rulemaking to consider ef-
8	FECTIVENESS OF LAMP LABELING.—
9	"(I) In general.—Not later than
10	1 year after the date of enactment of
11	this clause, the Commission shall ini-
12	tiate a rulemaking to consider—
13	"(aa) the effectiveness of cur-
14	rent lamp labeling for power lev-
15	els or watts, light output or
16	lumens, and lamp lifetime; and
17	"(bb) alternative labeling ap-
18	proaches that will help consumers
19	to understand new high-efficiency
20	lamp products and to base the
21	purchase decisions of the con-
22	sumers on the most appropriate
23	source that meets the requirements
24	of the consumers for lighting level,

1	light quality, lamp lifetime, and
2	$total\ life cycle\ cost.$
3	"(II) Completion.—The Com-
4	mission shall—
5	"(aa) complete the rule-
6	making not later than the date
7	that is 30 months after the date of
8	enactment of this clause; and
9	"(bb) consider reopening the
10	rulemaking not later than 180
11	days before the effective dates of
12	the standards for general service
13	incandescent lamps established
14	under section $325(i)(1)(A)$, if the
15	Commission determines that fur-
16	ther labeling changes are needed
17	to help consumers understand
18	lamp alternatives.".
19	(c) Market Assessments and Consumer Aware-
20	NESS PROGRAM.—
21	(1) In General.—In cooperation with the Ad-
22	ministrator of the Environmental Protection Agency,
23	the Secretary of Commerce, the Federal Trade Com-
24	mission, lighting and retail industry associations, en-
25	ergy efficiency organizations, and any other entities

1	that the Secretary of Energy determines to be appro-
2	priate, the Secretary of Energy shall—
3	(A) conduct an annual assessment of the
4	market for general service lamps and compact
5	fluorescent lamps—
6	(i) to identify trends in the market
7	shares of lamp types, efficiencies, and light
8	output levels purchased by residential and
9	nonresidential consumers; and
10	(ii) to better understand the degree to
11	which consumer decisionmaking is based on
12	lamp power levels or watts, light output or
13	lumens, lamp lifetime, and other factors, in-
14	cluding information required on labels
15	mandated by the Federal Trade Commis-
16	sion;
17	(B) provide the results of the market assess-
18	ment to the Federal Trade Commission for con-
19	sideration in the rulemaking described in section
20	324(a)(2)(C)(iii) of the Energy Policy and Con-
21	servation Act (42 U.S.C. 6294(a)(2)(C)(iii)); and
22	(C) in cooperation with industry trade as-
23	sociations, lighting industry members, utilities,
24	and other interested parties, carry out a
25	proactive national program of consumer aware-

1	ness, information, and education that broadly
2	uses the media and other effective communica-
3	tion techniques over an extended period of time
4	to help consumers understand the lamp labels
5	and make energy-efficient lighting choices that
6	meet the needs of consumers.
7	(2) Authorization of appropriations.—
8	There is authorized to be appropriated to carry out
9	this subsection \$10,000,000 for each of fiscal years
10	2009 through 2012.
11	(d) General Rule of Preemption for Energy
12	Conservation Standards Before Federal Standard
13	Becomes Effective for a Product.—Section 327(b)(1)
14	of the Energy Policy and Conservation Act (42 U.S.C.
15	6297(b)(1)) is amended—
16	(1) by inserting "(A)" after "(1)";
17	(2) by inserting "or" after the semicolon at the
18	end; and
19	(3) by adding at the end the following:
20	"(B) in the case of any portion of any regulation
21	that establishes requirements for general service in-
22	candescent lamps, intermediate base incandescent
23	lamps, or candelabra base lamps, was enacted or
24	adopted by the States of California or Nevada before
25	December 4, 2007, except that—

1	"(i) the regulation adopted by the Cali-
2	fornia Energy Commission with an effective date
3	of January 1, 2008, shall only be effective until
4	the effective date of the Federal standard for the
5	applicable lamp category under subparagraphs
6	(A), (B), and (C) of section 325(i)(1);
7	"(ii) the States of California and Nevada
8	may, at any time, modify or adopt a State
9	standard for general service lamps to conform
10	with Federal standards with effective dates no
11	earlier than 12 months prior to the Federal effec-
12	tive dates prescribed under subparagraphs (A),
13	(B), and (C) of section 325(i)(1), at which time
14	any prior regulations adopted by the States of
15	California or Nevada shall no longer be effective;
16	and
17	"(iii) all other States may, at any time,
18	modify or adopt a State standard for general
19	service lamps to conform with Federal standards
20	and effective dates.".
21	(e) Prohibited Acts.—Section 332(a) of the Energy
22	Policy and Conservation Act (42 U.S.C. 6302(a)) is amend-
23	ed—
24	(1) in paragraph (4), by striking "or" at the
25	end;

1	(2) in paragraph (5), by striking the period at
2	the end and inserting "; or"; and
3	(3) by adding at the end the following:
4	"(6) for any manufacturer, distributor, retailer,
5	or private labeler to distribute in commerce an adapt-
6	er that—
7	"(A) is designed to allow an incandescent
8	lamp that does not have a medium screw base to
9	be installed into a fixture or lampholder with a
10	medium screw base socket; and
11	"(B) is capable of being operated at a volt-
12	age range at least partially within 110 and 130
13	volts.".
14	(f) Enforcement.—Section 334 of the Energy Policy
15	and Conservation Act (42 U.S.C. 6304) is amended by in-
16	serting after the second sentence the following: "Any such
17	action to restrain any person from distributing in com-
18	merce a general service incandescent lamp that does not
19	comply with the applicable standard established under sec-
20	tion 325(i) or an adapter prohibited under section
21	332(a)(6) may also be brought by the attorney general of
22	a State in the name of the State.".
23	(g) Research and Development Program.—

1	(1) In general.—The Secretary may carry out
2	a lighting technology research and development pro-
3	gram—
4	(A) to support the research, development,
5	demonstration, and commercial application of
6	lamps and related technologies sold, offered for
7	sale, or otherwise made available in the United
8	States; and
9	(B) to assist manufacturers of general serv-
10	ice lamps in the manufacturing of general serv-
11	ice lamps that, at a minimum, achieve the watt-
12	age requirements imposed as a result of the
13	amendments made by subsection (a).
14	(2) Authorization of Appropriations.—
15	There are authorized to be appropriated to carry out
16	this subsection \$10,000,000 for each of fiscal years
17	2008 through 2013.
18	(3) Termination of Authority.—The program
19	under this subsection shall terminate on September
20	30, 2015.
21	(h) Reports to Congress.—
22	(1) Report on mercury use and release.—
23	Not later than 1 year after the date of enactment of
24	this Act, the Secretary , in cooperation with the Ad-
25	ministrator of the Environmental Protection Agency,

1	shall submit to Congress a report describing rec-
2	ommendations relating to the means by which the
3	Federal Government may reduce or prevent the re-
4	lease of mercury during the manufacture, transpor-
5	tation, storage, or disposal of light bulbs.
6	(2) Report on Rulemaking schedule.—Be-
7	ginning on July 1, 2013 and semiannually through
8	July 1, 2016, the Secretary shall submit to the Com-
9	mittee on Energy and Commerce of the House of Rep-
10	resentatives and the Committee on Energy and Nat-
11	ural Resources of the Senate a report on—
12	(A) whether the Secretary will meet the
13	deadlines for the rulemakings required under this
14	section;
15	(B) a description of any impediments to
16	meeting the deadlines; and
17	(C) a specific plan to remedy any failures,
18	including recommendations for additional legis-
19	lation or resources.
20	(3) National academy review.—
21	(A) In General.—Not later than December
22	31, 2009, the Secretary shall enter into an ar-
23	rangement with the National Academy of
24	Sciences to provide a report by December 31,

1	2013, and an updated report by July 31, 2015.
2	The report should include—
3	(i) the status of advanced solid state
4	lighting research, development, demonstra-
5	$tion\ and\ commercialization;$
6	(ii) the impact on the types of lighting
7	available to consumers of an energy con-
8	servation standard requiring a minimum of
9	45 lumens per watt for general service light-
10	ing effective in 2020; and
11	(iii) the time frame for the commer-
12	cialization of lighting that could replace
13	current incandescent and halogen incandes-
14	cent lamp technology and any other new
15	technologies developed to meet the minimum
16	standards required under subsection (a) (3)
17	of this section.
18	(B) Reports.—The reports shall be trans-
19	mitted to the Committee on Energy and Com-
20	merce of the House of Representatives and the
21	Committee on Energy and Natural Resources of
22	the Senate

1	SEC. 322. INCANDESCENT REFLECTOR LAMP EFFICIENCY
2	STANDARDS.
3	(a) Definitions.—Section 321 of the Energy Policy
4	and Conservation Act (42 U.S.C. 6291) (as amended by sec-
5	tion $316(c)(1)(D)$) is amended—
6	(1) in paragraph (30)(C)(ii)—
7	(A) in the matter preceding subclause (I)—
8	(i) by striking "or similar bulb shapes
9	(excluding ER or BR)" and inserting "ER,
10	BR, BPAR, or similar bulb shapes"; and
11	(ii) by striking "2.75" and inserting
12	"2.25"; and
13	(B) by striking "is either—" and all that
14	follows through subclause (II) and inserting "has
15	a rated wattage that is 40 watts or higher"; and
16	(2) by adding at the end the following:
17	"(54) BPAR INCANDESCENT REFLECTOR
18	LAMP.—The term 'BPAR incandescent reflector lamp'
19	means a reflector lamp as shown in figure C78.21—
20	278 on page 32 of ANSI C78.21–2003.
21	"(55) BR INCANDESCENT REFLECTOR LAMP;
22	BR30; BR40.—
23	"(A) BR INCANDESCENT REFLECTOR
24	LAMP.—The term 'BR incandescent reflector
25	lamn' means a reflector lamn that has—

1	"(i) a bulged section below the major
2	diameter of the bulb and above the approxi-
3	mate baseline of the bulb, as shown in fig-
4	ure 1 (RB) on page 7 of ANSI C79.1–1994,
5	incorporated by reference in section 430.22
6	of title 10, Code of Federal Regulations (as
7	in effect on the date of enactment of this
8	paragraph); and
9	"(ii) a finished size and shape shown
10	in ANSI C78.21-1989, including the ref-
11	erenced reflective characteristics in part 7 of
12	ANSI C78.21–1989, incorporated by ref-
13	erence in section 430.22 of title 10, Code of
14	Federal Regulations (as in effect on the date
15	of enactment of this paragraph).
16	"(B) BR30.—The term 'BR30' means a BR
17	incandescent reflector lamp with a diameter of
18	30/8ths of an inch.
19	"(C) BR40.—The term 'BR40' means a BR
20	incandescent reflector lamp with a diameter of
21	40/8ths of an inch.
22	"(56) ER INCANDESCENT REFLECTOR LAMP;
23	ER30; ER40.—

1	"(A) ER $INCANDESCENT$ $REFLECTOR$
2	LAMP.—The term 'ER incandescent reflector
3	lamp' means a reflector lamp that has—
4	"(i) an elliptical section below the
5	major diameter of the bulb and above the
6	approximate baseline of the bulb, as shown
7	in figure 1 (RE) on page 7 of ANSI C79.1-
8	1994, incorporated by reference in section
9	430.22 of title 10, Code of Federal Regula-
10	tions (as in effect on the date of enactment
11	of this paragraph); and
12	"(ii) a finished size and shape shown
13	in ANSI C78.21–1989, incorporated by ref-
14	erence in section 430.22 of title 10, Code of
15	Federal Regulations (as in effect on the date
16	of enactment of this paragraph).
17	"(B) ER30.—The term 'ER30' means an
18	ER incandescent reflector lamp with a diameter
19	of 30/8ths of an inch.
20	"(C) ER40.—The term 'ER40' means an
21	ER incandescent reflector lamp with a diameter
22	of 40/8ths of an inch.
23	"(57) R20 Incandescent reflector lamp.—
24	The term 'R20 incandescent reflector lamp' means a
25	reflector lamp that has a face diameter of approxi-

- 1 mately 2.5 inches, as shown in figure 1(R) on page 2 7 of ANSI C79.1–1994.".
- 3 (b) Standards for Fluorescent Lamps and In-
- 4 CANDESCENT REFLECTOR LAMPS.—Section 325(i) of the
- 5 Energy Policy and Conservation Act (42 U.S.C. 6995(i))
- 6 is amended by striking paragraph (1) and inserting the fol-
- 7 lowing:

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8 "(1) STANDARDS.—

"(A) DEFINITION OF EFFECTIVE DATE.—In this paragraph (other than subparagraph (D)), the term 'effective date' means, with respect to each type of lamp specified in a table contained in subparagraph (B), the last day of the period of months corresponding to that type of lamp (as specified in the table) that follows October 24, 1992.

"(B) MINIMUM STANDARDS.—Each of the following general service fluorescent lamps and incandescent reflector lamps manufactured after the effective date specified in the tables contained in this paragraph shall meet or exceed the following lamp efficacy and CRI standards:

"FLUORESCENT LAMPS

Lamp Type	Nominal Lamp Wattage	Minimum CRI	Minimum Average Lamp Efficacy (LPW)	Effective Date (Pe- riod of Months)
4-foot medium bi-pin	>35 W	69	75.0	36
	≤35 W	45	75.0	36
2-foot U-shaped	>35 W	69	68.0	36

254
"FLUORESCENT LAMPS—Continued

$Lamp\ Type$	Nominal Lamp Wattage	Minimum CRI	Minimum Average Lamp Efficacy (LPW)	Effective Date (Pe- riod of Months)
	≤35 W	45	64.0	36
8-foot slimline	65~W	69	80.0	18
	\leq 65 W	45	80.0	18
8-foot high output	>100 W	69	80.0	18
	$\leq 100~W$	45	80.0	18

"INCANDESCENT REFLECTOR LAMPS

Nominal Lamp Wattage	Minimum Average Lamp Efficacy (LPW)	Effective Date (Pe- riod of Months)
40–50	10.5	36
51-66	11.0	36
67–85	12.5	36
86–115	14.0	36
116–155	14.5	36
156–205	15.0	36

"(C) Exemptions.—The standards speci-1 2 fied in subparagraph (B) shall not apply to the following types of incandescent reflector lamps: 3 4 "(i) Lamps rated at 50 watts or less that are ER30, BR30, BR40, or ER40 5 6 lamps. 7 "(ii) Lamps rated at 65 watts that are 8 BR30, BR40, or ER40 lamps. 9 "(iii) R20 incandescent reflector lamps 10 rated 45 watts or less. 11 "(D) Effective dates.— 12 "(i) ER, BR, AND BPAR LAMPS.—The standards specified in subparagraph (B) 13 14 shall apply with respect to ER incandescent 15 reflector lamps, BR incandescent reflector

1	$lamps, \ BPAR \ in can descent \ reflector \ lamps,$
2	and similar bulb shapes on and after Janu-
3	ary 1, 2008.
4	"(ii) LAMPS BETWEEN 2.25–2.75
5	Inches in diameter.—The standards spec-
6	ified in subparagraph (B) shall apply with
7	respect to incandescent reflector lamps with
8	a diameter of more than 2.25 inches, but
9	not more than 2.75 inches, on and after the
10	later of January 1, 2008, or the date that
11	is 180 days after the date of enactment of
12	the Energy Independence and Security Act
13	of 2007.".
14	SEC. 323. PUBLIC BUILDING ENERGY EFFICIENT AND RE-
15	NEWABLE ENERGY SYSTEMS.
16	(a) Estimate of Energy Performance in Pro-
17	Spectus.—Section 3307(b) of title 40, United States Code,
18	is amended—
19	(1) by striking "and" at the end of paragraph
20	(5);
21	(2) by striking the period at the end of para-
22	graph (6) and inserting "; and"; and
23	(3) by inserting after paragraph (6) the fol-
24	lowing:

1	"(7) with respect to any prospectus for the con-
2	struction, alteration, or acquisition of any building or
3	space to be leased, an estimate of the future energy
4	performance of the building or space and a specific
5	description of the use of energy efficient and renew-
6	able energy systems, including photovoltaic systems,
7	in carrying out the project.".
8	(b) Minimum Performance Requirements for
9	Leased Space.—Section 3307 of such of title is amend-
10	ed—
11	(1) by redesignating subsections (f) and (g) as
12	subsections (g) and (h), respectively; and
13	(2) by inserting after subsection (e) the following:
14	"(f) Minimum Performance Requirements for
15	Leased Space.—With respect to space to be leased, the Ad-
16	ministrator shall include, to the maximum extent prac-
17	ticable, minimum performance requirements requiring en-
18	ergy efficiency and the use of renewable energy.".
19	(c) Use of Energy Efficient Lighting Fixtures
20	AND BULBS.—
21	(1) In general.—Chapter 33 of such title is
22	amended—
23	(A) by redesignating sections 3313, 3314,
24	and 3315 as sections 3314, 3315, and 3316, re-
25	spectively; and

1	(B) by inserting after section 3312 the fol-
2	lowing:
3	"§3313. Use of energy efficient lighting fixtures and
4	bulbs
5	"(a) Construction, Alteration, and Acquisition
6	of Public Buildings.—Each public building constructed,
7	altered, or acquired by the Administrator of General Serv-
8	ices shall be equipped, to the maximum extent feasible as
9	determined by the Administrator, with lighting fixtures and
10	bulbs that are energy efficient.
11	"(b) Maintenance of Public Buildings.—Each
12	lighting fixture or bulb that is replaced by the Adminis-
13	trator in the normal course of maintenance of public build-
14	ings shall be replaced, to the maximum extent feasible, with
15	a lighting fixture or bulb that is energy efficient.
16	"(c) Considerations.—In making a determination
17	under this section concerning the feasibility of installing
18	a lighting fixture or bulb that is energy efficient, the Ad-
19	ministrator shall consider—
20	"(1) the life-cycle cost effectiveness of the fixture
21	$or\ bulb;$
22	"(2) the compatibility of the fixture or bulb with
23	existing equipment;
24	"(3) whether use of the fixture or bulb could re-
25	sult in interference with productivity:

1	"(4) the aesthetics relating to use of the fixture
2	or bulb; and
3	"(5) such other factors as the Administrator de-
4	termines appropriate.
5	"(d) Energy Star.—A lighting fixture or bulb shall
6	be treated as being energy efficient for purposes of this sec-
7	tion if—
8	"(1) the fixture or bulb is certified under the En-
9	ergy Star program established by section 324A of the
10	Energy Policy and Conservation Act (42 U.S.C.
11	6294a);
12	"(2) in the case of all light-emitting diode
13	(LED) luminaires, lamps, and systems whose efficacy
14	(lumens per watt) and Color Rendering Index (CRI)
15	meet the Department of Energy requirements for min-
16	imum luminaire efficacy and CRI for the Energy
17	Star certification, as verified by an independent
18	third-party testing laboratory that the Administrator
19	and the Secretary of Energy determine conducts its
20	tests according to the procedures and recommenda-
21	tions of the Illuminating Engineering Society of
22	North America, even if the luminaires, lamps, and
23	sustems have not received such certification: or

1	"(3) the Administrator and the Secretary of En
2	ergy have otherwise determined that the fixture or
3	bulb is energy efficient.
4	"(e) Additional Energy Efficient Lighting Des
5	IGNATIONS.—The Administrator of the Environmental Pro-
6	tection Agency and the Secretary of Energy shall give pri
7	ority to establishing Energy Star performance criteria or
8	Federal Energy Management Program designations for ad
9	ditional lighting product categories that are appropriate for
10	use in public buildings.
11	"(f) Guidelines.—The Administrator shall develop
12	guidelines for the use of energy efficient lighting tech
13	nologies that contain mercury in child care centers in pub
14	lic buildings.
15	"(g) Applicability of Buy American Act.—Acqui
16	sitions carried out pursuant to this section shall be subject
17	to the requirements of the Buy American Act (41 U.S.C
18	10c et seq.).
19	"(h) Effective Date.—The requirements of sub-
20	sections (a) and (b) shall take effect one year after the date
21	of enactment of this subsection.".
22	(2) Clerical amendment.—The analysis for
23	such chapter is amended by striking the items relat
24	ing to sections 3313, 3314, and 3315 and inserting

 $the\ following:$

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[&]quot;3313. Use of energy efficient lighting fixtures and bulbs.

	"3314. Delegation. "3315. Report to Congress. "3316. Certain authority not affected.".
1	(d) Evaluation Factor.—Section 3310 of such title
2	is amended—
3	(1) by redesignating paragraphs (3), (4), and (5)
4	as paragraphs (4), (5), and (6), respectively; and
5	(2) by inserting after paragraph (2) the fol-
6	lowing:
7	"(3) shall include in the solicitation for any
8	lease requiring a prospectus under section 3307 an
9	evaluation factor considering the extent to which the
10	offeror will promote energy efficiency and the use of
11	renewable energy;".
12	SEC. 324. METAL HALIDE LAMP FIXTURES.
13	(a) Definitions.—Section 321 of the Energy Policy
14	and Conservation Act (42 U.S.C. 6291) (as amended by sec-
15	tion 322(a)(2)) is amended by adding at the end the fol-
16	lowing:
17	"(58) BALLAST.—The term 'ballast' means a de-
18	vice used with an electric discharge lamp to obtain
19	necessary circuit conditions (voltage, current, and
20	waveform) for starting and operating.
21	"(59) Ballast efficiency.—
22	"(A) In General.—The term ballast effi-
23	ciency' means, in the case of a high intensity
24	discharge fixture, the efficiency of a lamp and

1	ballast combination, expressed as a percentage,
2	and calculated in accordance with the following
3	formula: $Efficiency = P_{out}/P_{in}$.
4	"(B) Efficiency formula.—For the pur-
5	pose of subparagraph (A)—
6	"(i) Pout shall equal the measured op-
7	erating lamp wattage;
8	"(ii) $P_{\rm in}$ shall equal the measured oper-
9	ating input wattage;
10	"(iii) the lamp, and the capacitor
11	when the capacitor is provided, shall con-
12	stitute a nominal system in accordance
13	with the ANSI Standard C78.43-2004;
14	"(iv) for ballasts with a frequency of
15	60 Hz, $P_{\rm in}$ and $P_{\rm out}$ shall be measured after
16	lamps have been stabilized according to sec-
17	tion 4.4 of ANSI Standard C82.6-2005
18	using a wattmeter with accuracy specified
19	in section 4.5 of ANSI Standard C82.6-
20	2005; and
21	"(v) for ballasts with a frequency
22	greater than 60 Hz, $P_{\rm in}$ and $P_{\rm out}$ shall have
23	a basic accuracy of \pm 0.5 percent at the
24	higher of—

1	"(I) 3 times the output operating
2	frequency of the ballast; or
3	"(II) 2 kHz for ballast with a fre-
4	quency greater than 60 Hz.
5	"(C) Modification.—The Secretary may,
6	by rule, modify the definition of ballast effi-
7	ciency' if the Secretary determines that the
8	modification is necessary or appropriate to
9	carry out the purposes of this Act.
10	"(60) Electronic ballast.—The term 'elec-
11	tronic ballast' means a device that uses semiconduc-
12	tors as the primary means to control lamp starting
13	and operation.
14	"(61) General lighting application.—The
15	term 'general lighting application' means lighting
16	that provides an interior or exterior area with overall
17	illumination.
18	"(62) Metal Halide Ballast.—The term
19	'metal halide ballast' means a ballast used to start
20	and operate metal halide lamps.
21	"(63) Metal Halide Lamp.—The term 'metal
22	halide lamp' means a high intensity discharge lamp
23	in which the major portion of the light is produced
24	by radiation of metal halides and their products of

1	dissociation, possibly in combination with metallic
2	vapors.
3	"(64) Metal Halide Lamp fixture.—The term
4	'metal halide lamp fixture' means a light fixture for
5	general lighting application designed to be operated
6	with a metal halide lamp and a ballast for a metal
7	halide lamp.
8	"(65) Probe-start metal halide ballast.—
9	The term 'probe-start metal halide ballast' means a
10	ballast that—
11	"(A) starts a probe-start metal halide lamp
12	that contains a third starting electrode (probe)
13	in the arc tube; and
14	"(B) does not generally contain an igniter
15	but instead starts lamps with high ballast open
16	$circuit\ voltage.$
17	"(66) Pulse-start metal halide ballast.—
18	"(A) In General.—The term 'pulse-start
19	metal halide ballast' means an electronic or elec-
20	tromagnetic ballast that starts a pulse-start
21	metal halide lamp with high voltage pulses.
22	"(B) Starting process.—For the purpose
23	of subparagraph (A)—

1	"(i) lamps shall be started by first pro-
2	viding a high voltage pulse for ionization of
3	the gas to produce a glow discharge; and
4	"(ii) to complete the starting process,
5	power shall be provided by the ballast to
6	sustain the discharge through the glow-to-
7	arc transition.".
8	(b) Coverage.—Section 322(a) of the Energy Policy
9	and Conservation Act (42 U.S.C. 6292(a)) is amended—
10	(1) by redesignating paragraph (19) as para-
11	graph (20); and
12	(2) by inserting after paragraph (18) the fol-
13	lowing:
14	"(19) Metal halide lamp fixtures.".
15	(c) Test Procedures.—Section 323(b) of the Energy
16	Policy and Conservation Act (42 U.S.C. 6293(b)) (as
17	amended by section 301(b)) is amended by adding at the
18	end the following:
19	"(18) Metal Halide Lamp Ballasts.—Test
20	procedures for metal halide lamp ballasts shall be
21	based on ANSI Standard C82.6-2005, entitled 'Bal-
22	lasts for High Intensity Discharge Lamps—Method of
23	Measurement'.".

1	(d) Labeling.—Section 324(a)(2) of the Energy Pol-
2	icy and Conservation Act (42 U.S.C. 6294(a)(2)) is amend-
3	ed—
4	(1) by redesignating subparagraphs (C) through
5	(G) as subparagraphs (D) through (H), respectively;
6	and
7	(2) by inserting after subparagraph (B) the fol-
8	lowing:
9	"(C) Metal halide lamp fixtures.—
10	"(i) In General.—The Commission
11	shall issue labeling rules under this section
12	applicable to the covered product specified
13	in section 322(a)(19) and to which stand-
14	ards are applicable under section 325.
15	"(ii) Labeling.—The rules shall pro-
16	vide that the labeling of any metal halide
17	lamp fixture manufactured on or after the
18	later of January 1, 2009, or the date that
19	is 270 days after the date of enactment of
20	this subparagraph, shall indicate conspicu-
21	ously, in a manner prescribed by the Com-
22	mission under subsection (b) by July 1,
23	2008, a capital letter 'E' printed within a
24	circle on the packaging of the fixture, and
25	on the ballast contained in the fixture.".

1	(e) Standards.—Section 325 of the Energy Policy
2	and Conservation Act (42 U.S.C. 6295) (as amended by sec-
3	tion 310) is amended—
4	(1) by redesignating subsection (hh) as sub-
5	section (ii);
6	(2) by inserting after subsection (gg) the fol-
7	lowing:
8	"(hh) Metal Halide Lamp Fixtures.—
9	"(1) STANDARDS.—
10	"(A) In general.—Subject to subpara-
11	graphs (B) and (C), metal halide lamp fixtures
12	designed to be operated with lamps rated greater
13	than or equal to 150 watts but less than or equal
14	to 500 watts shall contain—
15	"(i) a pulse-start metal halide ballast
16	with a minimum ballast efficiency of 88
17	percent;
18	"(ii) a magnetic probe-start ballast
19	with a minimum ballast efficiency of 94
20	percent; or
21	"(iii) a nonpulse-start electronic bal-
22	last with—
23	"(I) a minimum ballast efficiency
24	of 92 percent for wattages greater than
25	250 watts: and

1	"(II) a minimum ballast effi-
2	ciency of 90 percent for wattages less
3	than or equal to 250 watts.
4	"(B) Exclusions.—The standards estab-
5	lished under subparagraph (A) shall not apply
6	to—
7	"(i) fixtures with regulated lag bal-
8	lasts;
9	"(ii) fixtures that use electronic bal-
10	lasts that operate at 480 volts; or
11	"(iii) fixtures that—
12	"(I) are rated only for 150 watt
13	lamps;
14	"(II) are rated for use in wet lo-
15	cations, as specified by the National
16	Electrical Code 2002, section 410.4(A);
17	and
18	"(III) contain a ballast that is
19	rated to operate at ambient air tem-
20	peratures above 50° C, as specified by
21	UL 1029–2001.
22	"(C) Application.—The standards estab-
23	lished under subparagraph (A) shall apply to
24	metal halide lamp fixtures manufactured on or
25	after the later of—

1	"(i) January 1, 2009; or
2	"(ii) the date that is 270 days after the
3	date of enactment of this subsection.
4	"(2) Final rule by January 1, 2012.—
5	"(A) In general.—Not later than January
6	1, 2012, the Secretary shall publish a final rule
7	to determine whether the standards established
8	under paragraph (1) should be amended.
9	"(B) Administration.—The final rule
10	shall—
11	"(i) contain any amended standard;
12	and
13	"(ii) apply to products manufactured
14	on or after January 1, 2015.
15	"(3) Final rule by January 1, 2019.—
16	"(A) In general.—Not later than January
17	1, 2019, the Secretary shall publish a final rule
18	to determine whether the standards then in effect
19	should be amended.
20	"(B) Administration.—The final rule
21	shall—
22	"(i) contain any amended standards;
23	and
24	"(ii) apply to products manufactured
25	after January 1, 2022.

1	"(4) Design and Performance require-
2	MENTS.—Notwithstanding any other provision of law,
3	any standard established pursuant to this subsection
4	may contain both design and performance require-
5	ments."; and
6	(3) in paragraph (2) of subsection (ii) (as redes-
7	ignated by paragraph (2)), by striking "(gg)" each
8	place it appears and inserting "(hh)".
9	(f) Effect on Other Law.—Section 327(c) of the
10	Energy Policy and Conservation Act (42 U.S.C. 6297(c))
11	is amended—
12	(1) in paragraph (8)(B), by striking the period
13	at the end and inserting "; and"; and
14	(2) by adding at the end the following:
15	"(9) is a regulation concerning metal halide
16	lamp fixtures adopted by the California Energy Com-
17	mission on or before January 1, 2011, except that—
18	"(A) if the Secretary fails to issue a final
19	rule within 180 days after the deadlines for
20	rulemakings in section 325(hh), notwithstanding
21	any other provision of this section, preemption
22	shall not apply to a regulation concerning metal
23	halide lamp fixtures adopted by the California
24	Energy Commission—

1	"(i) on or before July 1, 2015, if the
2	Secretary fails to meet the deadline speci-
3	fied in section 325(hh)(2); or
4	"(ii) on or before July 1, 2022, if the
5	Secretary fails to meet the deadline speci-
6	fied in section 325(hh)(3).".
7	SEC. 325. ENERGY EFFICIENCY LABELING FOR CONSUMER
8	ELECTRONIC PRODUCTS.
9	(a) In General.—Section 324(a) of the Energy Pol-
10	icy and Conservation Act (42 U.S.C. 6294(a)) (as amended
11	by section 324(d)) is amended—
12	(1) in paragraph (2), by adding at the end the
13	following:
14	"(I) Labeling requirements.—
15	"(i) In general.—Subject to clauses
16	(ii) through (iv), not later than 18 months
17	after the date of issuance of applicable De-
18	partment of Energy testing procedures, the
19	Commission, in consultation with the Sec-
20	retary and the Administrator of the Envi-
21	ronmental Protection Agency (acting
22	through the Energy Star program), shall,
23	by regulation, prescribe labeling or other
24	disclosure requirements for the energy use

1	$``(I)\ televisions;$
2	$``(II)\ personal\ computers;$
3	"(III) cable or satellite set-top
4	boxes;
5	"(IV) stand-alone digital video re-
6	corder boxes; and
7	"(V) personal computer monitors.
8	"(ii) Alternate testing proce-
9	DURES.—In the absence of applicable test-
10	ing procedures described in clause (i) for
11	products described in subclauses (I) through
12	(V) of that clause, the Commission may, by
13	regulation, prescribe labeling or other dis-
14	closure requirements for a consumer product
15	category described in clause (i) if the Com-
16	mission—
17	"(I) identifies adequate non-De-
18	partment of Energy testing procedures
19	for those products; and
20	"(II) determines that labeling of,
21	or other disclosures relating to, those
22	products is likely to assist consumers
23	in making purchasing decisions.
24	"(iii) Deadline and requirements
25	FOR LABELING.—

1	"(I) Deadline.—Not later than
2	18 months after the date of promulga-
3	tion of any requirements under clause
4	(i) or (ii), the Commission shall re-
5	quire labeling of, or other disclosure re-
6	quirements for, electronic products de-
7	scribed in clause (i).
8	"(II) REQUIREMENTS.—The re-
9	quirements prescribed under clause (i)
10	or (ii) may include specific require-
11	ments for each electronic product to be
12	labeled with respect to the placement,
13	size, and content of Energy Guide la-
14	bels.
15	"(iv) Determination of Feasi-
16	BILITY.—Clause (i) or (ii) shall not apply
17	in any case in which the Commission deter-
18	mines that labeling in accordance with this
19	subsection—
20	"(I) is not technologically or eco-
21	nomically feasible; or
22	"(II) is not likely to assist con-
23	sumers in making purchasing deci-
24	sions."; and
25	(2) by adding at the end the following:

1	"(6) Authority to include additional prod-
2	UCT CATEGORIES.—The Commission may, by regula-
3	tion, require labeling or other disclosures in accord-
4	ance with this subsection for any consumer product
5	not specified in this subsection or section 322 if the
6	Commission determines that labeling for the product
7	is likely to assist consumers in making purchasing
8	decisions.".
9	(b) Content of Label.—Section 324(c) of the En-
10	ergy Policy and Conservation Act (42 U.S.C. 6924(c)) is
11	amended by adding at the end the following:
12	"(9) Discretionary application.—The Com-
13	mission may apply paragraphs (1), (2), (3), (5), and
14	(6) of this subsection to the labeling of any product
15	covered by paragraph (2)(I) or (6) of subsection (a).".
16	TITLE IV—ENERGY SAVINGS IN
17	BUILDINGS AND INDUSTRY
18	SEC. 401. DEFINITIONS.
19	In this title:
20	(1) Administrator.—The term "Adminis-
21	trator" means the Administrator of General Services.
22	(2) Advisory committee.—The term "Advisory
23	Committee" means the Green Building Advisory
24	Committee established under section 484.

1	(3) Commercial director.—The term "Com-
2	mercial Director" means the individual appointed to
3	the position established under section 421.
4	(4) Consortium.—The term "Consortium"
5	means the High-Performance Green Building Part-
6	nership Consortium created in response to section
7	436(c)(1) to represent the private sector in a public-
8	private partnership to promote high-performance
9	green buildings and zero-net-energy commercial build-
10	ings.
11	(5) Cost-effective lighting technology.—
12	(A) In General.—The term "cost-effective
13	lighting technology" means a lighting technology
14	that—
15	(i) will result in substantial oper-
16	ational cost savings by ensuring an in-
17	stalled consumption of not more than 1
18	watt per square foot; or
19	(ii) is contained in a list under—
20	(I) section 553 of Public Law 95-
21	619 (42 U.S.C. 8259b);
22	(II) Federal acquisition regula-
23	tion 23–203; and
24	(III) is at least as energy-con-
25	serving as required by other provisions

1	of this Act, including the requirements
2	of this title and title III which shall be
3	applicable to the extent that they
4	would achieve greater energy savings
5	than provided under clause (i) or this
6	clause.
7	(B) Inclusions.—The term "cost-effective
8	lighting technology" includes—
9	(i) lamps;
10	$(ii)\ ballasts;$
11	(iii) luminaires;
12	$(iv)\ lighting\ controls;$
13	(v) daylighting; and
14	(vi) early use of other highly cost-effec-
15	$tive\ lighting\ technologies.$
16	(6) Cost-effective technologies and prac-
17	TICES.—The term "cost-effective technologies and
18	practices" means a technology or practice that—
19	(A) will result in substantial operational
20	cost savings by reducing electricity or fossil fuel
21	consumption, water, or other utility costs, in-
22	cluding use of geothermal heat pumps;
23	(B) complies with the provisions of section
24	553 of Public Law 95–619 (42 U.S.C. 8259b)
25	and Federal acquisition regulation 23–203; and

- 1 (C) is at least as energy and water con2 serving as required under this title, including
 3 sections 431 through 435, and title V, including
 4 section 511 through 525, which shall be applica5 ble to the extent that they are more stringent or
 6 require greater energy or water savings than re7 quired by this section.
 - (7) FEDERAL DIRECTOR.—The term "Federal Director" means the individual appointed to the position established under section 436(a).
 - (8) FEDERAL FACILITY.—The term "Federal facility" means any building that is constructed, renovated, leased, or purchased in part or in whole for use by the Federal Government.

(9) Operational cost savings.—

(A) In GENERAL.—The term "operational cost savings" means a reduction in end-use operational costs through the application of cost-effective technologies and practices or geothermal heat pumps, including a reduction in electricity consumption relative to consumption by the same customer or at the same facility in a given year, as defined in guidelines promulgated by the Administrator pursuant to section 329(b) of the Clean Air Act, that achieves cost savings suf-

1	ficient to pay the incremental additional costs of
2	using cost-effective technologies and practices in-
3	cluding geothermal heat pumps by not later than
4	the later of the date established under sections
5	431 through 434, or—
6	(i) for cost-effective technologies and
7	practices, the date that is 5 years after the
8	date of installation; and
9	(ii) for geothermal heat pumps, as soon
10	as practical after the date of installation of
11	the applicable geothermal heat pump.
12	(B) Inclusions.—The term "operational
13	cost savings" includes savings achieved at a fa-
14	cility as a result of—
15	(i) the installation or use of cost-effec-
16	tive technologies and practices; or
17	(ii) the planting of vegetation that
18	shades the facility and reduces the heating,
19	cooling, or lighting needs of the facility.
20	(C) Exclusion.—The term "operational
21	cost savings" does not include savings from
22	measures that would likely be adopted in the ab-
23	sence of cost-effective technology and practices
24	programs, as determined by the Administrator.

1	(10) Geothermal Heat Pump.—The term "geo-
2	thermal heat pump" means any heating or air condi-
3	tioning technology that—
4	(A) uses the ground or ground water as a
5	thermal energy source to heat, or as a thermal
6	energy sink to cool, a building; and
7	(B) meets the requirements of the Energy
8	Star program of the Environmental Protection
9	Agency applicable to geothermal heat pumps on
10	the date of purchase of the technology.
11	(11) GSA FACILITY.—
12	(A) In general.—The term "GSA facility"
13	means any building, structure, or facility, in
14	whole or in part (including the associated sup-
15	port systems of the building, structure, or facil-
16	ity) that—
17	(i) is constructed (including facilities
18	constructed for lease), renovated, or pur-
19	chased, in whole or in part, by the Admin-
20	istrator for use by the Federal Government;
21	or
22	(ii) is leased, in whole or in part, by
23	the Administrator for use by the Federal
24	Government—

1	(I) except as provided in sub-
2	clause (II), for a term of not less than
3	5 years; or
4	(II) for a term of less than 5
5	years, if the Administrator determines
6	that use of cost-effective technologies
7	and practices would result in the pay-
8	back of expenses.
9	(B) Inclusion.—The term "GSA facility"
10	includes any group of buildings, structures, or
11	facilities described in subparagraph (A) (includ-
12	ing the associated energy-consuming support sys-
13	tems of the buildings, structures, and facilities).
14	(C) Exemption.—The Administrator may
15	exempt from the definition of "GSA facility"
16	under this paragraph a building, structure, or
17	facility that meets the requirements of section
18	543(c) of Public Law 95–619 (42 U.S.C.
19	8253(c)).
20	(12) High-performance building.—The term
21	"high performance building" means a building that
22	integrates and optimizes on a life cycle basis all
23	major high performance attributes, including energy
24	conservation, environment, safetu, securitu, dura-

1	bility, accessibility, cost-benefit, productivity, sustain-
2	ability, functionality, and operational considerations.
3	(13) High-performance green building.—
4	The term "high-performance green building" means a
5	high-performance building that, during its life-cycle,
6	as compared with similar buildings (as measured by
7	Commercial Buildings Energy Consumption Survey
8	or Residential Energy Consumption Survey data
9	from the Energy Information Agency)—
10	(A) reduces energy, water, and material re-
11	source use;
12	(B) improves indoor environmental quality,
13	including reducing indoor pollution, improving
14	thermal comfort, and improving lighting and
15	acoustic environments that affect occupant health
16	and productivity;
17	(C) reduces negative impacts on the envi-
18	ronment throughout the life-cycle of the building,
19	including air and water pollution and waste
20	generation;
21	(D) increases the use of environmentally
22	preferable products, including biobased, recycled
23	content, and nontoxic products with lower life-
24	$cycle\ impacts;$

1	(E) increases reuse and recycling opportu-
2	nities;
3	(F) integrates systems in the building;
4	(G) reduces the environmental and energy
5	impacts of transportation through building loca-
6	tion and site design that support a full range of
7	transportation choices for users of the building;
8	and
9	(H) considers indoor and outdoor effects of
10	the building on human health and the environ-
11	ment, including—
12	(i) improvements in worker produc-
13	tivity;
14	(ii) the life-cycle impacts of building
15	materials and operations; and
16	(iii) other factors that the Federal Di-
17	rector or the Commercial Director consider
18	to be appropriate.
19	(14) Life-cycle.—The term 'life-cycle', with
20	respect to a high-performance green building, means
21	all stages of the useful life of the building (including
22	components, equipment, systems, and controls of the
23	building) beginning at conception of a high-perform-
24	ance green building project and continuing through
25	site selection, design, construction, landscaping, com-

1	missioning, operation, maintenance, renovation,
2	deconstruction or demolition, removal, and recycling
3	of the high-performance green building.
4	(15) Life-cycle assessment.—The term 'life-
5	cycle assessment" means a comprehensive system ap-
6	proach for measuring the environmental performance
7	of a product or service over the life of the product or
8	service, beginning at raw materials acquisition and
9	continuing through manufacturing, transportation,
10	installation, use, reuse, and end-of-life waste manage-
11	ment.
12	(16) Life-cycle costing.—The term "life-cycle
13	costing", with respect to a high-performance green
14	building, means a technique of economic evaluation
15	that—
16	(A) sums, over a given study period, the
17	costs of initial investment (less resale value), re-
18	placements, operations (including energy use),
19	and maintenance and repair of an investment
20	decision; and
21	(B) is expressed—
22	(i) in present value terms, in the case
23	of a study period equivalent to the longest
24	useful life of the building, determined by
25	taking into consideration the typical life of

1	such a building in the area in which the
2	building is to be located; or
3	(ii) in annual value terms, in the case
4	of any other study period.
5	(17) Office of commercial high-perform-
6	ANCE GREEN BUILDINGS.—The term "Office of Com-
7	mercial High-Performance Green Buildings" means
8	the Office of Commercial High-Performance Green
9	Buildings established under section 421(a).
10	(18) Office of federal high-performance
11	GREEN BUILDINGS.—The term "Office of Federal
12	High-Performance Green Buildings" means the Office
13	of Federal High-Performance Green Buildings estab-
14	lished under section 436(a).
15	(19) Practices.—The term "practices" means
16	design, financing, permitting, construction, commis-
17	sioning, operation and maintenance, and other prac-
18	tices that contribute to achieving zero-net-energy
19	buildings or facilities.
20	(20) Zero-net-energy commercial build-
21	ING.—The term "zero-net-energy commercial build-
22	ing" means a commercial building that is designed,
23	constructed, and operated to—
24	(A) require a greatly reduced quantity of
25	energy to operate;

1	(B) meet the balance of energy needs from
2	sources of energy that do not produce greenhouse
3	gases;
4	(C) therefore result in no net emissions of
5	greenhouse gases; and
6	(D) be economically viable.
7	Subtitle A—Residential Building
8	Efficiency
9	SEC. 411. REAUTHORIZATION OF WEATHERIZATION ASSIST-
10	ANCE PROGRAM.
11	(a) In General.—Section 422 of the Energy Con-
12	servation and Production Act (42 U.S.C. 6872) is amended
13	by striking "appropriated \$500,000,000 for fiscal year
14	2006, \$600,000,000 for fiscal year 2007, and \$700,000,000
15	for fiscal year 2008" and inserting "appropriated—
16	"(1) \$750,000,000 for fiscal year 2008;
17	"(2) \$900,000,000 for fiscal year 2009;
18	"(3) \$1,050,000,000 for fiscal year 2010;
19	"(4) \$1,200,000,000 for fiscal year 2011; and
20	"(5) \$1,400,000,000 for fiscal year 2012.".
21	(b) Sustainable Energy Resources for Con-
22	SUMERS GRANTS.—
23	(1) In General.—The Secretary may make
24	funding available to local weatherization agencies
25	from amounts authorized under the amendment made

1	by subsection (a) to expand the weatherization assist-
2	ance program for residential buildings to include ma-
3	terials, benefits, and renewable and domestic energy
4	technologies not covered by the program (as of the
5	date of enactment of this Act), if the State weatheriza-
6	tion grantee certifies that the applicant has the ca-
7	pacity to carry out the proposed activities and that
8	the grantee will include the project in the financial
9	oversight of the grantee of the weatherization assist-
10	ance program.
11	(2) Priority.—In selecting grant recipients
12	under this subsection, the Secretary shall give priority
13	to—
14	(A) the expected effectiveness and benefits of
15	the proposed project to low- and moderate-in-
16	come energy consumers;
17	(B) the potential for replication of success-
18	ful results;
19	(C) the impact on the health and safety and
20	energy costs of consumers served; and
21	(D) the extent of partnerships with other
22	public and private entities that contribute to the
23	resources and implementation of the program,
24	$including\ financial\ partnerships.$
25	(3) Funding.—

1	(A) In general.—Except as provided in
2	paragraph (2), the amount of funds used for
3	projects described in paragraph (1) may equal
4	up to 2 percent of the amount of funds made
5	available for any fiscal year under section 422
6	of the Energy Conservation and Production Act
7	(42 U.S.C. 6872).
8	(B) Exception.—No funds may be used for
9	sustainable energy resources for consumers
10	grants for a fiscal year under this subsection if
11	the amount of funds made available for the fiscal
12	year to carry out the Weatherization Assistance
13	Program for Low-Income Persons established
14	under part A of title IV of the Energy Conserva-
15	tion and Production Act (42 U.S.C. 6861 et seq.)
16	is less than \$275,000,000.
17	(c) Definition of State.—Section 412 of the Energy
18	Conservation and Production Act (42 U.S.C. 6862) is
19	amended by striking paragraph (8) and inserting the fol-
20	lowing:
21	"(8) State.—The term 'State' means—
22	"(A) a State;
23	"(B) the District of Columbia;
24	"(C) the Commonwealth of Puerto Rico; and

1	"(D) any other territory or possession of the
2	United States.".
3	SEC. 412. STUDY OF RENEWABLE ENERGY REBATE PRO-
4	GRAMS.
5	(a) In General.—Not later than 120 days after the
6	date of enactment of this Act, the Secretary shall conduct,
7	and submit to Congress a report on, a study regarding the
8	rebate programs established under sections 124 and 206(c)
9	of the Energy Policy Act of 2005 (42 U.S.C. 15821, 15853).
10	(b) Components.—In conducting the study, the Sec-
11	retary shall—
12	(1) develop a plan for how the rebate programs
13	would be carried out if the programs were funded;
14	and
15	(2) determine the minimum amount of funding
16	the program would need to receive in order to accom-
17	plish the goals of the programs.
18	SEC. 413. ENERGY CODE IMPROVEMENTS APPLICABLE TO
19	MANUFACTURED HOUSING.
20	(a) Establishment of Standards.—
21	(1) In general.—Not later than 4 years after
22	the date of enactment of this Act, the Secretary shall
23	by regulation establish standards for energy efficiency
24	in manufactured housing.

1	(2) Notice, comment, and consultation.—
2	Standards described in paragraph (1) shall be estab-
3	lished after—
4	(A) notice and an opportunity for comment
5	by manufacturers of manufactured housing and
6	other interested parties; and
7	(B) consultation with the Secretary of
8	Housing and Urban Development, who may seek
9	further counsel from the Manufactured Housing
10	$Consensus\ Committee.$
11	(b) Requirements.—
12	(1) International energy conservation
13	CODE.—The energy conservation standards established
14	under this section shall be based on the most recent
15	version of the International Energy Conservation
16	Code (including supplements), except in cases in
17	which the Secretary finds that the code is not cost-ef-
18	fective, or a more stringent standard would be more
19	cost-effective, based on the impact of the code on the
20	purchase price of manufactured housing and on total
21	life-cycle construction and operating costs.
22	(2) Considerations.—The energy conservation
23	standards established under this section may—

1	(A) take into consideration the design and
2	factory construction techniques of manufactured
3	homes;
4	(B) be based on the climate zones established
5	by the Department of Housing and Urban Devel-
6	opment rather than the climate zones under the
7	International Energy Conservation Code; and
8	(C) provide for alternative practices that re-
9	sult in net estimated energy consumption equal
10	to or less than the specified standards.
11	(3) UPDATING.—The energy conservation stand-
12	ards established under this section shall be updated
13	not later than—
14	(A) 1 year after the date of enactment of
15	this Act; and
16	(B) 1 year after any revision to the Inter-
17	national Energy Conservation Code.
18	(c) Enforcement.—Any manufacturer of manufac-
19	tured housing that violates a provision of the regulations
20	under subsection (a) is liable to the United States for a
21	civil penalty in an amount not exceeding 1 percent of the
22	manufacturer's retail list price of the manufactured hous-
23	ing.

1	Subtitle B—High-Performance
2	Commercial Buildings
3	SEC. 421. COMMERCIAL HIGH-PERFORMANCE GREEN
4	BUILDINGS.
5	(a) Director of Commercial High-Performance
6	Green Buildings.—Notwithstanding any other provision
7	of law, the Secretary, acting through the Assistant Sec-
8	retary of Energy Efficiency and Renewable Energy, shall
9	appoint a Director of Commercial High-Performance Green
10	Buildings to a position in the career-reserved Senior Execu-
11	tive service, with the principal responsibility to—
12	(1) establish and manage the Office of Commer-
13	cial High-Performance Green Buildings; and
14	(2) carry out other duties as required under this
15	subtitle.
16	(b) Qualifications.—The Commercial Director shall
17	be an individual, who by reason of professional background
18	and experience, is specifically qualified to carry out the du-
19	ties required under this subtitle.
20	(c) Duties.—The Commercial Director shall, with re-
21	spect to development of high-performance green buildings
22	and zero-energy commercial buildings nationwide—
23	(1) coordinate the activities of the Office of Com-
24	mercial High-Performance Green Buildings with the

1	activities of the Office of Federal High-Performance
2	Green Buildings;
3	(2) develop the legal predicates and agreements
4	for, negotiate, and establish one or more public-pri-
5	vate partnerships with the Consortium, members of
6	the Consortium, and other capable parties meeting the
7	qualifications of the Consortium, to further such de-
8	velopment;
9	(3) represent the public and the Department in
10	negotiating and performing in accord with such pub-
11	lic-private partnerships;
12	(4) use appropriated funds in an effective man-
13	ner to encourage the maximum investment of private
14	funds to achieve such development;
15	(5) promote research and development of high
16	performance green buildings, consistent with section
17	423; and
18	(6) jointly establish with the Federal Director a
19	national high-performance green building clearing-
20	house in accordance with section 423(1), which shall
21	provide high-performance green building information
22	and disseminate research results through—
23	(A) outreach;
24	(B) education; and
25	(C) the provision of technical assistance.

1	(d) Reporting.—The Commercial Director shall re-
2	port directly to the Assistant Secretary for Energy Effi-
3	ciency and Renewable Energy, or to other senior officials
4	in a way that facilitates the integrated program of this sub-
5	title for both energy efficiency and renewable energy and
6	both technology development and technology deployment.
7	(e) Coordination.—The Commercial Director shall
8	ensure full coordination of high-performance green building
9	information and activities, including activities under this
10	subtitle, within the Federal Government by working with
11	the General Services Administration and all relevant agen-
12	cies, including, at a minimum—
13	(1) the Environmental Protection Agency;
14	(2) the Office of the Federal Environmental Ex-
15	ecutive;
16	(3) the Office of Federal Procurement Policy;
17	(4) the Department of Energy, particularly the
18	Federal Energy Management Program;
19	(5) the Department of Health and Human Serv-
20	ices;
21	(6) the Department of Housing and Urban De-
22	velopment;
23	(7) the Department of Defense;
24	(8) the National Institute of Standards and
25	Technology;

1	(9) the Department of Transportation;
2	(10) the Office of Science Technology and Policy;
3	and
4	(11) such nonprofit high-performance green
5	building rating and analysis entities as the Commer-
6	cial Director determines can offer support, expertise,
7	and review services.
8	(f) High-Performance Green Building Partner-
9	SHIP CONSORTIUM.—
10	(1) Recognition.—Not later than 90 days after
11	the date of enactment of this Act, the Commercial Di-
12	rector shall formally recognize one or more groups
13	that qualify as a high-performance green building
14	partnership consortium.
15	(2) Representation to qualify.—To qualify
16	under this section, any consortium shall include rep-
17	resentation from—
18	(A) the design professions, including na-
19	tional associations of architects and of profes-
20	$sional\ engineers;$
21	(B) the development, construction, finan-
22	cial, and real estate industries;
23	(C) building owners and operators from the
24	nublic and private sectors:

1	(D) academic and research organizations,
2	including at least one national laboratory with
3	extensive commercial building energy expertise;
4	(E) building code agencies and organiza-
5	tions, including a model energy code-setting or-
6	ganization;
7	(F) independent high-performance green
8	building associations or councils;
9	(G) experts in indoor air quality and envi-
10	$ronmental\ factors;$
11	(H) experts in intelligent buildings and in-
12	tegrated building information systems;
13	(I) utility energy efficiency programs;
14	(J) manufacturers and providers of equip-
15	ment and techniques used in high performance
16	green buildings;
17	(K) public transportation industry experts;
18	and
19	(L) nongovernmental energy efficiency orga-
20	nizations.
21	(3) Funding.—The Secretary may make pay-
22	ments to the Consortium pursuant to the terms of a
23	public-private partnership for such activities of the
24	Consortium undertaken under such a partnership as

1	described in this subtitle directly to the Consortium or
2	through one or more of its members.
3	(g) Report.—Not later than 2 years after the date
4	of enactment of this Act, and biennially thereafter, the Com-
5	mercial Director, in consultation with the Consortium, shall
6	submit to Congress a report that—
7	(1) describes the status of the high-performance
8	green building initiatives under this subtitle and
9	other Federal programs affecting commercial high-
10	performance green buildings in effect as of the date of
11	the report, including—
12	(A) the extent to which the programs are
13	being carried out in accordance with this sub-
14	title; and
15	(B) the status of funding requests and ap-
16	propriations for those programs; and
17	(2) summarizes and highlights development, at
18	the State and local level, of high-performance green
19	building initiatives, including executive orders, poli-
20	cies, or laws adopted promoting high-performance
21	green building (including the status of implementa-
22	tion of those initiatives).
23	SEC. 422. ZERO NET ENERGY COMMERCIAL BUILDINGS INI-
24	TIATIVE.
25	(a) DEFINITIONS.—In this section:

1	(1) Consortium.—The term "consortium"
2	means a High-Performance Green Building Consor-
3	tium selected by the Commercial Director.
4	(2) Initiative.—The term "initiative" means
5	the Zero-Net-Energy Commercial Buildings Initiative
6	$established\ under\ subsection\ (b)$ (1).
7	(3) Zero-net-energy commercial build-
8	ING.—The term "zero-net-energy commercial build-
9	ing" means a high-performance commercial building
10	that is designed, constructed, and operated—
11	(A) to require a greatly reduced quantity of
12	energy to operate;
13	(B) to meet the balance of energy needs
14	from sources of energy that do not produce green-
15	house gases;
16	(C) in a manner that will result in no net
17	emissions of greenhouse gases; and
18	(D) to be economically viable.
19	(b) Establishment.—
20	(1) In General.—The Commercial Director
21	shall establish an initiative, to be known as the
22	"Zero-Net-Energy Commercial Buildings Initia-
23	tive"—

1	(A) to reduce the quantity of energy con-
2	sumed by commercial buildings located in the
3	United States; and
4	(B) to achieve the development of zero net
5	energy commercial buildings in the United
6	States.
7	(2) Consortium.—
8	(A) In general.—Not later than 180 days
9	after the date of enactment of this Act, the Com-
10	mercial Director shall competitively select, and
11	enter into an agreement with, a consortium to
12	develop and carry out the initiative.
13	(B) AGREEMENTS.—In entering into an
14	agreement with a consortium under subpara-
15	graph (A), the Commercial Director shall use the
16	authority described in section 646(g) of the De-
17	partment of Energy Organization Act (42 U.S.C.
18	7256(g)), to the maximum extent practicable.
19	(c) GOAL OF INITIATIVE.—The goal of the initiative
20	shall be to develop and disseminate technologies, practices,
21	and policies for the development and establishment of zero
22	net energy commercial buildings for—
23	(1) any commercial building newly constructed
24	in the United States by 2030:

1	(2) 50 percent of the commercial building stock
2	of the United States by 2040; and
3	(3) all commercial buildings in the United
4	States by 2050.
5	(d) Components.—In carrying out the initiative, the
6	Commercial Director, in consultation with the consortium,
7	may—
8	(1) conduct research and development on build-
9	ing science, design, materials, components, equipment
10	and controls, operation and other practices, integra-
11	tion, energy use measurement, and benchmarking;
12	(2) conduct pilot programs and demonstration
13	projects to evaluate replicable approaches to achieving
14	energy efficient commercial buildings for a variety of
15	building types in a variety of climate zones;
16	(3) conduct deployment, dissemination, and tech-
17	nical assistance activities to encourage widespread
18	adoption of technologies, practices, and policies to
19	achieve energy efficient commercial buildings;
20	(4) conduct other research, development, dem-
21	onstration, and deployment activities necessary to
22	achieve each goal of the initiative, as determined by
23	the Commercial Director, in consultation with the
24	consortium;

1	(5) develop training materials and courses for
2	building professionals and trades on achieving cost-ef-
3	fective high-performance energy efficient buildings;
4	(6) develop and disseminate public education
5	materials to share information on the benefits and
6	cost-effectiveness of high-performance energy efficient
7	buildings;
8	(7) support code-setting organizations and State
9	and local governments in developing minimum per-
10	formance standards in building codes that recognize
11	the ready availability of many technologies utilized in
12	high-performance energy efficient buildings;
13	(8) develop strategies for overcoming the split in-
14	centives between builders and purchasers, and land-
15	lords and tenants, to ensure that energy efficiency
16	and high-performance investments are made that are
17	cost-effective on a lifecycle basis; and
18	(9) develop improved means of measurement and
19	verification of energy savings and performance for
20	public dissemination.
21	(e) Cost Sharing.—In carrying out this section, the

Commercial Director shall require cost sharing in accord-

23 ance with section 988 of the Energy Policy Act of 2005 (42

24 U.S.C. 16352).

1	(f) Authorization of Appropriations.—There are
2	authorized to be appropriated to carry out this section—
3	(1) \$20,000,000 for fiscal year 2008;
4	(2) \$50,000,000 for each of fiscal years 2009 and
5	2010;
6	(3) \$100,000,000 for each of fiscal years 2011
7	and 2012; and
8	(4) \$200,000,000 for each of fiscal years 2013
9	through 2018.
10	SEC. 423. PUBLIC OUTREACH.
11	The Commercial Director and Federal Director, in co-
12	ordination with the Consortium, shall carry out public out-
13	reach to inform individuals and entities of the information
14	and services available Governmentwide by—
15	(1) establishing and maintaining a national
16	high-performance green building clearinghouse, in-
17	cluding on the internet, that—
18	(A) identifies existing similar efforts and
19	coordinates activities of common interest; and
20	(B) provides information relating to high-
21	performance green buildings, including
22	hyperlinks to internet sites that describe the ac-
23	tivities, information, and resources of—
24	(i) the Federal Government;
25	(ii) State and local governments;

1	(iii) the private sector (including non-
2	governmental and nonprofit entities and or-
3	ganizations); and
4	$(iv)\ international\ organizations;$
5	(2) identifying and recommending educational
6	resources for implementing high-performance green
7	building practices, including security and emergency
8	benefits and practices;
9	(3) providing access to technical assistance, tools,
10	and resources for constructing high-performance green
11	buildings, particularly tools to conduct life-cycle cost-
12	ing and life-cycle assessment;
13	(4) providing information on application proc-
14	esses for certifying a high-performance green building,
15	including certification and commissioning;
16	(5) providing to the public, through the Commer-
17	cial Director, technical and research information or
18	other forms of assistance or advice that would be use-
19	ful in planning and constructing high-performance
20	$green\ buildings;$
21	(6) using such additional methods as are deter-
22	mined by the Commercial Director to be appropriate
23	to conduct public outreach;
24	(7) surveying existing research and studies relat-
25	ing to high-performance green buildings; and

1	(8) coordinating activities of common interest.
2	Subtitle C—High-Performance
3	Federal Buildings
4	SEC. 431. ENERGY REDUCTION GOALS FOR FEDERAL BUILD-
5	INGS.
6	Section 543(a)(1) of the National Energy Conservation
7	Policy Act (42 U.S.C. 8253(a)(1)) is amended by striking
8	the table and inserting the following:
	"Fiscal Year Percentage reduction 2006 2 2007 4 2008 9 2009 12 2010 15 2011 18 2012 21 2013 24 2014 27 2015 30."
9	SEC. 432. MANAGEMENT OF ENERGY AND WATER EFFI-
10	CIENCY IN FEDERAL BUILDINGS.
11	Section 543 of the National Energy Conservation Pol-
12	icy Act (42 U.S.C. 8253) is amended by adding at the end
13	the following:
14	"(f) Use of Energy and Water Efficiency Meas-
15	ures in Federal Buildings.—
16	"(1) Definitions.—In this subsection:
17	"(A) Commissioning.—The term 'commis-
18	sioning', with respect to a facility, means a sys-
19	tematic process—

1	"(i) of ensuring, using appropriate
2	verification and documentation, during the
3	period beginning on the initial day of the
4	design phase of the facility and ending not
5	earlier than 1 year after the date of comple-
6	tion of construction of the facility, that all
7	facility systems perform interactively in ac-
8	cordance with—
9	"(I) the design documentation
10	and intent of the facility; and
11	"(II) the operational needs of the
12	owner of the facility, including prepa-
13	ration of operation personnel; and
14	"(ii) the primary goal of which is to
15	ensure fully functional systems that can be
16	properly operated and maintained during
17	the useful life of the facility.
18	"(B) Energy manager.—
19	"(i) In General.—The term 'energy
20	manager', with respect to a facility, means
21	the individual who is responsible for—
22	$``(I)\ ensuring\ compliance\ with$
23	this subsection by the facility; and
24	"(II) reducing energy use at the
25	facility.

1	"(ii) Inclusions.—The term 'energy
2	manager' may include—
3	"(I) a contractor of a facility;
4	"(II) a part-time employee of a
5	facility; and
6	"(III) an individual who is re-
7	sponsible for multiple facilities.
8	"(C) Facility.—
9	"(i) In general.—The term 'facility'
10	means any building, installation, structure,
11	or other property (including any applicable
12	fixtures) owned or operated by, or con-
13	structed or manufactured and leased to, the
14	Federal Government.
15	"(ii) Inclusions.—The term 'facility'
16	includes—
17	"(I) a group of facilities at a sin-
18	gle location or multiple locations man-
19	aged as an integrated operation; and
20	"(II) contractor-operated facilities
21	owned by the Federal Government.
22	"(iii) Exclusions.—The term 'facil-
23	ity' does not include any land or site for
24	which the cost of utilities is not paid by the
25	Federal Government

1	"(D) Life cycle cost-effective.—The
2	term 'life cycle cost-effective', with respect to a
3	measure, means a measure the estimated savings
4	of which exceed the estimated costs over the life-
5	span of the measure, as determined in accord-
6	ance with section 544.
7	"(E) Payback period.—
8	"(i) In general.—Subject to clause
9	(ii), the term 'payback period', with respect
10	to a measure, means a value equal to the
11	quotient obtained by dividing—
12	"(I) the estimated initial imple-
13	mentation cost of the measure (other
14	than financing costs); by
15	"(II) the annual cost savings re-
16	sulting from the measure, including—
17	"(aa) net savings in esti-
18	mated energy and water costs;
19	and
20	"(bb) operations, mainte-
21	nance, repair, replacement, and
22	$other\ direct\ costs.$
23	"(ii) Modifications and excep-
24	TIONS.—The Secretary, in guidelines issued
25	pursuant to paragraph (6), may make such

1	modifications and provide such exceptions
2	to the calculation of the payback period of
3	a measure as the Secretary determines to be
4	appropriate to achieve the purposes of this
5	Act.
6	``(F) Recommissioning.—The term 're-
7	commissioning' means a process—
8	"(i) of commissioning a facility or sys-
9	tem beyond the project development and
10	warranty phases of the facility or system;
11	and
12	"(ii) the primary goal of which is to
13	ensure optimum performance of a facility,
14	in accordance with design or current oper-
15	ating needs, over the useful life of the facil-
16	ity, while meeting building occupancy re-
17	quirements.
18	"(G) Retrocommissioning.—The term
19	'retrocommissioning' means a process of commis-
20	sioning a facility or system that was not com-
21	missioned at time of construction of the facility
22	$or\ system.$
23	"(2) Facility energy managers.—
24	"(A) In General.—Each Federal agency
25	shall designate an energy manager responsible

for implementing this subsection and reducing energy use at each facility that meets criteria under subparagraph (B).

"(B) Covered facilities.—The Secretary shall develop criteria, after consultation with affected agencies, energy efficiency advocates, and energy and utility service providers, that cover, at a minimum, Federal facilities, including central utility plants and distribution systems and other energy intensive operations, that constitute at least 75 percent of facility energy use at each agency.

"(3) Energy and water evaluations.—

"(A) EVALUATIONS.—Effective beginning on the date that is 180 days after the date of enactment of this subsection and annually thereafter, energy managers shall complete, for each calendar year, a comprehensive energy and water evaluation for approximately 25 percent of the facilities of each agency that meet the criteria under paragraph (2)(B) in a manner that ensures that an evaluation of each such facility is completed at least once every 4 years.

"(B) RECOMMISSIONING AND

RETROCOMMISSIONING.—As part of the evalua-

1	tion under subparagraph (A), the energy man-
2	ager shall identify and assess recommissioning
3	measures (or, if the facility has never been com-
4	missioned, retrocommissioning measures) for
5	each such facility.
6	"(4) Implementation of identified energy
7	and water efficiency measures.—Not later than
8	2 years after the completion of each evaluation under
9	paragraph (3), each energy manager may—
10	"(A) implement any energy- or water-sav-
11	ing measure that the Federal agency identified
12	in the evaluation conducted under paragraph (3)
13	that is life cycle cost-effective; and
14	"(B) bundle individual measures of varying
15	paybacks together into combined projects.
16	"(5) FOLLOW-UP ON IMPLEMENTED MEAS-
17	URES.—For each measure implemented under para-
18	graph (4), each energy manager shall ensure that—
19	"(A) equipment, including building and
20	equipment controls, is fully commissioned at ac-
21	ceptance to be operating at design specifications;
22	"(B) a plan for appropriate operations,
23	maintenance, and repair of the equipment is in
24	place at acceptance and is followed;

1	"(C) equipment and system performance is
2	measured during its entire life to ensure proper
3	operations, maintenance, and repair; and
4	"(D) energy and water savings are meas-
5	ured and verified.
6	"(6) Guidelines.—
7	"(A) In General.—The Secretary shall
8	issue guidelines and necessary criteria that each
9	Federal agency shall follow for implementation
10	of—
11	"(i) paragraphs (2) and (3) not later
12	than 180 days after the date of enactment
13	of this subsection; and
14	"(ii) paragraphs (4) and (5) not later
15	than 1 year after the date of enactment of
16	this subsection.
17	"(B) Relationship to funding
18	SOURCE.—The guidelines issued by the Secretary
19	under subparagraph (A) shall be appropriate
20	and uniform for measures funded with each type
21	of funding made available under paragraph
22	(10), but may distinguish between different types
23	of measures project size, and other criteria the
24	Secretary determines are relevant.
25	"(7) Web-based certification.—

1	"(A) In General.—For each facility that
2	meets the criteria established by the Secretary
3	under paragraph (2)(B), the energy manager
4	shall use the web-based tracking system under
5	subparagraph (B) to certify compliance with the
6	requirements for—
7	"(i) energy and water evaluations
8	under paragraph (3);
9	"(ii) implementation of identified en-
10	ergy and water measures under paragraph
11	(4); and
12	"(iii) follow-up on implemented meas-
13	ures under paragraph (5).
14	"(B) Deployment.—
15	"(i) In general.—Not later than 1
16	year after the date of enactment of this sub-
17	section, the Secretary shall develop and de-
18	ploy a web-based tracking system required
19	under this paragraph in a manner that
20	tracks, at a minimum—
21	"(I) the covered facilities;
22	"(II) the status of meeting the re-
23	quirements specified in subparagraph
24	(A);

1	"(III) the estimated cost and sav-
2	ings for measures required to be imple-
3	mented in a facility;
4	"(IV) the measured savings and
5	persistence of savings for implemented
6	measures; and
7	"(V) the benchmarking informa-
8	$tion\ disclosed\ under\ paragraph\ (8)(C).$
9	"(ii) Ease of compliance.—The Sec-
10	retary shall ensure that energy manager
11	compliance with the requirements in this
12	paragraph, to the maximum extent prac-
13	ticable—
14	"(I) can be accomplished with the
15	use of streamlined procedures and tem-
16	plates that minimize the time demands
17	on Federal employees; and
18	"(II) is coordinated with other
19	applicable energy reporting require-
20	ments.
21	"(C) Availability.—
22	"(i) In general.—Subject to clause
23	(ii), the Secretary shall make the web-based
24	tracking system required under this para-
25	graph available to Congress, other Federal

1	agencies, and the public through the Inter-
2	net.
3	"(ii) Exemptions.—At the request of
4	a Federal agency, the Secretary may exempt
5	specific data for specific facilities from dis-
6	closure under clause (i) for national secu-
7	rity purposes.
8	"(8) Benchmarking of federal facilities.—
9	"(A) In general.—The energy manager
10	shall enter energy use data for each metered
11	building that is (or is a part of) a facility that
12	meets the criteria established by the Secretary
13	under paragraph (2)(B) into a building energy
14	use benchmarking system, such as the Energy
15	Star Portfolio Manager.
16	"(B) System and Guidance.—Not later
17	than 1 year after the date of enactment of this
18	subsection, the Secretary shall—
19	"(i) select or develop the building en-
20	ergy use benchmarking system required
21	under this paragraph for each type of build-
22	ing; and
23	"(ii) issue guidance for use of the sys-
24	tem.

1	"(C) Public disclosure.—Each energy
2	manager shall post the information entered into,
3	or generated by, a benchmarking system under
4	this subsections, on the web-based tracking sys-
5	tem under paragraph $(7)(B)$. The energy man-
6	ager shall update such information each year,
7	and shall include in such reporting previous
8	years' information to allow changes in building
9	performance to be tracked over time.
10	"(9) Federal agency scorecards.—
11	"(A) In General.—The Director of the Of-
12	fice of Management and Budget shall issue semi-
13	annual scorecards for energy management activi-
14	ties carried out by each Federal agency that in-
15	cludes—
16	"(i) summaries of the status of imple-
17	menting the various requirements of the
18	agency and its energy managers under this
19	subsection; and
20	"(ii) any other means of measuring
21	performance that the Director considers ap-
22	propriate.
23	"(B) AVAILABILITY.—The Director shall
24	make the scorecards required under this para-

1	graph available to Congress, other Federal agen-
2	cies, and the public through the Internet.
3	"(10) Funding and implementation.—
4	"(A) AUTHORIZATION OF APPROPRIA-
5	Tions.—There are authorized to be appropriated
6	such sums as are necessary to carry out this sub-
7	section.
8	"(B) Funding options.—
9	"(i) In general.—To carry out this
10	subsection, a Federal agency may use any
11	combination of—
12	"(I) appropriated funds made
13	available under subparagraph (A); and
14	"(II) private financing otherwise
15	authorized under Federal law, includ-
16	ing financing available through energy
17	savings performance contracts or util-
18	ity energy service contracts.
19	"(ii) Combined funding for same
20	MEASURE.—A Federal agency may use any
21	combination of appropriated funds and pri-
22	vate financing described in clause (i) to
23	carry out the same measure under this sub-
24	section.

1	"(C) Implementation.—Each Federal
2	agency may implement the requirements under
3	this subsection itself or may contract out per-
4	formance of some or all of the requirements.
5	"(11) Rule of construction.—This subsection
6	shall not be construed to require or to obviate any
7	contractor savings guarantees.".
8	SEC. 433. FEDERAL BUILDING ENERGY EFFICIENCY PER-
9	FORMANCE STANDARDS.
10	(a) Standards.—Section 305(a)(3) of the Energy
11	Conservation and Production Act (42 U.S.C. 6834(a)(3))
12	is amended by adding at the end the following new subpara-
13	graph:
14	"(D) Not later than 1 year after the date of enactment
15	of the Energy Independence and Security Act of 2007, the
16	Secretary shall establish, by rule, revised Federal building
17	energy efficiency performance standards that require that:
18	"(i) For new Federal buildings and Federal
19	buildings undergoing major renovations, with respect
20	to which the Administrator of General Services is re-
21	quired to transmit a prospectus to Congress under
22	section 3307 of title 40, United States Code, in the
23	case of public buildings (as defined in section 3301 of
24	title 40, United States Code), or of at least \$2,500,000

in costs adjusted annually for inflation for other
 buildings:

"(I) The buildings shall be designed so that the fossil fuel-generated energy consumption of the buildings is reduced, as compared with such energy consumption by a similar building in fis-cal year 2003 (as measured by Commercial Buildings Energy Consumption Survey or Resi-dential Energy Consumption Survey data from the Energy Information Agency), by the percent-age specified in the following table:

"Fiscal Year	Percentage Reduction
2010	55
2015	65
2020	80
2025	90
2030	100.

"(II) Upon petition by an agency subject to this subparagraph, the Secretary may adjust the applicable numeric requirement under subclause (I) downward with respect to a specific building, if the head of the agency designing the building certifies in writing that meeting such requirement would be technically impracticable in light of the agency's specified functional needs for that building and the Secretary concurs with the agency's conclusion. This subclause shall not apply to the General Services Administration.

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"(III) Sustainable design principles shall be 2 applied to the siting, design, and construction of such buildings. Not later than 90 days after the 3 4 date of enactment of the Energy Independence 5 and Security Act of 2007, the Secretary, after re-6 viewing the findings of the Federal Director 7 under section 436(h) of that Act, in consultation 8 with the Administrator of General Services, and 9 in consultation with the Secretary of Defense for 10 considerations relating to those facilities under the custody and control of the Department of De-12 fense, shall identify a certification system and 13 level for green buildings that the Secretary deter-14 mines to be the most likely to encourage a com-15 prehensive and environmentally-sound approach 16 to certification of green buildings. The identifica-17 tion of the certification system and level shall be 18 based on a review of the Federal Director's find-19 ings under section 436(h) of the Energy Inde-20 pendence and Security Act of 2007 and the criteria specified in clause (iii), shall identify the 22 highest level the Secretary determines is appro-23 priate above the minimum level required for cer-24 tification under the system selected, and shall 25 achieve results at least comparable to the system

1	used by and highest level referenced by the Gen-
2	eral Services Administration as of the date of en-
3	actment of the Energy Independence and Secu-
4	rity Act of 2007. Within 90 days of the comple-
5	tion of each study required by clause (iv), the
6	Secretary, in consultation with the Adminis-
7	trator of General Services, and in consultation
8	with the Secretary of Defense for considerations
9	relating to those facilities under the custody and
10	control of the Department of Defense, shall re-
11	view and update the certification system and
12	level, taking into account the conclusions of such
13	study.
14	"(ii) In establishing criteria for identifying
15	major renovations that are subject to the requirements
16	of this subparagraph, the Secretary shall take into ac-
17	count the scope, degree, and types of renovations that
18	are likely to provide significant opportunities for sub-
19	stantial improvements in energy efficiency.
20	"(iii) In identifying the green building certifi-
21	cation system and level, the Secretary shall take into
22	consideration—
23	"(I) the ability and availability of assessors
24	and auditors to independently verify the criteria

1	and measurement of metrics at the scale nec-
2	essary to implement this subparagraph;
3	"(II) the ability of the applicable certifi-
4	cation organization to collect and reflect public
5	comment;
6	"(III) the ability of the standard to be de-
7	veloped and revised through a consensus-based
8	process;
9	"(IV) an evaluation of the robustness of the
10	criteria for a high-performance green building,
11	which shall give credit for promoting—
12	"(aa) efficient and sustainable use of
13	water, energy, and other natural resources;
14	"(bb) use of renewable energy sources;
15	"(cc) improved indoor environmental
16	quality through enhanced indoor air qual-
17	ity, thermal comfort, acoustics, day light-
18	ing, pollutant source control, and use of
19	low-emission materials and building system
20	controls; and
21	"(dd) such other criteria as the Sec-
22	retary determines to be appropriate; and
23	"(V) national recognition within the build-
24	$ing\ industry.$

"(iv) At least once every five years, and in accordance with section 436 of the Energy Independence and Security Act of 2007, the Administrator of General Services shall conduct a study to evaluate and compare available third-party green building certification systems and levels, taking into account the criteria listed in clause (iii).

"(v) The Secretary may by rule allow Federal agencies to develop internal certification processes, using certified professionals, in lieu of certification by the certification entity identified under clause (i)(III). The Secretary shall include in any such rule guidelines to ensure that the certification process results in buildings meeting the applicable certification system and level identified under clause (i)(III). An agency employing an internal certification process must continue to obtain external certification by the certification entity identified under clause (i)(III) for at least 5 percent of the total number of buildings certified annually by the agency.

"(vi) With respect to privatized military housing, the Secretary of Defense, after consultation with the Secretary may, through rulemaking, develop alternative criteria to those established by subclauses (I) and (III) of clause (i) that achieve an equivalent re-

- 1 sult in terms of energy savings, sustainable design,
- 2 and green building performance.
- 3 "(vii) In addition to any use of water conserva-
- 4 tion technologies otherwise required by this section,
- 5 water conservation technologies shall be applied to the
- 6 extent that the technologies are life-cycle cost-effec-
- 7 *tive.*".
- 8 (b) Definitions.—Section 303(6) of the Energy Con-
- 9 servation and Production Act (42 U.S.C. 6832(6)) is
- 10 amended by striking "which is not legally subject to State
- 11 or local building codes or similar requirements." and in-
- 12 serting ". Such term shall include buildings built for the
- 13 purpose of being leased by a Federal agency, and privatized
- 14 military housing.".
- 15 (c) Revision of Federal Acquisition Regula-
- 16 TION.—Not later than 2 years after the date of the enact-
- 17 ment of this Act, the Federal Acquisition Regulation shall
- 18 be revised to require Federal officers and employees to com-
- 19 ply with this section and the amendments made by this sec-
- 20 tion in the acquisition, construction, or major renovation
- 21 of any facility. The members of the Federal Acquisition
- 22 Regulatory Council (established under section 25 of the Of-
- 23 fice of Federal Procurement Policy Act (41 U.S.C. 421))
- 24 shall consult with the Federal Director and the Commercial

- 1 Director before promulgating regulations to carry out this
- 2 subsection.
- 3 (d) GUIDANCE.—Not later than 90 days after the date
- 4 of promulgation of the revised regulations under subsection
- 5 (c), the Administrator for Federal Procurement Policy shall
- 6 issue guidance to all Federal procurement executives pro-
- 7 viding direction and instructions to renegotiate the design
- 8 of proposed facilities and major renovations for existing fa-
- 9 cilities to incorporate improvements that are consistent
- 10 with this section.
- 11 SEC. 434. MANAGEMENT OF FEDERAL BUILDING EFFI-
- 12 *CIENCY* .
- 13 (a) Large Capital Energy Investments.—Section
- 14 543 of the National Energy Conservation Policy Act (42
- 15 U.S.C. 8253) is amended by adding at the end the following:
- 16 "(f) Large Capital Energy Investments.—
- 17 "(1) In General.—Each Federal agency shall
- 18 ensure that any large capital energy investment in an
- existing building that is not a major renovation but
- involves replacement of installed equipment (such as
- 21 heating and cooling systems), or involves renovation,
- 22 rehabilitation, expansion, or remodeling of existing
- 23 space, employs the most energy efficient designs, sys-
- 24 tems, equipment, and controls that are life-cycle cost
- 25 effective.

1	"(2) Process for review of investment de-
2	CISIONS.—Not later than 180 days after the date of
3	enactment of this subsection, each Federal agency
4	shall—
5	"(A) develop a process for reviewing each
6	decision made on a large capital energy invest-
7	ment described in paragraph (1) to ensure that
8	the requirements of this subsection are met; and
9	"(B) report to the Director of the Office of
10	Management and Budget on the process estab-
11	lished.
12	"(3) Compliance report.—Not later than 1
13	year after the date of enactment of this subsection, the
14	Director of the Office of Management and Budget
15	shall evaluate and report to Congress on the compli-
16	ance of each agency with this subsection.".
17	(b) Metering.—Section 543(e)(1) of the National En-
18	ergy Conservation Policy Act (42 U.S.C. 8253(e)(1)) is
19	amended by inserting after the second sentence the fol-
20	lowing: "Not later than October 1, 2016, each agency shall
21	provide for equivalent metering of natural gas and steam,
22	in accordance with guidelines established by the Secretary
23	under paragraph (2).".

SEC. 435. LEASING.

2	(a) In General.—Except as provided in subsection
3	(b), effective beginning on the date that is 3 years after the
4	date of enactment of this Act, no Federal agency shall enter
5	into a contract to lease space in a building that has not
6	earned the Energy Star label in the most recent year.
7	(b) Exception.—
8	(1) Application.—This subsection applies if—
9	(A) no space is available in a building de-
10	scribed in subsection (a) that meets the func-
11	tional requirements of an agency, including loca-
12	$tional\ needs;$
13	(B) the agency proposes to remain in a
14	building that the agency has occupied previously,
15	(C) the agency proposes to lease a building
16	of historical, architectural, or cultural signifi-
17	cance (as defined in section 3306(a)(4) of title
18	40, United States Code) or space in such a
19	$building;\ or$
20	(D) the lease is for not more than 10,000
21	gross square feet of space.
22	(2) Buildings without energy star
23	LABEL.—If 1 of the conditions described in paragraph
24	(2) is met, the agency may enter into a contract to
25	lease space in a building that has not earned the En-
26	ergy Star label in the most recent year if the lease

- 1 contract includes provisions requiring that, prior to 2 occupancy or, in the case of a contract described in 3 paragraph (1)(B), not later than 1 year after signing 4 the contract, the space will be renovated for all energy 5 efficiency and conservation improvements that would 6 be cost effective over the life of the lease, including im-7 provements in lighting, windows, and heating, ventilation, and air conditioning systems. 8
- 9 (c) Revision of Federal Acquisition Regula-10 tion.—
- 11 (1) In GENERAL.—Not later than 3 years after
 12 the date of the enactment of this Act, the Federal Ac13 quisition Regulation described in section 6(a) of the
 14 Office of Federal Procurement Policy Act (41 U.S.C.
 15 405(a)) shall be revised to require Federal officers and
 16 employees to comply with this section in leasing
 17 buildings.
 - (2) Consultation.—The members of the Federal Acquisition Regulatory Council established under section 25 of the Office of Federal Procurement Policy Act (41 U.S.C. 421)) shall consult with the Federal Director and the Commercial Director before promulgating regulations to carry out this subsection.

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1	SEC. 436. HIGH-PERFORMANCE GREEN FEDERAL BUILD-
2	INGS.
3	(a) Establishment of Office.—Not later than 60
4	days after the date of enactment of this Act, the Adminis-
5	trator shall establish within the General Services Adminis-
6	tration an Office of Federal High-Performance Green
7	Buildings, and appoint an individual to serve as Federal
8	Director in, a position in the career-reserved Senior Execu-
9	tive service, to—
10	(1) establish and manage the Office of Federal
11	High-Performance Green Buildings; and
12	(2) carry out other duties as required under this
13	subtitle.
14	(b) Compensation.—The compensation of the Federal
15	Director shall not exceed the maximum rate of basic pay
16	for the Senior Executive Service under section 5382 of title
17	5, United States Code, including any applicable locality-
18	based comparability payment that may be authorized under
19	section $5304(h)(2)(C)$ of that title.
20	(c) Duties.—The Federal Director shall—
21	(1) coordinate the activities of the Office of Fed-
22	eral High-Performance Green Buildings with the ac-
23	tivities of the Office of Commercial High-Performance
24	Green Buildings, and the Secretary, in accordance
25	with section $305(a)(3)(D)$ of the Energy Conservation
26	and Production Act (42 U.S.C. $6834(a)(3)(D)$);

1	(2) ensure full coordination of high-performance
2	green building information and activities within the
3	General Services Administration and all relevant
4	agencies, including, at a minimum—
5	(A) the Environmental Protection Agency;
6	(B) the Office of the Federal Environmental
7	Executive;
8	(C) the Office of Federal Procurement Pol-
9	icy;
10	(D) the Department of Energy;
11	(E) the Department of Health and Human
12	Services;
13	(F) the Department of Defense;
14	(G) the Department of Transportation;
15	(H) the National Institute of Standards
16	and Technology; and
17	(I) the Office of Science and Technology
18	Policy;
19	(3) establish a senior-level Federal Green Build-
20	ing Advisory Committee under section 474, which
21	shall provide advice and recommendations in accord-
22	ance with that section and subsection (d);
23	(4) identify and every 5 years reassess improved
24	or higher rating standards recommended by the Advi-
25	sory Committee;

1	(5) ensure full coordination, dissemination of in-
2	formation regarding, and promotion of the results of
3	research and development information relating to
4	Federal high-performance green building initiatives;
5	(6) identify and develop Federal high-perform-
6	ance green building standards for all types of Federal
7	facilities, consistent with the requirements of this sub-
8	title and section $305(a)(3)(D)$ of the Energy Con-
9	servation and Production Act (42 U.S.C.
10	6834(a)(3)(D));
11	(7) establish green practices that can be used
12	throughout the life of a Federal facility;
13	(8) review and analyze current Federal budget
14	practices and life-cycle costing issues, and make rec-
15	ommendations to Congress, in accordance with sub-
16	section (d); and
17	(9) identify opportunities to demonstrate innova-
18	tive and emerging green building technologies and
19	concepts.
20	(d) Additional Duties.—The Federal Director, in
21	consultation with the Commercial Director and the Advi-
22	sory Committee, and consistent with the requirements of
23	section 305(a)(3)(D) of the Energy Conservation and Pro-
24	duction Act (42 U.S.C. 6834(a)(3)(D)) shall—

1	(1) identify, review, and analyze current budget
2	and contracting practices that affect achievement of
3	high-performance green buildings, including the iden-
4	tification of barriers to high-performance green build-
5	ing life-cycle costing and budgetary issues;
6	(2) develop guidance and conduct training ses-
7	sions with budget specialists and contracting per-
8	sonnel from Federal agencies and budget examiners to
9	apply life-cycle cost criteria to actual projects;
10	(3) identify tools to aid life-cycle cost decision-
11	making; and
12	(4) explore the feasibility of incorporating the
13	benefits of high-performance green buildings, such as
14	security benefits, into a cost-budget analysis to aid in
15	life-cycle costing for budget and decisionmaking proc-
16	esses.
17	(e) Incentives.—Within 90 days after the date of en-
18	actment of this Act, the Federal Director shall identify in-
19	centives to encourage the expedited use of high-performance
20	green buildings and related technology in the operations of
21	the Federal Government, in accordance with the require-
22	ments of section 305(a)(3)(D) of the Energy Conservation
23	and Production Act (42 U.S.C. 6834(a)(3)(D)), including
24	through—
25	(1) the provision of recognition awards; and

1	(2) the maximum feasible retention of financial
2	savings in the annual budgets of Federal agencies for
3	use in reinvesting in future high-performance green
4	building initiatives.
5	(f) Report.—Not later than 2 years after the date of
6	enactment of this Act, and biennially thereafter, the Federal
7	Director, in consultation with the Secretary, shall submit
8	to Congress a report that—
9	(1) describes the status of compliance with this
10	subtitle, the requirements of section $305(a)(3)(D)$ of
11	the Energy Conservation and Production Act (42
12	$U.S.C.\ 6834(a)(3)(D)),\ and\ other\ Federal\ high-per-$
13	formance green building initiatives in effect as of the
14	date of the report, including—
15	(A) the extent to which the programs are
16	being carried out in accordance with this subtitle
17	and the requirements of section $305(a)(3)(D)$ of
18	that Act; and
19	(B) the status of funding requests and ap-
20	propriations for those programs;
21	(2) identifies within the planning, budgeting,
22	and construction process all types of Federal facility
23	procedures that may affect the certification of new
24	and existing Federal facilities as high-performance
25	green buildings under the provisions of section

1	305(a)(3)(D) of that Act and the criteria established
2	in subsection (h);
3	(3) identifies inconsistencies, as reported to the
4	Advisory Committee, in Federal law with respect to
5	product acquisition guidelines and high-performance
6	product guidelines;
7	(4) recommends language for uniform standards
8	for use by Federal agencies in environmentally re-
9	$sponsible\ acquisition;$
10	(5) in coordination with the Office of Manage-
11	ment and Budget, reviews the budget process for cap-
12	ital programs with respect to alternatives for—
13	(A) restructuring of budgets to require the
14	use of complete energy and environmental cost
15	accounting;
16	(B) using operations expenditures in budg-
17	et-related decisions while simultaneously incor-
18	porating productivity and health measures (as
19	those measures can be quantified by the Office of
20	Federal High-Performance Green Buildings,
21	with the assistance of universities and national
22	laboratories);
23	(C) streamlining measures for permitting
24	Federal agencies to retain all identified savings
25	accrued as a result of the use of life-cucle costina

1	for future high-performance green building ini-
2	tiatives; and
3	(D) identifying short-term and long-term
4	cost savings that accrue from high-performance
5	green buildings, including those relating to
6	health and productivity;
7	(6) identifies green, self-sustaining technologies
8	to address the operational needs of Federal facilities
9	in times of national security emergencies, natural dis-
10	asters, or other dire emergencies;
11	(7) summarizes and highlights development, at
12	the State and local level, of high-performance green
13	building initiatives, including executive orders, poli-
14	cies, or laws adopted promoting high-performance
15	green building (including the status of implementa-
16	tion of those initiatives); and
17	(8) includes, for the 2-year period covered by the
18	report, recommendations to address each of the mat-
19	ters, and a plan for implementation of each rec-
20	ommendation, described in paragraphs (1) through
21	(7).
22	(g) Implementation.—The Office of Federal High-
23	Performance Green Buildings shall carry out each plan for
24	implementation of recommendations under subsection
25	(f)(8).

1	(h) Identification of Certification System.—
2	(1) In general.—For the purpose of this sec-
3	tion, not later than 60 days after the date of enact-
4	ment of this Act, the Federal Director shall identify
5	and shall provide to the Secretary pursuant to section
6	305(a)(3)(D) of the Energy Conservation and Produc-
7	tion Act (42 U.S.C. $6834(a)(3)(D)$), a certification
8	system that the Director determines to be the most
9	likely to encourage a comprehensive and environ-
10	mentally-sound approach to certification of green
11	buildings.
12	(2) BASIS.—The system identified under para-
13	graph (1) shall be based on—
14	(A) a study completed every 5 years and
15	provided to the Secretary pursuant to section
16	305(a)(3)(D) of that Act, which shall be carried
17	out by the Federal Director to compare and
18	evaluate standards;
19	(B) the ability and availability of assessors
20	and auditors to independently verify the criteria
21	and measurement of metrics at the scale nec-
22	essary to implement this subtitle;
23	(C) the ability of the applicable standard-
24	setting organization to collect and reflect public
25	comment;

1	(D) the ability of the standard to be devel-
2	oped and revised through a consensus-based proc-
3	ess;
4	(E) an evaluation of the robustness of the
5	criteria for a high performance green building,
6	which shall give credit for promoting—
7	(i) efficient and sustainable use of
8	water, energy, and other natural resources;
9	(ii) use of renewable energy sources;
10	(iii) improved indoor environmental
11	quality through enhanced indoor air qual-
12	ity, thermal comfort, acoustics, day light-
13	ing, pollutant source control, and use of
14	low-emission materials and building system
15	controls;
16	(iv) reduced impacts from transpor-
17	tation through building location and site
18	design that promote access by public trans-
19	portation; and
20	(v) such other criteria as the Federal
21	Director determines to be appropriate; and
22	(F) national recognition within the build-
23	ing industry.

1 SEC. 437. FEDERAL GREEN BUILDING PERFORMANCE.

2	(a) In General.—Not later than October 31 of each
3	of the 2 fiscal years following the fiscal year in which this
4	Act is enacted, and at such times thereafter as the Comp-
5	troller General of the United States determines to be appro-
6	priate, the Comptroller General of the United States shall,
7	with respect to the fiscal years that have passed since the
8	preceding report—
9	(1) conduct an audit of the implementation of
10	this subtitle, section 305(a)(3)(D) of the Energy Con-
11	servation and Production Act (42 U.S.C.
12	6834(a)(3)(D)), and section 435; and
13	(2) submit to the Federal Director, the Advisory
14	Committee, the Administrator, and Congress a report
15	describing the results of the audit.
16	(b) Contents.—An audit under subsection (a) shall
17	include a review, with respect to the period covered by the
18	report under subsection (a)(2), of—
19	(1) budget, life-cycle costing, and contracting
20	issues, using best practices identified by the Comp-
21	troller General of the United States and heads of other
22	$agencies\ in\ accordance\ with\ section\ 436(d);$
23	(2) the level of coordination among the Federal
24	Director, the Office of Management and Budget, the
25	Department of Energy, and relevant agencies:

1	(3) the performance of the Federal Director and
2	other agencies in carrying out the implementation
3	plan;
4	(4) the design stage of high-performance green
5	building measures;
6	(5) high-performance building data that were
7	collected and reported to the Office; and
8	(6) such other matters as the Comptroller Gen-
9	eral of the United States determines to be appro-
10	priate.
11	(c) Environmental Stewardship Scorecard.—
12	The Federal Director shall consult with the Advisory Com-
13	mittee to enhance, and assist in the implementation of, the
14	Office of Management and Budget government efficiency re-
15	ports and scorecards under section 528 and the Environ-
16	mental Stewardship Scorecard announced at the White
17	House summit on Federal sustainable buildings in January
18	2006, to measure the implementation by each Federal agen-
19	cy of sustainable design and green building initiatives.
20	SEC. 438. STORM WATER RUNOFF REQUIREMENTS FOR FED-
21	ERAL DEVELOPMENT PROJECTS.
22	The sponsor of any development or redevelopment
23	project involving a Federal facility with a footprint that
24	exceeds 5,000 square feet shall use site planning, design,
25	construction, and maintenance strategies for the property

1	to maintain or restore, to the maximum extent technically
2	feasible, the predevelopment hydrology of the property with
3	regard to the temperature, rate, volume, and duration of
4	flow.
5	SEC. 439. COST-EFFECTIVE TECHNOLOGY ACCELERATION
6	PROGRAM.
7	(a) Definition of Administrator.—In this section,
8	the term "Administrator" means the Administrator of Gen-
9	eral Services.
10	(b) Establishment.—
11	(1) In general.—The Administrator shall es-
12	tablish a program to accelerate the use of more cost-
13	effective technologies and practices at GSA facilities.
14	(2) Requirements.—The program established
15	under this subsection shall—
16	(A) ensure centralized responsibility for the
17	coordination of cost reduction-related rec-
18	ommendations, practices, and activities of all
19	relevant Federal agencies;
20	(B) provide technical assistance and oper-
21	ational guidance to applicable tenants to achieve
22	the goal identified in subsection $(c)(2)(B)(ii)$;
23	(C) establish methods to track the success of
24	Federal departments and agencies with respect to
25	that goal; and

1	(D) be fully coordinated with and no less
2	stringent nor less energy-conserving or water-
3	conserving than required by other provisions of
4	this Act and other applicable law, including sec-
5	tions 321 through 324, 431 through 438, 461,
6	511 through 518, and 523 through 525 and
7	amendments made by those sections.
8	(c) Accelerated Use of Technologies.—
9	(1) Review.—
10	(A) In general.—As part of the program
11	under this section, not later than 90 days after
12	the date of enactment of this Act, the Adminis-
13	trator shall conduct a review of—
14	(i) current use of cost-effective lighting
15	technologies and geothermal heat pumps in
16	GSA facilities; and
17	(ii) the availability to managers of
18	GSA facilities of cost-effective lighting tech-
19	nologies and geothermal heat pumps.
20	(B) Requirements.—The review under
21	subparagraph (A) shall—
22	(i) examine the use of cost-effective
23	lighting technologies, geothermal heat
24	pumps, and other cost-effective technologies

1 and practices by Federal agencies in GSA 2 facilities; and

> (ii) as prepared in consultation with the Administrator of the Environmental Protection Agency, identify cost-effective lighting technology and geothermal heat pump technology standards that could be used for all types of GSA facilities.

(2) Replacement.—

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(A) In general.—As part of the program under this section, not later than 180 days after the date of enactment of this Act, the Administrator shall establish, using available appropriations and programs implementing sections 432 and 525 (and amendments made by those sections), a cost-effective lighting technology and geothermal heat pump technology acceleration program to achieve maximum feasible replacement of existing lighting, heating, cooling technologies with cost-effective lighting technologies and geothermal heat pump technologies in each GSA facility. Such program shall fully comply with the requirements of sections 321 through 324, 431 through 438, 461, 511 through 518, and 523 through 525 and amendments made by those sections and any other provisions of law, which shall be applicable to the extent that they are more stringent or would achieve greater energy savings than required by this section.

(B) Acceleration plan timetable.—

(i) In GENERAL.—To implement the program established under subparagraph (A), not later than 1 year after the date of enactment of this Act, the Administrator shall establish a timetable of actions to comply with the requirements of this section and sections 431 through 435, whichever achieves greater energy savings most expeditiously, including milestones for specific activities needed to replace existing lighting, heating, cooling technologies with cost-effective lighting technologies and geothermal heat pump technologies, to the maximum extent feasible (including at the maximum rate feasible), at each GSA facility.

(ii) GOAL.—The goal of the timetable under clause (i) shall be to complete, using available appropriations and programs implementing sections 431 through 435 (and amendments made by those sections), max-

I	imum feasible replacement of existing light-
2	ing, heating, and cooling technologies with
3	cost-effective lighting technologies and geo-
4	thermal heat pump technologies consistent
5	with the requirements of this section and
6	sections 431 through 435, whichever
7	achieves greater energy savings most expedi-
8	tiously. Notwithstanding any provision of
9	this section, such program shall fully com-
10	ply with the requirements of the Act includ-
11	ing sections 321 through 324, 431 through
12	438, 461, 511 through 518, and 523 through
13	525 and amendments made by those sec-
14	tions and other provisions of law, which
15	shall be applicable to the extent that they
16	are more stringent or would achieve greater
17	energy or water savings than required by
18	this section.
19	(d) GSA FACILITY TECHNOLOGIES AND PRACTICES.—
20	(1) In general.—Not later than 180 days after
21	the date of enactment of this Act, and annually there-
22	after, the Administrator shall—
23	(A) ensure that a manager responsible for
24	implementing section 432 and for accelerating

1	the use of cost-effective technologies and practices
2	is designated for each GSA facility; and
3	(B) submit to Congress a plan to comply
4	with section 432, this section, and other applica-
5	ble provisions of this Act and applicable law
6	with respect to energy and water conservation at
7	$GSA\ facilities.$
8	(2) Measures.—The plan shall implement
9	measures required by such other provisions of law in
10	accordance with those provisions, and shall imple-
11	ment the measures required by this section to the
12	maximum extent feasible (including at the maximum
13	rate feasible) using available appropriations and pro-
14	grams implementing sections 431 through 435 and
15	525 (and amendments made by those sections), by not
16	later than the date that is 5 years after the date of
17	enactment of this Act.
18	(3) Contents of Plan.—The plan shall—
19	(A) with respect to cost-effective technologies
20	and practices—
21	(i) identify the specific activities need-
22	ed to comply with sections 431 through 435;
23	(ii) identify the specific activities need-
24	ed to achieve at least a 20-percent reduction
25	in operational costs through the application

1	of cost-effective technologies and practices
2	from 2003 levels at GSA facilities by not
3	later than 5 years after the date of enact-
4	ment of this Act;
5	(iii) describe activities required and
6	carried out to estimate the funds necessary
7	to achieve the reduction described in clauses
8	(i) and (ii);
9	(B) include an estimate of the funds nec-
10	essary to carry out this section;
11	(C) describe the status of the implementa-
12	tion of cost-effective technologies and practices at
13	GSA facilities, including—
14	(i) the extent to which programs, in-
15	cluding the program established under sub-
16	section (b), are being carried out in accord-
17	ance with this subtitle; and
18	(ii) the status of funding requests and
19	appropriations for those programs;
20	(D) identify within the planning, budg-
21	eting, and construction processes, all types of
22	GSA facility-related procedures that inhibit new
23	and existing GSA facilities from implementing
24	$cost\-effective\ technologies;$

1	(E) recommend language for uniform stand-
2	ards for use by Federal agencies in imple-
3	menting cost-effective technologies and practices;
4	(F) in coordination with the Office of Man-
5	agement and Budget, review the budget process
6	for capital programs with respect to alternatives
7	for—
8	(i) implementing measures that will
9	assure that Federal agencies retain all iden-
10	tified savings accrued as a result of the use
11	of cost-effective technologies, consistent with
12	section $543(a)(1)$ of the National Energy
13	Conservation Policy Act (42 U.S.C.
14	8253(a)(1), and other applicable law; and
15	(ii) identifying short- and long-term
16	cost savings that accrue from the use of cost-
17	effective technologies and practices;
18	(G) with respect to cost-effective technologies
19	and practices, achieve substantial operational
20	cost savings through the application of the tech-
21	nologies; and
22	(H) include recommendations to address
23	each of the matters, and a plan for implementa-
24	tion of each recommendation, described in sub-
25	paragraphs (A) through (G).

- 1 Administration.—Notwithstanding (4)2 provision of this section, the program required under 3 this section shall fully comply with the requirements 4 of sections 321 through 324, 431 through 438, 461, 5 511 through 518, and 523 through 525 and amend-6 ments made by those sections, which shall be applica-7 ble to the extent that they are more stringent or would 8 achieve greater energy or water savings than required 9 by this section.
- 10 (e) AUTHORIZATION OF APPROPRIATIONS.—There are 11 authorized to be appropriated such sums as are necessary
- 12 to carry out this section, to remain available until ex-
- 13 pended.
- 14 SEC. 440. AUTHORIZATION OF APPROPRIATIONS.
- There is authorized to be appropriated to carry out
- 16 sections 434 through 439 and 482 \$4,000,000 for each of
- 17 fiscal years 2008 through 2012, to remain available until
- 18 expended.
- 19 SEC. 441. PUBLIC BUILDING LIFE-CYCLE COSTS.
- 20 Section 544(a)(1) of the National Energy Conservation
- 21 Policy Act (42 U.S.C. 8254(a)(1)) is amended by striking
- 22 "25" and inserting "40".

1	Subtitle D—Industrial Energy
2	<i>Efficiency</i>
3	SEC. 451. INDUSTRIAL ENERGY EFFICIENCY.
4	(a) In General.—Title III of the Energy Policy and
5	Conservation Act (42 U.S.C. 6291 et seq.) is amended by
6	inserting after part D the following:
7	"PART E—INDUSTRIAL ENERGY EFFICIENCY
8	"SEC. 371. DEFINITIONS.
9	"In this part:
10	"(1) Administrator.—The term 'Adminis-
11	trator' means the Administrator of the Environ-
12	mental Protection Agency.
13	"(2) Combined Heat and Power.—The term
14	'combined heat and power system' means a facility
15	that—
16	"(A) simultaneously and efficiently pro-
17	duces useful thermal energy and electricity; and
18	"(B) recovers not less than 60 percent of the
19	energy value in the fuel (on a higher-heating-
20	value basis) in the form of useful thermal energy
21	and electricity.
22	"(3) Net excess power.—The term 'net excess
23	power' means, for any facility, recoverable waste en-
24	ergy recovered in the form of electricity in quantities
25	exceeding the total consumption of electricity at the

1	specific time of generation on the site at which the fa-
2	cility is located.
3	"(4) Project.—The term 'project' means a re-
4	coverable waste energy project or a combined heat and
5	power system project.
6	"(5) Recoverable waste energy.—The term
7	'recoverable waste energy' means waste energy from
8	which electricity or useful thermal energy may be re-
9	covered through modification of an existing facility or
10	addition of a new facility.
11	"(6) REGISTRY.—The term 'Registry' means the
12	Registry of Recoverable Waste Energy Sources estab-
13	lished under section $372(d)$.
14	"(7) USEFUL THERMAL ENERGY.—The term
15	'useful thermal energy' means energy—
16	"(A) in the form of direct heat, steam, hot
17	water, or other thermal form that is used in pro-
18	duction and beneficial measures for heating,
19	cooling, humidity control, process use, or other
20	valid thermal end-use energy requirements; and
21	"(B) for which fuel or electricity would oth-
22	erwise be consumed.
23	"(8) Waste energy.—The term 'waste energy'
24	means—

1	"(A) exhaust heat or flared gas from any
2	$in dustrial\ process;$
3	"(B) waste gas or industrial tail gas that
4	would otherwise be flared, incinerated, or vented;
5	"(C) a pressure drop in any gas, excluding
6	any pressure drop to a condenser that subse-
7	quently vents the resulting heat; and
8	"(D) such other forms of waste energy as the
9	Administrator may determine.
10	"(9) Other terms.—The terms 'electric utility',
11	'nonregulated electric utility', 'State regulated electric
12	utility', and other terms have the meanings given
13	those terms in title I of the Public Utility Regulatory
14	Policies Act of 1978 (16 U.S.C. 2611 et seq.).
15	"SEC. 372. SURVEY AND REGISTRY.
16	"(a) Recoverable Waste Energy Inventory Pro-
17	GRAM.—
18	"(1) In General.—The Administrator, in co-
19	operation with the Secretary and State energy offices,
20	shall establish a recoverable waste energy inventory
21	program.
22	"(2) Survey.—The program shall include—
23	"(A) an ongoing survey of all major indus-
24	trial and large commercial combustion sources
25	in the United States (as defined by the Adminis-

1	trator) and the sites at which the sources are lo-
2	cated; and
3	"(B) a review of each source for the quan-
4	tity and quality of waste energy produced at the
5	source.
6	"(b) Criteria.—
7	"(1) In general.—Not later than 270 days
8	after the date of enactment of the Energy Independ-
9	ence and Security Act of 2007, the Administrator
10	shall publish a rule for establishing criteria for in-
11	cluding sites in the Registry.
12	"(2) Inclusions.—The criteria shall include—
13	"(A) a requirement that, to be included in
14	the Registry, a project at the site shall be deter-
15	mined to be economically feasible by virtue of of-
16	fering a payback of invested costs not later than
17	5 years after the date of first full project oper-
18	ation (including incentives offered under this
19	part);
20	"(B) standards to ensure that projects pro-
21	posed for inclusion in the Registry are not devel-
22	oped or used for the primary purpose of making
23	sales of excess electric power under the regulatory
24	provisions of this part; and

1	"(C) procedures for contesting the listing of
2	any source or site on the Registry by any State,
3	utility, or other interested person.
4	"(c) Technical Support.—On the request of the
5	owner or operator of a source or site included in the Reg-
6	istry, the Secretary shall—
7	"(1) provide to owners or operators of combus-
8	tion sources technical support; and
9	"(2) offer partial funding (in an amount equal
10	to not more than ½ of total costs) for feasibility stud-
11	ies to confirm whether or not investment in recovery
12	of waste energy or combined heat and power at a
13	source would offer a payback period of 5 years or less.
14	"(d) Registry.—
15	"(1) Establishment.—
16	"(A) In general.—Not later than 1 year
17	after the date of enactment of the Energy Inde-
18	pendence and Security Act of 2007, the Adminis-
19	trator shall establish a Registry of Recoverable
20	Waste Energy Sources, and sites on which the
21	sources are located, that meet the criteria estab-
22	lished under subsection (b).
23	"(B) UPDATES; AVAILABILITY.—The Ad-
24	ministrator shall—

1	"(i) update the Registry on a regular
2	basis; and
3	"(ii) make the Registry available to the
4	public on the website of the Environmental
5	Protection Agency.
6	"(C) Contesting listing.—Any State,
7	electric utility, or other interested person may
8	contest the listing of any source or site by sub-
9	mitting a petition to the Administrator.
10	"(2) Contents.—
11	"(A) In General.—The Administrator
12	shall register and include on the Registry all
13	sites meeting the criteria established under sub-
14	section (b).
15	"(B) Quantity of recoverable waste
16	Energy.—The Administrator shall—
17	"(i) calculate the total quantities of po-
18	tentially recoverable waste energy from
19	sources at the sites, nationally and by
20	State; and
21	"(ii) make public—
22	"(I) the total quantities described
23	in clause (i); and
24	"(II) information on the criteria
25	pollutant and greenhouse gas emissions

1	savings that might be achieved with re-
2	covery of the waste energy from all
3	sources and sites listed on the Registry.
4	"(3) Availability of information.—
5	"(A) In General.—The Administrator
6	shall notify owners or operators of recoverable
7	waste energy sources and sites listed on the Reg-
8	istry prior to publishing the listing.
9	"(B) Detailed quantitative informa-
10	TION.—
11	"(i) In general.—Except as provided
12	in clause (ii), the owner or operator of a
13	source at a site may elect to have detailed
14	quantitative information concerning the site
15	not made public by notifying the Adminis-
16	trator of the election.
17	"(ii) Limited availability.—The in-
18	formation shall be made available to—
19	"(I) the applicable State energy
20	office; and
21	"(II) any utility requested to sup-
22	port recovery of waste energy from the
23	source pursuant to the incentives pro-
24	vided under section 374.

1	"(iii) State totals.—Information
2	concerning the site shall be included in the
3	total quantity of recoverable waste energy
4	for a State unless there are fewer than 3
5	sites in the State.
6	"(4) Removal of projects from registry.—
7	"(A) In General.—Subject to subpara-
8	graph (B), as a project achieves successful recov-
9	ery of waste energy, the Administrator shall—
10	"(i) remove the related sites or sources
11	from the Registry; and
12	"(ii) designate the removed projects as
13	eligible for incentives under section 374.
14	"(B) Limitation.—No project shall be re-
15	moved from the Registry without the consent of
16	the owner or operator of the project if—
17	"(i) the owner or operator has sub-
18	mitted a petition under section 374; and
19	"(ii) the petition has not been acted on
20	$or\ denied.$
21	"(5) Ineligibility of certain sources.—The
22	Administrator shall not list any source constructed
23	after the date of the enactment of the Energy Inde-
24	pendence and Security Act of 2007 on the Registry if
25	the Administrator determines that the source—

1	"(A) was developed for the primary purpose
2	of making sales of excess electric power under the
3	regulatory provisions of this part; or
4	"(B) does not capture at least 60 percent of
5	the total energy value of the fuels used (on a
6	higher-heating-value basis) in the form of useful
7	thermal energy, electricity, mechanical energy,
8	chemical output, or any combination thereof.
9	"(e) Self-Certification.—
10	"(1) In general.—Subject to any procedures
11	that are established by the Administrator, an owner,
12	operator, or third-party developer of a recoverable
13	waste energy project that qualifies under standards
14	established by the Administrator may self-certify the
15	sites or sources of the owner, operator, or developer to
16	the Administrator for inclusion in the Registry.
17	"(2) Review and approval.—To prevent a
18	fraudulent listing, a site or source shall be included
19	on the Registry only if the Administrator reviews and
20	approves the self-certification.
21	"(f) New Facilities.—As a new energy-consuming
22	industrial facility is developed after the date of enactment
23	of the Energy Independence and Security Act of 2007, to
24	the extent the facility may constitute a site with recoverable
25	waste energy that may qualify for inclusion on the Reg-

1	istry, the Administrator may elect to include the facility
2	on the Registry, at the request of the owner, operator, or
3	developer of the facility, on a conditional basis with the
4	site to be removed from the Registry if the development
5	ceases or the site fails to qualify for listing under this part
6	"(g) Optimum Means of Recovery.—For each site
7	listed in the Registry, at the request of the owner or operator
8	of the site, the Administrator shall offer, in cooperation with
9	Clean Energy Application Centers operated by the Sec-
10	retary of Energy, suggestions for optimum means of recov-
11	ery of value from waste energy stream in the form of elec-
12	tricity, useful thermal energy, or other energy-related prod
13	ucts.
14	"(h) Revision.—Each annual report of a State under
15	section 548(a) of the National Energy Conservation Policy
16	Act (42 U.S.C. 8258(a)) shall include the results of the sur-
17	vey for the State under this section.
18	"(i) Authorization of Appropriations.—There are
19	authorized to be appropriated to—
20	"(1) the Administrator to create and maintain
21	the Registry and services authorized by this section
22	\$1,000,000 for each of fiscal years 2008 through 2012

24 "(2) the Secretary—

and

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1	"(A) to assist site or source owners and op-
2	erators in determining the feasibility of projects
3	authorized by this section, \$2,000,000 for each of
4	fiscal years 2008 through 2012; and
5	"(B) to provide funding for State energy of-
6	fice functions under this section, \$5,000,000.
7	"SEC. 373. WASTE ENERGY RECOVERY INCENTIVE GRANT
8	PROGRAM.
9	"(a) Establishment.—The Secretary shall establish
10	in the Department of Energy a waste energy recovery incen-
11	tive grant program to provide incentive grants to—
12	"(1) owners and operators of projects that suc-
13	cessfully produce electricity or incremental useful
14	thermal energy from waste energy recovery;
15	"(2) utilities purchasing or distributing the elec-
16	tricity; and
17	"(3) States that have achieved 80 percent or
18	more of recoverable waste heat recovery opportunities.
19	"(b) Grants to Projects and Utilities.—
20	"(1) In General.—The Secretary shall make
21	grants under this section—
22	"(A) to the owners or operators of waste en-
23	ergy recovery projects; and
24	"(B) in the case of excess power purchased
25	or transmitted by a electric utility, to the utility.

1 "(2) Proof.—Grants may only be made under 2 this section on receipt of proof of waste energy recov-3 ery or excess electricity generation, or both, from the 4 project in a form prescribed by the Secretary.

"(3) Excess electric energy.—

"(A) In General.—In the case of waste energy recovery, a grant under this section shall be made at the rate of \$10 per megawatt hour of documented electricity produced from recoverable waste energy (or by prevention of waste energy in the case of a new facility) by the project during the first 3 calendar years of production, beginning on or after the date of enactment of the Energy Independence and Security Act of 2007.

"(B) UTILITIES.—If the project produces net excess power and an electric utility purchases or transmits the excess power, 50 percent of so much of the grant as is attributable to the net excess power shall be paid to the electric utility purchasing or transporting the net excess power.

"(4) USEFUL THERMAL ENERGY.—In the case of waste energy recovery that produces useful thermal energy that is used for a purpose different from that for which the project is principally designed, a grant

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1	under this section shall be made to the owner or oper-
2	ator of the waste energy recovery project at the rate
3	of \$10 for each 3,412,000 Btus of the excess thermal
4	energy used for the different purpose.
5	"(c) Grants to States.—In the case of any State
6	that has achieved 80 percent or more of waste heat recovery
7	opportunities identified by the Secretary under this part,
8	the Administrator shall make a 1-time grant to the State
9	in an amount of not more than \$1,000 per megawatt of
10	waste-heat capacity recovered (or a thermal equivalent) to
11	support State-level programs to identify and achieve addi-
12	tional energy efficiency.
13	"(d) Eligibility.—The Secretary shall—
14	"(1) establish rules and guidelines to establish
15	eligibility for grants under subsection (b);
16	"(2) publicize the availability of the grant pro-
17	gram known to owners or operators of recoverable
18	waste energy sources and sites listed on the Registry,
19	and
20	"(3) award grants under the program on the
21	basis of the merits of each project in recovering or
22	preventing waste energy throughout the United States
23	on an impartial, objective, and not unduly discrimi-
24	natoru basis.

1	"(e) Limitation.—The Secretary shall not award
2	grants to any person for a combined heat and power project
3	or a waste heat recovery project that qualifies for specific
4	Federal tax incentives for combined heat and power or for
5	waste heat recovery.
6	"(f) Authorization of Appropriations.—There are
7	authorized to be appropriated to the Secretary—
8	"(1) to make grants to projects and utilities
9	under subsection (b)—
10	"(A) \$100,000,000 for fiscal year 2008 and
11	\$200,000,000 for each of fiscal years 2009
12	through 2012; and
13	"(B) such additional amounts for fiscal
14	year 2008 and each fiscal year thereafter as may
15	be necessary for administration of the waste en-
16	ergy recovery incentive grant program; and
17	"(2) to make grants to States under subsection
18	(b), \$10,000,000 for each of fiscal years 2008 through
19	2012, to remain available until expended.
20	"SEC. 374. ADDITIONAL INCENTIVES FOR RECOVERY, USE,
21	AND PREVENTION OF INDUSTRIAL WASTE EN-
22	ERGY.
23	"(a) Consideration of Standard.—
24	"(1) In general.—Not later than 180 days
25	after the receipt by a State regulatory authority (with

1	respect to each electric utility for which the authority
2	has ratemaking authority), or nonregulated electric
3	utility, of a request from a project sponsor or owner
4	or operator, the State regulatory authority or non-
5	regulated electric utility shall—
6	"(A) provide public notice and conduct a
7	hearing respecting the standard established by
8	subsection (b); and
9	"(B) on the basis of the hearing, consider
10	and make a determination whether or not it is
11	appropriate to implement the standard to carry
12	out the purposes of this part.
13	"(2) Relationship to state law.—For pur-
14	poses of any determination under paragraph (1) and
15	any review of the determination in any court, the
16	purposes of this section supplement otherwise applica-
17	ble State law.
18	"(3) Nonadoption of Standard.—Nothing in
19	this part prohibits any State regulatory authority or
20	nonregulated electric utility from making any deter-
21	mination that it is not appropriate to adopt any
22	standard described in paragraph (1), pursuant to au-
23	thority under otherwise applicable State law.
24	"(b) Standard for Sales of Excess Power.—For
25	purposes of this section, the standard referred to in sub-

- 1 section (a) shall provide that an owner or operator of a
- 2 waste energy recovery project identified on the Registry that
- 3 generates net excess power shall be eligible to benefit from
- 4 at least 1 of the options described in subsection (c) for dis-
- 5 posal of the net excess power in accordance with the rate
- 6 conditions and limitations described in subsection (d).
- 7 "(c) Options.—The options referred to in subsection
- 8 *(b)* are as follows:
- 9 "(1) Sale of Net excess power to utility.—
- 10 The electric utility shall purchase the net excess power
- 11 from the owner or operator of the eligible waste en-
- 12 ergy recovery project during the operation of the
- 13 project under a contract entered into for that purpose.
- 14 "(2) Transport by utility for direct sale
- 15 TO THIRD PARTY.—The electric utility shall transmit
- the net excess power on behalf of the project owner or
- operator to up to 3 separate locations on the system
- of the utility for direct sale by the owner or operator
- 19 to third parties at those locations.
- 20 "(3) Transport over private transmission
- 21 LINES.—The State and the electric utility shall per-
- 22 mit, and shall waive or modify such laws as would
- otherwise prohibit, the construction and operation of
- private electric wires constructed, owned, and oper-
- 25 ated by the project owner or operator, to transport the

1	power to up to 3 purchasers within a 3-mile radius
2	of the project, allowing the wires to use or cross public
3	rights-of-way, without subjecting the project to regula-
4	tion as a public utility, and according the wires the
5	same treatment for safety, zoning, land use, and other
6	legal privileges as apply or would apply to the wires
7	of the utility, except that—
8	"(A) there shall be no grant of any power
9	of eminent domain to take or cross private prop-
10	erty for the wires; and
11	"(B) the wires shall be physically segregated
12	and not interconnected with any portion of the
13	system of the utility, except on the customer side
14	of the revenue meter of the utility and in a man-
15	ner that precludes any possible export of the elec-
16	tricity onto the utility system, or disruption of
17	the system.
18	"(4) AGREED ON ALTERNATIVES.—The utility
19	and the owner or operator of the project may reach
20	agreement on any alternate arrangement and pay-
21	ments or rates associated with the arrangement that
22	is mutually satisfactory and in accord with State
23	law.
24	"(d) Rate Conditions and Criteria.—
25	"(1) DEFINITIONS —In this subsection.

1	"(A) Per unit distribution costs.—The
2	term 'per unit distribution costs' means (in kilo-
3	watt hours) the quotient obtained by dividing—
4	"(i) the depreciated book-value dis-
5	tribution system costs of a utility; by
6	"(ii) the volume of utility electricity
7	sales or transmission during the previous
8	year at the distribution level.
9	"(B) PER UNIT DISTRIBUTION MARGIN.—
10	The term 'per unit distribution margin'
11	means—
12	"(i) in the case of a State-regulated
13	electric utility, a per-unit gross pretax prof-
14	it equal to the product obtained by multi-
15	plying—
16	"(I) the State-approved percentage
17	rate of return for the utility for dis-
18	tribution system assets; by
19	"(II) the per unit distribution
20	costs; and
21	"(ii) in the case of a nonregulated util-
22	ity, a per unit contribution to net revenues
23	determined multiplying—

1	"(I) the percentage (but not less
2	than 10 percent) obtained by divid-
3	ing—
4	"(aa) the amount of any net
5	revenue payment or contribution
6	to the owners or subscribers of the
7	nonregulated utility during the
8	prior year; by
9	"(bb) the gross revenues of
10	the utility during the prior year
11	to obtain a percentage; by
12	"(II) the per unit distribution
13	costs.
14	"(C) Per unit transmission costs.—The
15	term 'per unit transmission costs' means the
16	total cost of those transmission services pur-
17	chased or provided by a utility on a per-kilo-
18	watt-hour basis as included in the retail rate of
19	$the\ utility.$
20	"(2) Options.—The options described in para-
21	graphs (1) and (2) in subsection (c) shall be offered
22	under purchase and transport rate conditions that re-
23	flect the rate components defined under paragraph (1)
24	as applicable under the circumstances described in
25	paragraph (3).

1	"(3) Applicable rates.—
2	"(A) Rates applicable to sale of net
3	EXCESS POWER.—
4	"(i) In general.—Sales made by a
5	project owner or operator of a facility under
6	the option described in subsection $(c)(1)$
7	shall be paid for on a per kilowatt hour
8	basis that shall equal the full undiscounted
9	retail rate paid to the utility for power pur-
10	chased by the facility minus per unit dis-
11	tribution costs, that applies to the type of
12	utility purchasing the power.
13	"(ii) Voltages exceeding 25 kilo-
14	VOLTS.—If the net excess power is made
15	available for purchase at voltages that must
16	be transformed to or from voltages exceeding
17	25 kilovolts to be available for resale by the
18	utility, the purchase price shall further be
19	reduced by per unit transmission costs.
20	"(B) Rates applicable to transport by
21	UTILITY FOR DIRECT SALE TO THIRD PARTIES.—
22	"(i) In General.—Transportation by
23	utilities of power on behalf of the owner or
24	operator of a project under the option de-
25	scribed in subsection (c)(2) shall incur a

1	transportation rate that shall equal the per
2	unit distribution costs and per unit dis-
3	tribution margin, that applies to the type of
4	utility transporting the power.
5	"(ii) Voltages exceeding 25 kilo-
6	VOLTS.—If the net excess power is made
7	available for transportation at voltages that
8	must be transformed to or from voltages ex-
9	ceeding 25 kilovolts to be transported to the
10	designated third-party purchasers, the
11	transport rate shall further be increased by
12	per unit transmission costs.
13	"(iii) States with competitive re-
14	tail markets for electricity.—In a
15	State with a competitive retail market for
16	electricity, the applicable transportation
17	rate for similar transportation shall be ap-
18	plied in lieu of any rate calculated under
19	this paragraph.
20	"(4) Limitations.—
21	"(A) In general.—Any rate established for
22	sale or transportation under this section shall—
23	"(i) be modified over time with
24	changes in the underlying costs or rates of
25	the electric utility; and

1	"(ii) reflect the same time-sensitivity
2	and billing periods as are established in the
3	retail sales or transportation rates offered
4	by the utility.
5	"(B) Limitation.—No utility shall be re-
6	quired to purchase or transport a quantity of net
7	excess power under this section that exceeds the
8	available capacity of the wires, meter, or other
9	equipment of the electric utility serving the site
10	unless the owner or operator of the project agrees
11	to pay necessary and reasonable upgrade costs.
12	"(e) Procedural Requirements for Consider-
13	ATION AND DETERMINATION.—
14	"(1) Public notice and hearing.—
15	"(A) In General.—The consideration re-
16	ferred to in subsection (a) shall be made after
17	public notice and hearing.
18	"(B) Administration.—The determination
19	referred to in subsection (a) shall be—
20	"(i) in writing;
21	"(ii) based on findings included in the
22	determination and on the evidence presented
23	at the hearing; and
24	"(iii) available to the public.

1	"(2) Intervention by administrator.—The
2	Administrator may intervene as a matter of right in
3	a proceeding conducted under this section—
4	"(A) to calculate—
5	"(i) the energy and emissions likely to
6	be saved by electing to adopt 1 or more of
7	the options; and
8	"(ii) the costs and benefits to rate-
9	payers and the utility; and
10	"(B) to advocate for the waste-energy recov-
11	ery opportunity.
12	"(3) Procedures.—
13	"(A) In General.—Except as otherwise
14	provided in paragraphs (1) and (2), the proce-
15	dures for the consideration and determination
16	referred to in subsection (a) shall be the proce-
17	dures established by the State regulatory author-
18	ity or the nonregulated electric utility.
19	"(B) MULTIPLE PROJECTS.—If there is
20	more than 1 project seeking consideration simul-
21	taneously in connection with the same utility,
22	the proceeding may encompass all such projects,
23	if full attention is paid to individual cir-
24	cumstances and merits and an individual judg-
25	ment is reached with respect to each project.

1	"(f) Implementation.—
2	"(1) In general.—The State regulatory author-
3	ity (with respect to each electric utility for which the
4	authority has ratemaking authority) or nonregulated
5	electric utility may, to the extent consistent with oth-
6	erwise applicable State law—
7	"(A) implement the standard determined
8	under this section; or
9	"(B) decline to implement any such stand-
10	ard.
11	"(2) Nonimplementation of standard.—
12	"(A) In General.—If a State regulatory
13	authority (with respect to each electric utility for
14	which the authority has ratemaking authority)
15	or nonregulated electric utility declines to imple-
16	ment any standard established by this section,
17	the authority or nonregulated electric utility
18	shall state in writing the reasons for declining to
19	implement the standard.
20	"(B) Availability to public.—The state-
21	ment of reasons shall be available to the public.
22	"(C) Annual Report.—The Administrator
23	shall include in an annual report submitted to
24	Congress a description of the lost opportunities
25	for waste-heat recovery from the project described

1	in subparagraph (A), specifically identifying the
2	utility and stating the quantity of lost energy
3	and emissions savings calculated.
4	"(D) New Petition.—If a State regulatory
5	authority (with respect to each electric utility for
6	which the authority has ratemaking authority,
7	or nonregulated electric utility declines to imple
8	ment the standard established by this section, the
9	project sponsor may submit a new petition
10	under this section with respect to the project a
11	any time after the date that is 2 years after the
12	date on which the State regulatory authority or
13	nonregulated utility declined to implement the
14	standard.
15	"SEC. 375. CLEAN ENERGY APPLICATION CENTERS.
16	"(a) Renaming.—
17	"(1) In General.—The Combined Heat and
18	Power Application Centers of the Department of En
19	ergy are redesignated as Clean Energy Application
20	Centers.
21	"(2) References.—Any reference in any law
22	rule, regulation, or publication to a Combined Hea
23	and Power Application Center shall be treated as a
24	reference to a Clean Energy Application Center.
25	"(b) Relocation.—

1	"(1) In general.—In order to better coordinate
2	efforts with the separate Industrial Assessment Cen-
3	ters and to ensure that the energy efficiency and,
4	when applicable, the renewable nature of deploying
5	mature clean energy technology is fully accounted for,
6	the Secretary shall relocate the administration of the
7	Clean Energy Application Centers to the Office of En-
8	ergy Efficiency and Renewable Energy within the De-
9	partment of Energy.
10	"(2) Office of electricity delivery and en-
11	ERGY RELIABILITY.—The Office of Electricity Deliv-
12	ery and Energy Reliability shall—
13	"(A) continue to perform work on the role
14	of technology described in paragraph (1) in sup-
15	port of the grid and the reliability and security
16	of the technology; and
17	"(B) shall assist the Clean Energy Applica-
18	tion Centers in the work of the Centers with re-
19	gard to the grid and with electric utilities.
20	"(c) Grants.—
21	"(1) In general.—The Secretary shall make
22	grants to universities, research centers, and other ap-
23	propriate institutions to ensure the continued oper-
24	ations and effectiveness of 8 Regional Clean Energy
25	Application Centers in each of the following regions

1	(as designated for such purposes as of the date of the
2	enactment of the Energy Independence and Security
3	Act of 2007):
4	"(A) Gulf Coast.
5	$``(B)\ Intermountain.$
6	$"(C)\ Mid ext{-}Atlantic.$
7	$"(D) \ Midwest.$
8	``(E) Northeast.
9	"(F) Northwest.
10	"(G) Pacific.
11	"(H) Southeast.
12	"(2) Establishment of goals and compli-
13	ANCE.—In making grants under this subsection, the
14	Secretary shall ensure that sufficient goals are estab-
15	lished and met by each Center throughout the pro-
16	gram duration concerning outreach and technology
17	deployment.
18	"(d) Activities.—
19	"(1) In General.—Each Clean Energy Applica-
20	tion Center shall—
21	"(A) operate a program to encourage de-
22	ployment of clean energy technologies through
23	education and outreach to building and indus-
24	trial professionals; and other individuals and or-

1	ganizations with an interest in efficient energy
2	use; and
3	"(B) provide project specific support to
4	building and industrial professionals through as-
5	sessments and advisory activities.
6	"(2) Types of activities.—Funds made avail-
7	able under this section may be used—
8	"(A) to develop and distribute informa-
9	tional materials on clean energy technologies, in-
10	cluding continuation of the 8 websites in exist-
11	ence on the date of enactment of the Energy
12	Independence and Security Act of 2007;
13	"(B) to develop and conduct target market
14	workshops, seminars, internet programs, and
15	other activities to educate end users, regulators,
16	and stakeholders in a manner that leads to the
17	deployment of clean energy technologies;
18	"(C) to provide or coordinate onsite assess-
19	ments for sites and enterprises that may consider
20	deployment of clean energy technology;
21	"(D) to perform market research to identify
22	high profile candidates for clean energy deploy-
23	ment;

1	"(E) to provide consulting support to sites
2	considering deployment of clean energy tech-
3	nologies;
4	"(F) to assist organizations developing
5	clean energy technologies to overcome barriers to
6	deployment; and
7	"(G) to assist companies and organizations
8	with performance evaluations of any clean en-
9	ergy technology implemented.
10	"(e) Duration.—
11	"(1) In general.—A grant awarded under this
12	section shall be for a period of 5 years
13	"(2) Annual evaluations.—Each grant shall
14	be evaluated annually for the continuation of the
15	grant based on the activities and results of the grant.
16	"(f) AUTHORIZATION.—There is authorized to be ap-
17	propriated to carry out this section \$10,000,000 for each
18	of fiscal years 2008 through 2012.".
19	(b) Table of Contents.—The table of contents of the
20	Energy Policy and Conservation Act (42 U.S.C. prec. 6201)
21	is amended by inserting after the items relating to part D
22	of title III the following:
	"Part E—Industrial Energy Efficiency

[&]quot;Sec. 371. Definitions.

[&]quot;Sec. 372. Survey and Registry.

[&]quot;Sec. 373. Waste energy recovery incentive grant program.

[&]quot;Sec. 374. Additional incentives for recovery, utilization and prevention of industrial waste energy.

[&]quot;Sec. 375. Clean Energy Application Centers.".

1 SEC. 452. ENERGY-INTENSIVE INDUSTRIES PROGRAM. 2 (a) DEFINITIONS.—In this section: 3 (1) Eligible entity.—The term "eligible enti-4 tu" means— 5 (A) an energy-intensive industry; (B) a national trade association rep-6 7 resenting an energy-intensive industry; or 8 (C) a person acting on behalf of 1 or more 9 energy-intensive industries or sectors, as deter-10 mined by the Secretary. 11 (2) Energy-intensive industry.—The term "energy-intensive industry" means an industry that 12 13 uses significant quantities of energy as part of its 14 primary economic activities, including— 15 (A) information technology, including data 16 centers containing electrical equipment used in 17 processing, storing, and transmitting digital in-18 formation; 19 (B) consumer product manufacturing; 20 (C) food processing; 21 (D) materials manufacturers, including— 22 (i) aluminum; 23 (ii) chemicals; 24 (iii) forest and paper products; 25 (iv) metal casting;

(v) glass;

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1	$(vi)\ petroleum\ refining;$
2	(vii) mining; and
3	$(viii) \ steel;$
4	(E) other energy-intensive industries, as de-
5	termined by the Secretary.
6	(3) FEEDSTOCK.—The term "feedstock" means
7	the raw material supplied for use in manufacturing,
8	chemical, and biological processes.
9	(4) Partnership.—The term "partnership"
10	means an energy efficiency partnership established
11	under subsection $(c)(1)(A)$.
12	(5) Program.—The term "program" means the
13	energy-intensive industries program established under
14	subsection (b).
15	(b) Establishment of Program.—The Secretary
16	shall establish a program under which the Secretary, in co-
17	operation with energy-intensive industries and national in-
18	dustry trade associations representing the energy-intensive
19	industries, shall support, research, develop, and promote the
20	use of new materials processes, technologies, and techniques
21	to optimize energy efficiency and the economic competitive-
22	ness of the United States' industrial and commercial sec-
23	tors.
24	(c) Partnerships.—

1	(1) In general.—As part of the program, the
2	Secretary shall establish energy efficiency partner-
3	ships between the Secretary and eligible entities to
4	conduct research on, develop, and demonstrate new
5	processes, technologies, and operating practices and
6	techniques to significantly improve the energy effi-
7	ciency of equipment and processes used by energy-in-
8	tensive industries, including the conduct of activities
9	to—
10	(A) increase the energy efficiency of indus-
11	trial processes and facilities;
12	(B) research, develop, and demonstrate ad-
13	vanced technologies capable of energy intensity
14	reductions and increased environmental perform-
15	ance; and
16	(C) promote the use of the processes, tech-
17	nologies, and techniques described in subpara-
18	graphs (A) and (B).
19	(2) Eligible activities.—Partnership activi-
20	ties eligible for funding under this subsection in-
21	clude—
22	(A) feedstock and recycling research, devel-
23	opment, and demonstration activities to identify
24	and promote—

1	(i) opportunities for meeting industry
2	feedstock requirements with more energy ef-
3	ficient and flexible sources of feedstock or
4	energy supply;
5	(ii) strategies to develop and deploy
6	technologies that improve the quality and
7	quantity of feedstocks recovered from process
8	and waste streams; and
9	(iii) other methods using recycling,
10	reuse, and improved industrial materials;
11	(B) research to develop and demonstrate
12	technologies and processes that utilize alternative
13	energy sources to supply heat, power, and new
14	feedstocks for energy-intensive industries;
15	(C) research to achieve energy efficiency in
16	steam, power, control system, and process heat
17	technologies, and in other manufacturing proc-
18	esses; and
19	(D) industrial and commercial energy effi-
20	ciency and sustainability assessments to—
21	(i) assist individual industrial and
22	commercial sectors in developing tools, tech-
23	niques, and methodologies to assess—
24	(I) the unique processes and fa-
25	cilities of the sectors;

1	(II) the energy utilization require-
2	ments of the sectors; and
3	(III) the application of new, more
4	energy efficient technologies; and
5	(ii) conduct energy savings assess-
6	ments;
7	(E) the incorporation of technologies and
8	innovations that would significantly improve the
9	energy efficiency and utilization of energy-inten-
10	sive commercial applications; and
11	(F) any other activities that the Secretary
12	determines to be appropriate.
13	(3) Proposals.—
14	(A) In general.—To be eligible for fund-
15	ing under this subsection, a partnership shall
16	submit to the Secretary a proposal that describes
17	the proposed research, development, or dem-
18	onstration activity to be conducted by the part-
19	nership.
20	(B) Review.—After reviewing the scientific,
21	technical, and commercial merit of a proposals
22	submitted under subparagraph (A), the Secretary
23	shall approve or disapprove the proposal.

1	(C) Competitive awards.—The provision
2	of funding under this subsection shall be on a
3	$competitive\ basis.$
4	(4) Cost-sharing requirement.—In carrying
5	out this section, the Secretary shall require cost shar-
6	ing in accordance with section 988 of the Energy Pol-
7	icy Act of 2005 (42 U.S.C. 16352).
8	(d) Grants.—The Secretary may award competitive
9	grants for innovative technology research, development and
10	demonstrations to universities, individual inventors, and
11	small companies, based on energy savings potential, com-
12	mercial viability, and technical merit.
13	(e) Institution of Higher Education-Based In-
14	DUSTRIAL RESEARCH AND ASSESSMENT CENTERS.—The
15	Secretary shall provide funding to institution of higher edu-
16	cation-based industrial research and assessment centers,
17	whose purpose shall be—
18	(1) to identify opportunities for optimizing en-
19	ergy efficiency and environmental performance;
20	(2) to promote applications of emerging concepts
21	and technologies in small and medium-sized manufac-
22	turers;
23	(3) to promote research and development for the
24	use of alternative energy sources to supply heat,

1	power, and new feedstocks for energy-intensive indus-
2	tries;
3	(4) to coordinate with appropriate Federal and
4	State research offices, and provide a clearinghouse for
5	industrial process and energy efficiency technical as-
6	sistance resources; and
7	(5) to coordinate with State-accredited technical
8	training centers and community colleges, while ensur-
9	ing appropriate services to all regions of the United
10	States.
11	(f) Authorization of Appropriations.—
12	(1) In general.—There are authorized to be ap-
13	propriated to the Secretary to carry out this section—
14	(A) \$184,000,000 for fiscal year 2008;
15	(B) \$190,000,000 for fiscal year 2009;
16	(C) \$196,000,000 for fiscal year 2010;
17	(D) \$202,000,000 for fiscal year 2011;
18	(E) \$208,000,000 for fiscal year 2012; and
19	(F) such sums as are necessary for fiscal
20	year 2013 and each fiscal year thereafter.
21	(2) Partnership activities.—Of the amounts
22	made available under paragraph (1), not less than 50
23	percent shall be used to pay the Federal share of part-
24	nership activities under subsection (c).

1	(3) Coordination and nonduplication.—The
2	Secretary shall coordinate efforts under this section
3	with other programs of the Department and other
4	Federal agencies to avoid duplication of effort.
5	SEC. 453. ENERGY EFFICIENCY FOR DATA CENTER BUILD-
6	INGS.
7	(a) Definitions.—In this section:
8	(1) Data center.—The term "data center"
9	means any facility that primarily contains electronic
10	equipment used to process, store, and transmit digital
11	information, which may be—
12	(A) a free-standing structure; or
13	(B) a facility within a larger structure,
14	that uses environmental control equipment to
15	maintain the proper conditions for the operation
16	$of\ electronic\ equipment.$
17	(2) Data center operator.—The term "data
18	center operator" means any person or government en-
19	tity that builds or operates a data center or purchases
20	data center services, equipment, and facilities.
21	(b) Voluntary National Information Program.—
22	(1) In general.—Not later than 90 days after
23	the date of enactment of this Act, the Secretary and
24	the Administrator of the Environmental Protection
25	Agency shall, after consulting with information tech-

1	nology industry and other interested parties, initiate
2	a voluntary national information program for those
3	types of data centers and data center equipment and
4	facilities that are widely used and for which there is
5	a potential for significant data center energy savings
6	as a result of the program.
7	(2) Requirements.—The program described in
8	paragraph (1) shall—
9	(A) address data center efficiency holis-
10	tically, reflecting the total energy consumption of
11	data centers as whole systems, including both
12	equipment and facilities;
13	(B) consider prior work and studies under-
14	taken in this area, including by the Environ-
15	mental Protection Agency and the Department of
16	Energy;
17	(C) consistent with the objectives described
18	in paragraph (1), determine the type of data
19	center and data center equipment and facilities
20	to be covered under the program;
21	(D) produce specifications, measurements,
22	best practices, and benchmarks that will enable
23	data center operators to make more informed de-
24	cisions about the energy efficiency and costs of
25	data centers, and that take into account—

1	(i) the performance and use of servers,
2	data storage devices, and other information
3	$technology\ equipment;$
4	(ii) the efficiency of heating, ventila-
5	tion, and air conditioning, cooling, and
6	power conditioning systems, provided that
7	no modification shall be required of a
8	standard then in effect under the Energy
9	Policy and Conservation Act (42 U.S.C.
10	6201 et seq.) for any covered heating, ven-
11	tilation, air-conditioning, cooling or power-
12	$conditioning\ product;$
13	(iii) energy savings from the adoption
14	of software and data management tech-
15	niques; and
16	(iv) other factors determined by the or-
17	ganization described in subsection (c);
18	(E) allow for creation of separate specifica-
19	tions, measurements, and benchmarks based on
20	data center size and function, as well as other
21	$appropriate\ characteristics;$
22	(F) advance the design and implementation
23	of efficiency technologies to the maximum extent
24	economically practical;

(G) provide to data center operators in the
private sector and the Federal Government infor-
mation about best practices and purchasing deci-
sions that reduce the energy consumption of data
centers; and

- (H) publish the information described in subparagraph (G), which may be disseminated through catalogs, trade publications, the Internet, or other mechanisms, that will allow data center operators to assess the energy consumption and potential cost savings of alternative data centers and data center equipment and facilities.
- (3) PROCEDURES.—The program described in paragraph (1) shall be developed in consultation with and coordinated by the organization described in subsection (c) according to commonly accepted procedures for the development of specifications, measurements, and benchmarks.

(c) Data Center Efficiency Organization.—

(1) In General.—After the establishment of the program described in subsection (b), the Secretary and the Administrator shall jointly designate an information technology industry organization to consult with and to coordinate the program.

1	(2) Requirements.—The organization des-
2	ignated under paragraph (1), whether preexisting or
3	formed specifically for the purposes of subsection (b),
4	shall—
5	(A) consist of interested parties that have
6	expertise in energy efficiency and in the develop-
7	ment, operation, and functionality of computer
8	data centers, information technology equipment,
9	and software, as well as representatives of hard-
10	ware manufacturers, data center operators, and
11	facility managers;
12	(B) obtain and address input from Depart-
13	ment of Energy National Laboratories or any
14	college, university, research institution, industry
15	association, company, or public interest group
16	with applicable expertise in any of the areas list-
17	ed in paragraph (1);
18	(C) follow commonly accepted procedures
19	for the development of specifications and accred-
20	ited standards development processes;
21	(D) have a mission to develop and promote
22	energy efficiency for data centers and informa-
23	tion technology; and
24	(E) have the primary responsibility to con-
25	sult in the development and publishing of the in-

formation, measurements, and benchmarks described in subsection (b) and transmission of the information to the Secretary and the Administrator for consideration under subsection (d).

(d) Measurements and Specifications.—

- (1) In General.—The Secretary and the Administrator shall consider the specifications, measurements, and benchmarks described in subsection (b) for use by the Federal Energy Management Program, the Energy Star Program, and other efficiency programs of the Department of Energy and Environmental Protection Agency, respectively.
- (2) REJECTIONS.—If the Secretary or the Administrator rejects 1 or more specifications, measurements, or benchmarks described in subsection (b), the rejection shall be made consistent with section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note; Public Law 104–113).
- (3) Determination of impracticability.—A determination that a specification, measurement, or benchmark described in subsection (b) is impractical may include consideration of the maximum efficiency that is technologically feasible and economically justified.

1	(e) Monitoring.—The Secretary and the Adminis-
2	trator shall—
3	(1) monitor and evaluate the efforts to develop
4	the program described in subsection (b); and
5	(2) not later than 3 years after the date of enact-
6	ment of this Act, make a determination as to whether
7	the program is consistent with the objectives of sub-
8	section (b).
9	(f) Alternative System.—If the Secretary and the
10	Administrator make a determination under subsection (e)
11	that a voluntary national information program for data
12	centers consistent with the objectives of subsection (b) has
13	not been developed, the Secretary and the Administrator
14	shall, after consultation with the National Institute of
15	Standards and Technology and not later than 2 years after
16	the determination, develop and implement the program
17	under subsection (b).
18	(g) Protection of Proprietary Information.—
19	The Secretary, the Administrator, or the data center effi-
20	ciency organization shall not disclose any proprietary in-
21	formation or trade secrets provided by any individual or
22	company for the purposes of carrying out this section or
23	the program established under this section.

1	Subtitle E—Healthy High-
2	Performance Schools
3	SEC. 461. HEALTHY HIGH-PERFORMANCE SCHOOLS.
4	(a) Amendment.—The Toxic Substances Control Act
5	(15 U.S.C. 2601 et seq.) is amended by adding at the end
6	the following new title:
7	"TITLE V—HEALTHY HIGH-
8	PERFORMANCE SCHOOLS
9	"SEC. 501. GRANTS FOR HEALTHY SCHOOL ENVIRONMENTS.
10	"(a) In General.—The Administrator, in consulta-
11	tion with the Secretary of Education, may provide grants
12	to States for use in—
13	"(1) providing technical assistance for programs
14	of the Environmental Protection Agency (including
15	the Tools for Schools Program and the Healthy School
16	Environmental Assessment Tool) to schools for use in
17	addressing environmental issues; and
18	"(2) development and implementation of State
19	school environmental health programs that include—
20	"(A) standards for school building design,
21	construction, and renovation; and
22	"(B) identification of ongoing school build-
23	ing environmental problems, including contami-
24	nants, hazardous substances, and pollutant emis-
25	sions, in the State and recommended solutions to

1	address those problems, including assessment of
2	information on the exposure of children to envi-
3	ronmental hazards in school facilities.
4	"(b) Sunset.—The authority of the Administrator to
5	carry out this section shall expire 5 years after the date
6	of enactment of this section.
7	"SEC. 502. MODEL GUIDELINES FOR SITING OF SCHOOL FA-
8	CILITIES.
9	"Not later than 18 months after the date of enactment
10	of this section, the Administrator, in consultation with the
11	Secretary of Education and the Secretary of Health and
12	Human Services, shall issue voluntary school site selection
13	guidelines that account for—
14	"(1) the special vulnerability of children to haz-
15	ardous substances or pollution exposures in any case
16	in which the potential for contamination at a poten-
17	tial school site exists;
18	"(2) modes of transportation available to stu-
19	dents and staff;
20	"(3) the efficient use of energy; and
21	"(4) the potential use of a school at the site as
22	an emergency shelter.
23	"SEC. 503. PUBLIC OUTREACH.
24	"(a) Reports.—The Administrator shall publish and
25	submit to Congress an annual report on all activities car-

- 1 ried out under this title, until the expiration of authority
- 2 described in section 501(b).
- 3 "(b) Public Outreach.—The Federal Director ap-
- 4 pointed under section 436(a) of the Energy Independence
- 5 and Security Act of 2007 (in this title referred to as the
- 6 'Federal Director') shall ensure, to the maximum extent
- 7 practicable, that the public clearinghouse established under
- 8 section 423(1) of the Energy Independence and Security Act
- 9 of 2007 receives and makes available information on the
- 10 exposure of children to environmental hazards in school fa-
- 11 cilities, as provided by the Administrator.
- 12 "SEC. 504. ENVIRONMENTAL HEALTH PROGRAM.
- 13 "(a) In General.—Not later than 2 years after the
- 14 date of enactment of this section, the Administrator, in con-
- 15 sultation with the Secretary of Education, the Secretary of
- 16 Health and Human Services, and other relevant agencies,
- 17 shall issue voluntary guidelines for use by the State in de-
- 18 veloping and implementing an environmental health pro-
- 19 gram for schools that—
- 20 "(1) takes into account the status and findings
- 21 of Federal initiatives established under this title or
- subtitle C of title IV of the Energy Independence and
- 23 Security Act of 2007 and other relevant Federal law
- 24 with respect to school facilities, including relevant up-

1	dates on trends in the field, such as the impact of
2	school facility environments on student and staff—
3	"(A) health, safety, and productivity; and
4	"(B) disabilities or special needs;
5	"(2) takes into account studies using relevant
6	tools identified or developed in accordance with sec-
7	tion 492 of the Energy Independence and Security
8	Act of 2007;
9	"(3) takes into account, with respect to school fa-
10	cilities, each of—
11	"(A) environmental problems, contami-
12	nants, hazardous substances, and pollutant emis-
13	sions, including—
14	"(i) lead from drinking water;
15	"(ii) lead from materials and products;
16	"(iii) asbestos;
17	"(iv) radon;
18	"(v) the presence of elemental mercury
19	releases from products and containers;
20	"(vi) pollutant emissions from mate-
21	rials and products; and
22	"(vii) any other environmental prob-
23	lem, contaminant, hazardous substance, or
24	pollutant emission that present or may

1	present a risk to the health of occupants of
2	the school facilities or environment;
3	"(B) natural day lighting;
4	"(C) ventilation choices and technologies;
5	"(D) heating and cooling choices and tech-
6	nologies;
7	"(E) moisture control and mold;
8	"(F) maintenance, cleaning, and pest con-
9	$trol\ activities;$
10	"(G) acoustics; and
11	"(H) other issues relating to the health,
12	comfort, productivity, and performance of occu-
13	pants of the school facilities;
14	"(4) provides technical assistance on siting, de-
15	sign, management, and operation of school facilities,
16	including facilities used by students with disabilities
17	or special needs;
18	"(5) collaborates with federally funded pediatric
19	environmental health centers to assist in on-site school
20	$environmental\ investigations;$
21	"(6) assists States and the public in better un-
22	derstanding and improving the environmental health
23	of children; and
24	"(7) takes into account the special vulnerability
25	of children in low-income and minority communities

- 1 to exposures from contaminants, hazardous sub-
- 2 stances, and pollutant emissions.
- 3 "(b) Public Outreach.—The Federal Director and
- 4 Commercial Director shall ensure, to the maximum extent
- 5 practicable, that the public clearinghouse established under
- 6 section 423 of the Energy Independence and Security Act
- 7 of 2007 receives and makes available—
- 8 "(1) information from the Administrator that is
- 9 contained in the report described in section 503(a);
- 10 *and*
- 11 "(2) information on the exposure of children to
- 12 environmental hazards in school facilities, as pro-
- 13 vided by the Administrator.
- 14 "SEC. 505. AUTHORIZATION OF APPROPRIATIONS.
- 15 "There are authorized to be appropriated to carry out
- 16 this title \$1,000,000 for fiscal year 2009, and \$1,500,000
- 17 for each of fiscal years 2010 through 2013, to remain avail-
- 18 able until expended.".
- 19 (b) Table of Contents Amendment.—The table of
- 20 contents for the Toxic Substances Control Act (15 U.S.C.
- 21 2601 et seq.) is amended by adding at the end the following:

"TITLE V—HEALTHY HIGH-PERFORMANCE SCHOOLS

[&]quot;Sec. 501. Grants for healthy school environments.

[&]quot;Sec. 502. Model guidelines for siting of school facilities.

[&]quot;Sec. 503. Public outreach.

[&]quot;Sec. 504. Environmental health program.

[&]quot;Sec. 505. Authorization of appropriations.".

1	SEC. 462. STUDY ON INDOOR ENVIRONMENTAL QUALITY IN
2	SCHOOLS.
3	(a) In General.—The Administrator of the Environ-
4	mental Protection Agency shall enter into an arrangement
5	with the Secretary of Education and the Secretary of En-
6	ergy to conduct a detailed study of how sustainable building
7	features such as energy efficiency affect multiple perceived
8	indoor environmental quality stressors on students in K-
9	12 schools.
10	(b) Contents.—The study shall—
11	(1) investigate the combined effect building
12	stressors such as heating, cooling, humidity, lighting,
13	and acoustics have on building occupants' health, pro-
14	ductivity, and overall well-being;
15	(2) identify how sustainable building features,
16	such as energy efficiency, are influencing these human
17	outcomes singly and in concert; and
18	(3) ensure that the impacts of the indoor envi-
19	ronmental quality are evaluated as a whole.
20	(c) AUTHORIZATION OF APPROPRIATIONS.—There are
21	authorized to be appropriated for carrying out this section
22	\$200,000 for each of the fiscal years 2008 through 2012.

1	Subtitle F—Institutional Entities
2	SEC. 471. ENERGY SUSTAINABILITY AND EFFICIENCY
3	GRANTS AND LOANS FOR INSTITUTIONS.
4	Part G of title III of the Energy Policy and Conserva-
5	tion Act is amended by inserting after section 399 (42
6	U.S.C. 6371h) the following:
7	"SEC. 399A. ENERGY SUSTAINABILITY AND EFFICIENCY
8	GRANTS AND LOANS FOR INSTITUTIONS.
9	"(a) DEFINITIONS.—In this section:
10	"(1) Combined Heat and Power.—The term
11	'combined heat and power' means the generation of
12	electric energy and heat in a single, integrated sys-
13	tem, with an overall thermal efficiency of 60 percent
14	or greater on a higher-heating-value basis.
15	"(2) District energy systems.—The term
16	'district energy systems' means systems providing
17	thermal energy from a renewable energy source, ther-
18	mal energy source, or highly efficient technology to
19	more than 1 building or fixed energy-consuming use
20	from 1 or more thermal-energy production facilities
21	through pipes or other means to provide space heat-
22	ing, space conditioning, hot water, steam, compres-
23	sion, process energy, or other end uses for that energy.
24	"(3) Energy sustainability.—The term 'en-
25	ergy sustainability' includes using a renewable energy

1	source, thermal energy source, or a highly efficient
2	technology for transportation, electricity generation,
3	heating, cooling, lighting, or other energy services in
4	fixed installations.
5	"(4) Institution of higher education.—The
6	term 'institution of higher education' has the meaning
7	given the term in section 2 of the Energy Policy Act
8	of 2005 (42 U.S.C. 15801).
9	"(5) Institutional entity.—The term 'institu-
10	tional entity' means an institution of higher edu-
11	cation, a public school district, a local government, a
12	municipal utility, or a designee of 1 of those entities.
13	"(6) Renewable energy source.—The term
14	'renewable energy source' has the meaning given the
15	term in section 609 of the Public Utility Regulatory
16	Policies Act of 1978 (7 U.S.C. 918c).
17	"(7) Sustainable energy infrastructure.—
18	The term 'sustainable energy infrastructure' means—
19	"(A) facilities for production of energy from
20	renewable energy sources, thermal energy sources,
21	or highly efficient technologies, including com-
22	bined heat and power or other waste heat use,
23	and
24	"(B) district energy systems.

1	"(8) THERMAL ENERGY SOURCE.—The term
2	'thermal energy source' means—
3	"(A) a natural source of cooling or heating
4	from lake or ocean water; and
5	"(B) recovery of useful energy that would
6	otherwise be wasted from ongoing energy uses.
7	"(b) Technical Assistance Grants.—
8	"(1) In general.—Subject to the availability of
9	appropriated funds, the Secretary shall implement a
10	program of information dissemination and technical
11	assistance to institutional entities to assist the insti-
12	tutional entities in identifying, evaluating, designing,
13	and implementing sustainable energy infrastructure
14	projects in energy sustainability.
15	"(2) Assistance.—The Secretary shall support
16	institutional entities in—
17	"(A) identification of opportunities for sus-
18	tainable energy infrastructure;
19	"(B) understanding the technical and eco-
20	nomic characteristics of sustainable energy infra-
21	structure;
22	"(C) utility interconnection and negotiation
23	of power and fuel contracts;
24	$``(D)\ understanding\ financing\ alternatives;$
25	"(E) permitting and siting issues;

1	"(F) obtaining case studies of similar and
2	successful sustainable energy infrastructure sys-
3	tems; and
4	"(G) reviewing and obtaining computer
5	software for assessment, design, and operation
6	and maintenance of sustainable energy infra-
7	structure systems.
8	"(3) Eligible costs for technical assist-
9	ANCE GRANTS.—On receipt of an application of an
10	institutional entity, the Secretary may make grants
11	to the institutional entity to fund a portion of the
12	cost of—
13	"(A) feasibility studies to assess the poten-
14	tial for implementation or improvement of sus-
15	tainable energy infrastructure;
16	"(B) analysis and implementation of strate-
17	gies to overcome barriers to project implementa-
18	tion, including financial, contracting, siting,
19	and permitting barriers; and
20	"(C) detailed engineering of sustainable en-
21	$ergy\ infrastructure.$
22	"(c) Grants for Energy Efficiency Improvement
23	and Energy Sustainability.—
24	"(1) GRANTS.—

1	"(A) In General.—The Secretary shall
2	award grants to institutional entities to carry
3	out projects to improve energy efficiency on the
4	grounds and facilities of the institutional entity.
5	"(B) Requirement.—To the extent that
6	applications have been submitted, grants under
7	subparagraph (A) shall include not less than 1
8	grant each year to an institution of higher edu-
9	cation in each State.
10	"(C) Minimum funding.—Not less than 50
11	percent of the total funding for all grants under
12	this subsection shall be awarded in grants to in-
13	stitutions of higher education.
14	"(2) Criteria.—Evaluation of projects for grant
15	funding shall be based on criteria established by the
16	Secretary, including criteria relating to—
17	"(A) improvement in energy efficiency;
18	"(B) reduction in greenhouse gas emissions
19	and other air emissions, including criteria air
20	pollutants and ozone-depleting refrigerants;
21	"(C) increased use of renewable energy
22	sources or thermal energy sources;
23	"(D) reduction in consumption of fossil
24	fuels;
25	"(E) active student participation; and

1	" (F) need for funding assistance.
2	"(3) Condition.—As a condition of receiving a
3	grant under this subsection, an institutional entity
4	shall agree—
5	"(A) to implement a public awareness cam-
6	paign concerning the project in the community
7	in which the institutional entity is located; and
8	"(B) to submit to the Secretary, and make
9	available to the public, reports on any efficiency
10	improvements, energy cost savings, and environ-
11	mental benefits achieved as part of a project car-
12	ried out under paragraph (1), including quan-
13	tification of the results relative to the criteria de-
14	scribed under paragraph (2).
15	"(d) Grants for Innovation in Energy Sustain-
16	ABILITY.—
17	"(1) Grants.—
18	"(A) In General.—The Secretary shall
19	award grants to institutional entities to engage
20	in innovative energy sustainability projects.
21	"(B) Requirement.—To the extent that
22	applications have been submitted, grants under
23	subparagraph (A) shall include not less than 2
24	grants each year to institutions of higher edu-
25	cation in each State.

1	"(C) Minimum funding.—Not less than 50
2	percent of the total funding for all grants under
3	this subsection shall be awarded in grants to in-
4	stitutions of higher education.
5	"(2) Innovation projects.—An innovation
6	project carried out with a grant under this subsection
7	shall—
8	"(A) involve—
9	"(i) an innovative technology that is
10	not yet commercially available; or
11	"(ii) available technology in an inno-
12	vative application that maximizes energy
13	efficiency and sustainability;
14	"(B) have the greatest potential for testing
15	or demonstrating new technologies or processes;
16	and
17	"(C) to the extent undertaken by an institu-
18	tion of higher education, ensure active student
19	participation in the project, including the plan-
20	ning, implementation, evaluation, and other
21	phases of projects.
22	"(3) Condition.—As a condition of receiving a
23	grant under this subsection, an institutional entity
24	shall agree to submit to the Secretary, and make

1	available to the public, reports that describe the re-
2	sults of the projects carried out using grant funds.
3	"(e) Allocation to Institutions of Higher Edu-
4	CATION WITH SMALL ENDOWMENTS.—
5	"(1) In general.—Of the total amount of
6	grants provided to institutions of higher education for
7	a fiscal year under this section, the Secretary shall
8	provide not less than 50 percent of the amount to in-
9	stitutions of higher education that have an endow-
10	ment of not more than \$100,000,000.
11	"(2) Requirement.—To the extent that appli-
12	cations have been submitted, at least 50 percent of the
13	amount described in paragraph (1) shall be provided
14	to institutions of higher education that have an en-
15	downent of not more than \$50,000,000.
16	"(f) Grant Amounts.—
17	"(1) In General.—If the Secretary determines
18	that cost sharing is appropriate, the amounts of
19	grants provided under this section shall be limited as
20	provided in this subsection.
21	"(2) Technical assistance grants.—In the
22	case of grants for technical assistance under sub-
23	section (b), grant funds shall be available for not
24	more than—
25	"(A) an amount equal to the lesser of—

1	"(i) \$50,000; or
2	"(ii) 75 percent of the cost of feasi-
3	bility studies to assess the potential for im-
4	plementation or improvement of sustainable
5	$energy\ infrastructure;$
6	"(B) an amount equal to the lesser of—
7	"(i) \$90,000; or
8	"(ii) 60 percent of the cost of guidance
9	on overcoming barriers to project implemen-
10	tation, including financial, contracting,
11	siting, and permitting barriers; and
12	"(C) an amount equal to the lesser of—
13	"(i) \$250,000; or
14	"(ii) 40 percent of the cost of detailed
15	engineering and design of sustainable en-
16	$ergy\ in frastructure.$
17	"(3) Grants for efficiency improvement
18	AND ENERGY SUSTAINABILITY.—In the case of grants
19	for efficiency improvement and energy sustainability
20	under subsection (c), grant funds shall be available
21	for not more than an amount equal to the lesser of—
22	"(A) \$1,000,000; or
23	"(B) 60 percent of the total cost.
24	"(4) Grants for innovation in energy sus-
25	TAINABILITY.—In the case of grants for innovation in

1	energy sustainability under subsection (d), grant
2	funds shall be available for not more than an amount
3	equal to the lesser of—
4	"(A) \$500,000; or
5	"(B) 75 percent of the total cost.
6	"(g) Loans for Energy Efficiency Improvement
7	and Energy Sustainability.—
8	"(1) In general.—Subject to the availability of
9	appropriated funds, the Secretary shall provide loans
10	to institutional entities for the purpose of imple-
11	menting energy efficiency improvements and sustain-
12	able energy infrastructure.
13	"(2) Terms and conditions.—
14	"(A) In general.—Except as otherwise
15	provided in this paragraph, loans made under
16	this subsection shall be on such terms and condi-
17	tions as the Secretary may prescribe.
18	"(B) MATURITY.—The final maturity of
19	loans made within a period shall be the lesser of,
20	as determined by the Secretary—
21	"(i) 20 years; or
22	"(ii) 90 percent of the useful life of the
23	principal physical asset to be financed by
24	$the\ loan.$

1	"(C) Default.—No loan made under this
2	subsection may be subordinated to another debt
3	contracted by the institutional entity or to any
4	other claims against the institutional entity in
5	the case of default.
6	"(D) Benchmark interest rate.—
7	"(i) In general.—Loans under this
8	subsection shall be at an interest rate that
9	is set by reference to a benchmark interest
10	rate (yield) on marketable Treasury securi-
11	ties with a similar maturity to the direct
12	loans being made.
13	"(ii) Minimum.—The minimum inter-
14	est rate of loans under this subsection shall
15	be at the interest rate of the benchmark fi-
16	nancial instrument.
17	"(iii) New loans.—The minimum in-
18	terest rate of new loans shall be adjusted
19	each quarter to take account of changes in
20	the interest rate of the benchmark financial
21	instrument.
22	"(E) Credit risk.—The Secretary shall—
23	"(i) prescribe explicit standards for use
24	in periodically assessing the credit risk of

1	making direct loans under this subsection;
2	and
3	"(ii) find that there is a reasonable as-
4	surance of repayment before making a loan.
5	"(F) Advance budget authority re-
6	QUIRED.—New direct loans may not be obligated
7	under this subsection except to the extent that
8	appropriations of budget authority to cover the
9	costs of the new direct loans are made in ad-
10	vance, as required by section 504 of the Federal
11	Credit Reform Act of 1990 (2 U.S.C. 661c).
12	"(3) Criteria.—Evaluation of projects for po-
13	tential loan funding shall be based on criteria estab-
14	lished by the Secretary, including criteria relating
15	to—
16	"(A) improvement in energy efficiency;
17	"(B) reduction in greenhouse gas emissions
18	and other air emissions, including criteria air
19	pollutants and ozone-depleting refrigerants;
20	"(C) increased use of renewable electric en-
21	ergy sources or renewable thermal energy sources;
22	"(D) reduction in consumption of fossil
23	fuels; and
24	"(E) need for funding assistance, including
25	consideration of the size of endowment or other

financial resources available to the institutional
 entity.

"(4) Labor Standards.—

"(A) IN GENERAL.—All laborers and mechanics employed by contractors or subcontractors in the performance of construction, repair, or alteration work funded in whole or in part under this section shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with sections 3141 through 3144, 3146, and 3147 of title 40, United States Code. The Secretary shall not approve any such funding without first obtaining adequate assurance that required labor standards will be maintained upon the construction work.

"(B) AUTHORITY AND FUNCTIONS.—The Secretary of Labor shall have, with respect to the labor standards specified in paragraph (1), the authority and functions set forth in Reorganization Plan Number 14 of 1950 (15 Fed. Reg. 3176; 64 Stat. 1267) and section 3145 of title 40, United States Code.

1	"(h) Program Procedures.—Not later than 180
2	days after the date of enactment of this section, the Sec-
3	retary shall establish procedures for the solicitation and
4	evaluation of potential projects for grant and loan funding
5	and administration of the grant and loan programs.
6	"(i) Authorization.—
7	"(1) Grants.—There is authorized to be appro-
8	priated for the cost of grants authorized in subsections
9	(b), (c), and (d) \$250,000,000 for each of fiscal years
10	2009 through 2013, of which not more than 5 percent
11	may be used for administrative expenses.
12	"(2) Loans.—There is authorized to be appro-
13	priated for the initial cost of direct loans authorized
14	in subsection (g) \$500,000,000 for each of fiscal years
15	2009 through 2013, of which not more than 5 percent
16	may be used for administrative expenses.".
17	Subtitle G—Public and Assisted
18	Housing
19	SEC. 481. APPLICATION OF INTERNATIONAL ENERGY CON-
20	SERVATION CODE TO PUBLIC AND ASSISTED
21	HOUSING.
22	Section 109 of the Cranston-Gonzalez National Afford-
23	able Housing Act (42 U.S.C. 12709) is amended—
24	(1) in subsection (a)—

1	(A) in paragraph $(1)(C)$, by striking, ",
2	where such standards are determined to be cost
3	effective by the Secretary of Housing and Urban
4	Development"; and
5	(B) in the first sentence of paragraph (2)—
6	(i) by striking "Council of American
7	Building Officials Model Energy Code,
8	1992" and inserting "2006 International
9	Energy Conservation Code"; and
10	(ii) by striking ", and, with respect to
11	rehabilitation and new construction of pub-
12	lic and assisted housing funded by HOPE
13	VI revitalization grants under section 24 of
14	the United States Housing Act of 1937 (42
15	U.S.C. 1437v), the 2003 International En-
16	ergy Conservation Code";
17	(2) in subsection (b)—
18	(A) in the heading, by striking "Model
19	Energy Code.—" and inserting "Inter-
20	NATIONAL ENERGY CONSERVATION CODE.—";
21	(B) by inserting "and rehabilitation" after
22	"all new construction"; and
23	(C) by striking ", and, with respect to reha-
24	bilitation and new construction of public and as-
25	sisted housing funded by HOPE VI revitaliza-

1	tion grants under section 24 of the United States
2	Housing Act of 1937 (42 U.S.C. 1437v), the 2003
3	$International\ Energy\ Conservation\ Code";$
4	(3) in subsection (c)—
5	(A) in the heading, by striking "Model
6	Energy Code and"; and
7	(B) by striking ", or, with respect to reha-
8	bilitation and new construction of public and as-
9	sisted housing funded by HOPE VI revitaliza-
10	tion grants under section 24 of the United States
11	Housing Act of 1937 (42 U.S.C. 1437v), the 2003
12	International Energy Conservation Code";
13	(4) by adding at the end the following:
14	"(d) Failure To Amend the Standards.—If the
15	Secretary of Housing and Urban Development and the Sec-
16	retary of Agriculture have not, within 1 year after the re-
17	quirements of the 2006 IECC or the ASHRAE Standard
18	90.1–2004 are revised, amended the standards or made a
19	determination under subsection (c), all new construction
20	and rehabilitation of housing specified in subsection (a)
21	shall meet the requirements of the revised code or standard
22	if—
23	"(1) the Secretary of Housing and Urban Devel-
24	opment or the Secretary of Agriculture make a deter-
25	mination that the revised codes do not negatively af-

1	fect the availability or affordability of new construc-
2	tion of assisted housing and single family and multi-
3	family residential housing (other than manufactured
4	homes) subject to mortgages insured under the Na-
5	tional Housing Act (12 U.S.C. 1701 et seq.) or in-
6	sured, guaranteed, or made by the Secretary of Agri-
7	culture under title V of the Housing Act of 1949 (42
8	U.S.C. 1471 et seq.), respectively; and
9	"(2) the Secretary of Energy has made a deter-
10	mination under section 304 of the Energy Conserva-
11	tion and Production Act (42 U.S.C. 6833) that the re-
12	vised code or standard would improve energy effi-
13	ciency.";
14	(5) by striking "CABO Model Energy Code,
15	1992" each place it appears and inserting "the 2006
16	IECC"; and
17	(6) by striking "1989" each place it appears and
18	inserting "2004".
19	Subtitle H—General Provisions
20	SEC. 491. DEMONSTRATION PROJECT.
21	(a) In General.—The Federal Director and the Com-
22	mercial Director shall establish guidelines to implement a
23	demonstration project to contribute to the research goals of
24	the Office of Commercial High-Performance Green Build-

1	ings and the Office of Federal High-Performance Green
2	Buildings.
3	(b) Projects.—In accordance with guidelines estab-
4	lished by the Federal Director and the Commercial Director
5	under subsection (a) and the duties of the Federal Director
6	and the Commercial Director described in this title, the
7	Federal Director or the Commercial Director shall carry
8	out—
9	(1) for each of fiscal years 2009 through 2014,
10	1 demonstration project per year of green features in
11	a Federal building selected by the Federal Director in
12	accordance with relevant agencies and described in
13	subsection (c)(1), that—
14	(A) provides for instrumentation, moni-
15	toring, and data collection related to the green
16	features, for study of the impact of the features
17	on overall enrgy use and operational costs, and
18	for the evaluation of the information obtained
19	through the conduct of projects and activities
20	under this title; and
21	(B) achieves the highest rating offered by
22	the high performance green building system iden-
23	tified pursuant to section 436(h);
24	(2) no fewer than 4 demonstration projects at 4
25	universities, that, as competitively selected by the

1	Commercial Director in accordance with subsection
2	(c)(2), have—
3	(A) appropriate research resources and rel-
4	evant projects to meet the goals of the demonstra-
5	tion project established by the Office of Commer-
6	cial High-Performance Green Buildings; and
7	(B) the ability—
8	(i) to serve as a model for high-per-
9	formance green building initiatives, includ-
10	ing research and education by achieving the
11	highest rating offered by the high perform-
12	ance green building system identified pur-
13	suant to section 436(h);
14	(ii) to identify the most effective ways
15	o use high-performance green building and
16	landscape technologies to engage and edu-
17	cate undergraduate and graduate students;
18	(iii) to effectively implement a high-
19	performance green building education pro-
20	gram for students and occupants;
21	(iv) to demonstrate the effectiveness of
22	various high-performance technologies, in-
23	cluding their impacts on energy use and
24	operational costs, in each of the 4 climatic

1	regions of the United States described in
2	subsection $(c)(2)(B)$; and
3	(v) to explore quantifiable and non-
4	quantifiable beneficial impacts on public
5	health and employee and student perform-
6	ance;
7	(3) demonstration projects to evaluate replicable
8	approaches of achieving high performance in actual
9	building operation in various types of commercial
10	buildings in various climates; and
11	(4) deployment activities to disseminate infor-
12	mation on and encourage widespread adoption of
13	technologies, practices, and policies to achieve zero-
14	net-energy commercial buildings or low energy use
15	and effective monitoring of energy use in commercial
16	buildings.
17	(c) Criteria.—
18	(1) Federal facilities.—With respect to the
19	existing or proposed Federal facility at which a dem-
20	onstration project under this section is conducted, the
21	Federal facility shall—
22	(A) be an appropriate model for a project
23	relating to—
24	(i) the effectiveness of high-performance
25	technologies;

1	(ii) analysis of materials, components,
2	systems, and emergency operations in the
3	building, and the impact of those materials,
4	components, and systems, including the im-
5	pact on the health of building occupants;
6	(iii) life-cycle costing and life-cycle as-
7	sessment of building materials and systems;
8	and
9	(iv) location and design that promote
10	access to the Federal facility through walk-
11	ing, biking, and mass transit; and
12	(B) possess sufficient technological and or-
13	$ganizational\ adaptability.$
14	(2) Universities.—With respect to the 4 uni-
15	versities at which a demonstration project under this
16	section is conducted—
17	(A) the universities should be selected, after
18	careful review of all applications received con-
19	taining the required information, as determined
20	by the Commercial Director, based on—
21	(i) successful and established public-
22	private research and development partner-
23	ships;

1	(ii) demonstrated capabilities to con-
2	struct or renovate buildings that meet high
3	$indo or\ environmental\ quality\ standards;$
4	$(iii)\ organizational\ flexibility;$
5	$(iv)\ technological\ adaptability;$
6	(v) the demonstrated capacity of at
7	least 1 university to replicate lessons
8	learned among nearby or sister universities,
9	preferably by participation in groups or
10	consortia that promote sustainability;
11	(vi) the demonstrated capacity of at
12	least 1 university to have officially-adopted,
13	institution-wide 'high-performance green
14	building" guidelines for all campus build-
15	ing projects; and
16	(vii) the demonstrated capacity of at
17	least 1 university to have been recognized by
18	similar institutions as a national leader in
19	sustainability education and curriculum for
20	students of the university; and
21	(B) each university shall be located in a dif-
22	ferent climatic region of the United States, each
23	of which regions shall have, as determined by the
24	Office of Commercial High-Performance Green
25	Buildings—

1	(i) a hot, dry climate;
2	(ii) a hot, humid climate;
3	(iii) a cold climate; or
4	(iv) a temperate climate (including a
5	climate with cold winters and humid sum-
6	mers).
7	(d) Applications.—To receive a grant under sub-
8	section (b), an eligible applicant shall submit to the Federal
9	Director or the Commercial Director an application at such
10	time, in such manner, and containing such information as
11	the Director may require, including a written assurance
12	that all laborers and mechanics employed by contractors or
13	subcontractors during construction, alteration, or repair
14	that is financed, in whole or in part, by a grant under
15	this section shall be paid wages at rates not less than those
16	prevailing on similar construction in the locality, as deter-
17	mined by the Secretary of Labor in accordance with sec-
18	tions 3141 through 3144, 3146, and 3147 of title 40, United
19	States Code. The Secretary of Labor shall, with respect to
20	the labor standards described in this subsection, have the
21	authority and functions set forth in Reorganization Plan
22	Numbered 14 of 1950 (5 U.S.C. App.) and section 3145 of
23	title 40 United States Code

1	(e) REPORT.—Not later than 1 year after the date of
2	enactment of this Act, and annually thereafter through Sep-
3	tember 30, 2014—
4	(1) the Federal Director and the Commercial Di-
5	rector shall submit to the Secretary a report that de-
6	scribes the status of the demonstration projects; and
7	(2) each University at which a demonstration
8	project under this section is conducted shall submit to
9	the Secretary a report that describes the status of the
10	demonstration projects under this section.
11	(f) Authorization of Appropriations.—There is
12	authorized to be appropriated to carry out the demonstra-
13	tion project described in section (b)(1) \$10,000,000 for the
14	period of fiscal years 2008 through 2012, and to carry out
15	the demonstration project described in section $(b)(2)$,
16	\$10,000,000 for the period of fiscal years 2008 through
17	2012, to remain available until expended.
18	SEC. 492. RESEARCH AND DEVELOPMENT.
19	(a) Establishment.—The Federal Director and the
20	Commercial Director, jointly and in coordination with the
21	Advisory Committee, shall—
22	(1)(A) survey existing research and studies relat-
23	ing to high-performance green buildings; and
24	(B) coordinate activities of common interest;

1	(2) develop and recommend a high-performance
2	green building research plan that—
3	(A) identifies information and research
4	needs, including the relationships between
5	human health, occupant productivity, safety, se-
6	curity, and accessibility and each of—
7	(i) emissions from materials and prod-
8	ucts in the building;
9	(ii) natural day lighting;
10	(iii) ventilation choices and tech-
11	nologies;
12	(iv) heating, cooling, and system con-
13	trol choices and technologies;
14	(v) moisture control and mold;
15	(vi) maintenance, cleaning, and pest
16	$control\ activities;$
17	$(vii)\ acoustics;$
18	(viii) access to public transportation;
19	and
20	(ix) other issues relating to the health,
21	comfort, productivity, and performance of
22	occupants of the building;
23	(B) promotes the development and dissemi-
24	nation of high-performance green building meas-

1	urement tools that, at a minimum, may be
2	used—
3	(i) to monitor and assess the life-cycle
4	performance of facilities (including dem-
5	onstration projects) built as high-perform-
6	ance green buildings; and
7	(ii) to perform life-cycle assessments;
8	and
9	(C) identifies and tests new and emerging
10	technologies for high performance green build-
11	ings;
12	(3) assist the budget and life-cycle costing func-
13	$tions\ of\ the\ Directors'\ Offices\ under\ section\ 436(d);$
14	(4) study and identify potential benefits of green
15	buildings relating to security, natural disaster, and
16	emergency needs of the Federal Government; and
17	(5) support other research initiatives determined
18	by the Directors' Offices.
19	(b) Indoor Air Quality.—The Federal Director, in
20	consultation with the Administrator of the Environmental
21	Protection Agency and the Advisory Committee, shall de-
22	velop and carry out a comprehensive indoor air quality
23	program for all Federal facilities to ensure the safety of
24	Federal workers and facility occupants—

1	(1) during new construction and renovation of
2	facilities; and
3	(2) in existing facilities.
4	SEC. 493. ENVIRONMENTAL PROTECTION AGENCY DEM-
5	ONSTRATION GRANT PROGRAM FOR LOCAL
6	GOVERNMENTS.
7	Title III of the Clean Air Act (42 U.S.C. 7601 et seq.)
8	is amended by adding at the end the following:
9	"SEC. 329. DEMONSTRATION GRANT PROGRAM FOR LOCAL
10	GOVERNMENTS.
11	"(a) Grant Program.—
12	"(1) In General.—The Administrator shall es-
13	tablish a demonstration program under which the Ad-
14	ministrator shall provide competitive grants to assist
15	local governments (such as municipalities and coun-
16	ties), with respect to local government buildings—
17	"(A) to deploy cost-effective technologies and
18	practices; and
19	"(B) to achieve operational cost savings,
20	through the application of cost-effective tech-
21	nologies and practices, as verified by the Admin-
22	istrator.
23	"(2) Cost sharing.—

1	"(A) In General.—The Federal share of
2	the cost of an activity carried out using a grant
3	provided under this section shall be 40 percent.
4	"(B) Waiver of non-federal share.—
5	The Administrator may waive up to 100 percent
6	of the local share of the cost of any grant under
7	this section should the Administrator determine
8	that the community is economically distressed,
9	pursuant to objective economic criteria estab-
10	lished by the Administrator in published guide-
11	lines.
12	"(3) Maximum amount.—The amount of a
13	grant provided under this subsection shall not exceed
14	\$1,000,000.
15	"(b) Guidelines.—
16	"(1) In general.—Not later than 1 year after
17	the date of enactment of this section, the Adminis-
18	trator shall issue guidelines to implement the grant
19	program established under subsection (a).
20	"(2) Requirements.—The guidelines under
21	paragraph (1) shall establish—
22	"(A) standards for monitoring and
23	verification of operational cost savings through
24	the application of cost-effective technologies and
25	practices reported by grantees under this section:

1 "(B) standards for grantees to implement 2 training programs, and to provide technical assistance and education, relating to the retrofit of 3 4 buildings using cost-effective technologies and 5 practices; and 6 "(C) a requirement that each local govern-7 ment that receives a grant under this section 8 shall achieve facility-wide cost savings, through 9 renovation of existing local government buildings 10 using cost-effective technologies and practices, of 11 at least 40 percent as compared to the baseline 12 operational costs of the buildings before the ren-13 ovation (as calculated assuming a 3-year, weath-14 er-normalized average). 15 "(c) Compliance With State and Local Law.— Nothing in this section or any program carried out using 16 a grant provided under this section supersedes or otherwise 17 18 affects any State or local law, to the extent that the State 19 or local law contains a requirement that is more stringent than the relevant requirement of this section. 20 21 "(d) AUTHORIZATION OF APPROPRIATIONS.—There is 22 authorized to be appropriated to carry out this section \$20,000,000 for each of fiscal years 2007 through 2012.

"(e) Reports.— 24

23

1	"(1) In general.—The Administrator shall pro-
2	vide annual reports to Congress on cost savings
3	achieved and actions taken and recommendations
4	made under this section, and any recommendations
5	for further action.
6	"(2) Final Report.—The Administrator shall
7	issue a final report at the conclusion of the program,
8	including findings, a summary of total cost savings
9	achieved, and recommendations for further action.
10	"(f) Termination.—The program under this section
11	shall terminate on September 30, 2012.
12	"(g) Definitions.—In this section, the terms 'cost ef-
13	fective technologies and practices' and 'operating cost sav-
14	ings' shall have the meanings defined in section 401 of the
15	Energy Independence and Security Act of 2007.".
16	SEC. 494. GREEN BUILDING ADVISORY COMMITTEE.
17	(a) Establishment.—Not later than 180 days after
18	the date of enactment of this Act, the Federal Director, in
19	coordination with the Commercial Director, shall establish
20	an advisory committee, to be known as the "Green Building
21	Advisory Committee".
22	(b) Membership.—
23	(1) In General.—The Committee shall be com-
24	posed of representatives of, at a minimum—

1	(A) each agency referred to in section
2	421(e); and
3	(B) other relevant agencies and entities, as
4	determined by the Federal Director, including at
5	least 1 representative of each of—
6	(i) State and local governmental green
7	$building\ programs;$
8	(ii) independent green building asso-
9	ciations or councils;
10	(iii) building experts, including archi-
11	tects, material suppliers, and construction
12	contractors;
13	(iv) security advisors focusing on na-
14	tional security needs, natural disasters, and
15	other dire emergency situations;
16	(v) public transportation industry ex-
17	perts; and
18	(vi) environmental health experts, in-
19	cluding those with experience in children's
20	health.
21	(2) Non-federal members.—The total number
22	of non-Federal members on the Committee at any
23	time shall not exceed 15.
24	(c) Meetings.—The Federal Director shall establish
25	a regular schedule of meetings for the Committee.

1	(d) Duties.—The Committee shall provide advice and
2	expertise for use by the Federal Director in carrying our
3	the duties under this subtitle, including such recommenda-
4	tions relating to Federal activities carried out under sec-
5	tions 434 through 436 as are agreed to by a majority of
6	the members of the Committee.
7	(e) FACA Exemption.—The Committee shall not be
8	subject to section 14 of the Federal Advisory Committee Act
9	(5 U.S.C. App.).
10	SEC. 495. ADVISORY COMMITTEE ON ENERGY EFFICIENCY
11	FINANCE.
12	(a) Establishment.—The Secretary, acting through
13	the Assistant Secretary of Energy for Energy Efficiency
13 14	the Assistant Secretary of Energy for Energy Efficiency and Renewable Energy, shall establish an Advisory Com-
14	and Renewable Energy, shall establish an Advisory Com-
14 15	and Renewable Energy, shall establish an Advisory Com- mittee on Energy Efficiency Finance to provide advice and recommendations to the Department on energy efficiency fi-
14 15 16 17	and Renewable Energy, shall establish an Advisory Com- mittee on Energy Efficiency Finance to provide advice and recommendations to the Department on energy efficiency fi-
14 15 16 17	and Renewable Energy, shall establish an Advisory Committee on Energy Efficiency Finance to provide advice and recommendations to the Department on energy efficiency finance and investment issues, options, ideas, and trends,
14 15 16 17	and Renewable Energy, shall establish an Advisory Committee on Energy Efficiency Finance to provide advice and recommendations to the Department on energy efficiency finance and investment issues, options, ideas, and trends, and to assist the energy community in identifying practical
114 115 116 117 118	and Renewable Energy, shall establish an Advisory Committee on Energy Efficiency Finance to provide advice and recommendations to the Department on energy efficiency finance and investment issues, options, ideas, and trends, and to assist the energy community in identifying practical ways of lowering costs and increasing investments in energy
14 15 16 17 18 19 20	and Renewable Energy, shall establish an Advisory Committee on Energy Efficiency Finance to provide advice and recommendations to the Department on energy efficiency finance and investment issues, options, ideas, and trends, and to assist the energy community in identifying practical ways of lowering costs and increasing investments in energy efficiency technologies.
114 115 116 117 118 119 220 221	and Renewable Energy, shall establish an Advisory Committee on Energy Efficiency Finance to provide advice and recommendations to the Department on energy efficiency finance and investment issues, options, ideas, and trends, and to assist the energy community in identifying practical ways of lowering costs and increasing investments in energy efficiency technologies. (b) Membership.—The advisory committee established.

(2) availability of venture capital;

25

1	(3) availability of other sources of private equity;
2	(4) investment banking with respect to corporate
3	finance;
4	(5) investment banking with respect to mergers
5	and acquisitions;
6	(6) equity capital markets;
7	(7) debt capital markets;
8	(8) research analysis;
9	(9) sales and trading;
10	(10) commercial lending; and
11	(11) residential lending.
12	(c) Termination.—The Advisory Committee on En-
13	ergy Efficiency Finance shall terminate on the date that
14	is 10 years after the date of enactment of this Act.
15	(d) AUTHORIZATION OF APPROPRIATIONS.—There are
16	authorized to be appropriated such sums as are necessary
17	to the Secretary for carrying out this section.

1	TITLE V—ENERGY SAVINGS IN
2	GOVERNMENT AND PUBLIC
3	INSTITUTIONS
4	Subtitle A—United States Capitol
5	Complex
6	SEC. 501. CAPITOL COMPLEX PHOTOVOLTAIC ROOF FEASI-
7	BILITY STUDIES.
8	(a) Studies.—The Architect of the Capitol may con-
9	duct feasibility studies regarding construction of photo-
10	voltaic roofs for the Rayburn House Office Building and
11	the Hart Senate Office Building.
12	(b) Report.—Not later than 6 months after the date
13	of enactment of this Act, the Architect of the Capitol shall
14	transmit to the Committee on Transportation and Infra-
15	$structure\ of\ the\ House\ of\ Representatives\ and\ the\ Committee$
16	on Rules and Administration of the Senate a report on the
17	results of the feasibility studies and recommendations re-
18	garding construction of photovoltaic roofs for the buildings
19	referred to in subsection (a).
20	(c) Authorization of Appropriations.—There is
21	authorized to be appropriated to carry out this section
22	\$500,000.
23	SEC. 502. CAPITOL COMPLEX E-85 REFUELING STATION.
24	(a) Construction.—The Architect of the Capitol may
25	construct a fuel tank and pumping system for $E\!-\!85$ fuel

- 1 at or within close proximity to the Capitol Grounds Fuel
- 2 Station.
- 3 (b) USE.—The E-85 fuel tank and pumping system
- 4 shall be available for use by all legislative branch vehicles
- 5 capable of operating with E-85 fuel, subject to such other
- 6 legislative branch agencies reimbursing the Architect of the
- 7 Capitol for the costs of E-85 fuel used by such other legisla-
- 8 tive branch vehicles.
- 9 (c) Authorization of Appropriations.—There is
- 10 authorized to be appropriated to carry out this section
- 11 \$640,000 for fiscal year 2008.
- 12 SEC. 503. ENERGY AND ENVIRONMENTAL MEASURES IN
- 13 CAPITOL COMPLEX MASTER PLAN.
- 14 (a) In General.—To the maximum extent prac-
- 15 ticable, the Architect of the Capitol shall include energy effi-
- 16 ciency and conservation measures, greenhouse gas emission
- 17 reduction measures, and other appropriate environmental
- 18 measures in the Capitol Complex Master Plan.
- 19 (b) Report.—Not later than 6 months after the date
- 20 of enactment of this Act, the Architect of the Capitol shall
- 21 submit to the Committee on Transportation and Infrastruc-
- 22 ture of the House of Representatives and the Committee on
- 23 Rules and Administration of the Senate a report on the
- 24 energy efficiency and conservation measures, greenhouse gas
- 25 emission reduction measures, and other appropriate envi-

1	ronmental measures included in the Capitol Complex Mas-
2	ter Plan pursuant to subsection (a).
3	SEC. 504. PROMOTING MAXIMUM EFFICIENCY IN OPER-
4	ATION OF CAPITOL POWER PLANT.
5	(a) Steam Boilers.—
6	(1) In General.—The Architect of the Capitol
7	shall take such steps as may be necessary to operate
8	the steam boilers at the Capitol Power Plant in the
9	most energy efficient manner possible to minimize
10	carbon emissions and operating costs, including ad-
11	justing steam pressures and adjusting the operation of
12	the boilers to take into account variations in demand,
13	including seasonality, for the use of the system.
14	(2) Effective date.—The Architect shall im-
15	plement the steps required under paragraph (1) not
16	later than 30 days after the date of the enactment of
17	$this\ Act.$
18	(b) Chiller Plant.—
19	(1) In General.—The Architect of the Capitol
20	shall take such steps as may be necessary to operate
21	the chiller plant at the Capitol Power Plant in the
22	most energy efficient manner possible to minimize
23	carbon emissions and operating costs, including ad-
24	justing water temperatures and adjusting the oper-

 $ation\ of\ the\ chillers\ to\ take\ into\ account\ variations\ in$

25

- 1 demand, including seasonality, for the use of the sys-
- 2 tem.
- 3 (2) Effective date.—The Architect shall im-
- 4 plement the steps required under paragraph (1) not
- 5 later than 30 days after the date of the enactment of
- 6 this Act.
- 7 (c) Meters.—Not later than 90 days after the date
- 8 of the enactment of this Act, the Architect of the Capitol
- 9 shall evaluate the accuracy of the meters in use at the Cap-
- 10 itol Power Plant and correct them as necessary.
- 11 (d) Report on Implementation.—Not later than
- 12 180 days after the date of the enactment of this Act, the
- 13 Architect of the Capitol shall complete the implementation
- 14 of the requirements of this section and submit a report de-
- 15 scribing the actions taken and the energy efficiencies
- 16 achieved to the Committee on Transportation and Infra-
- 17 structure of the House of Representatives, the Committee on
- 18 Commerce, Science, and Transportation of the Senate, the
- 19 Committee on House Administration of the House of Rep-
- 20 resentatives, and the Committee on Rules and Administra-
- 21 tion of the Senate.

1	SEC. 505. CAPITOL POWER PLANT CARBON DIOXIDE EMIS-
2	SIONS FEASIBILITY STUDY AND DEMONSTRA-
3	TION PROJECTS.
4	The first section of the Act of March 4, 1911 (2 U.S.C.
5	2162; 36 Stat. 1414, chapter 285) is amended in the seventh
6	undesignated paragraph (relating to the Capitol power
7	plant) under the heading "Public Buildings", under the
8	heading "Under the Department of Interior"—
9	(1) by striking "ninety thousand dollars:" and
10	inserting \$90,000."; and
11	(2) by striking "Provided, That hereafter the"
12	and all that follows through the end of the proviso
13	and inserting the following:
14	"(a) Designation.—The heating, lighting, and power
15	plant constructed under the terms of the Act approved April
16	28, 1904 (33 Stat. 479, chapter 1762) shall be known as
17	the 'Capitol Power Plant'.
18	"(b) Definition.—In this section, the term 'carbon di-
19	oxide energy efficiency' means the quantity of electricity
20	used to power equipment for carbon dioxide capture and
21	storage or use.
22	"(c) Feasibility Study.—The Architect of the Cap-
23	itol shall conduct a feasibility study evaluating the avail-
24	able methods to capture, store, and use carbon dioxide emit-
25	ted from the Capitol Power Plant as a result of burning
26	fossil fuels. In carrying out the feasibility study, the Archi-

1	tect of the Capitol is encouraged to consult with individuals
2	with expertise in carbon capture and storage or use, includ-
3	ing experts with the Environmental Protection Agency, De-
4	partment of Energy, academic institutions, non-profit orga-
5	nizations, and industry, as appropriate. The study shall
6	consider—
7	"(1) the availability of technologies to capture
8	and store or use Capitol Power Plant carbon dioxide
9	emissions;
10	"(2) strategies to conserve energy and reduce car-
11	bon dioxide emissions at the Capitol Power Plant;
12	and
13	"(3) other factors as determined by the Architect
14	of the Capitol.
15	"(d) Demonstration Projects.—
16	"(1) In general.—If the feasibility study deter-
17	mines that a demonstration project to capture and
18	store or use Capitol Power Plant carbon dioxide emis-
19	sions is technologically feasible and economically jus-
20	tified (including direct and indirect economic and en-
21	vironmental benefits), the Architect of the Capitol
22	may conduct one or more demonstration projects to
23	capture and store or use carbon dioxide emitted from

the Capitol Power Plant as a result of burning fossil

fuels.

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1	"(2) Factors for consideration.—In car-
2	rying out such demonstration projects, the Architect
3	of the Capitol shall consider—
4	"(A) the amount of Capitol Power Plant
5	carbon dioxide emissions to be captured and
6	stored or used;
7	"(B) whether the proposed project is able to
8	reduce air pollutants other than carbon dioxide;
9	"(C) the carbon dioxide energy efficiency of
10	the proposed project;
11	"(D) whether the proposed project is able to
12	use carbon dioxide emissions;
13	"(E) whether the proposed project could be
14	expanded to significantly increase the amount of
15	Capitol Power Plant carbon dioxide emissions to
16	be captured and stored or used;
17	"(F) the potential environmental, energy,
18	and educational benefits of demonstrating the
19	capture and storage or use of carbon dioxide at
20	the U.S. Capitol; and
21	"(G) other factors as determined by the Ar-
22	chitect of the Capitol.
23	"(3) Terms and conditions.—A demonstration
24	project funded under this section shall be subject to

1	such terms and conditions as the Architect of the Cap-
2	itol may prescribe.
3	"(e) Authorization of Appropriations.—There is
4	authorized to be appropriated to carry out the feasibility
5	study and demonstration project \$3,000,000. Such sums
6	shall remain available until expended.".
7	Subtitle B—Energy Savings
8	Performance Contracting
9	SEC. 511. AUTHORITY TO ENTER INTO CONTRACTS; RE-
10	PORTS.
11	(a) In General.—Section 801(a)(2)(D) of the Na-
12	tional Energy Conservation Policy Act (42 U.S.C.
13	8287(a)(2)(D)) is amended—
14	(1) in clause (ii), by inserting "and" after the
15	semicolon at the end;
16	(2) by striking clause (iii); and
17	(3) by redesignating clause (iv) as clause (iii).
18	(b) Reports.—Section 548(a)(2) of the National En-
19	ergy Conservation Policy Act (42 U.S.C. 8258(a)(2)) is
20	amended by inserting "and any termination penalty expo-
21	sure" after "the energy and cost savings that have resulted
22	from such contracts".
23	(c) Conforming Amendment.—Section 2913 of title
24	10, United States Code, is amended by striking subsection
25	(e).

1	SEC. 512. FINANCING FLEXIBILITY.
2	Section 801(a)(2) of the National Energy Conservation
3	Policy Act (42 U.S.C. 8287(a)(2)) is amended by adding
4	at the end the following:
5	"(E) Funding options.—In carrying out a
6	contract under this title, a Federal agency may
7	use any combination of—
8	"(i) appropriated funds; and
9	"(ii) private financing under an en-
10	ergy savings performance contract.".
11	SEC. 513. PROMOTING LONG-TERM ENERGY SAVINGS PER-
12	FORMANCE CONTRACTS AND VERIFYING SAV-
13	INGS.
14	Section 801(a)(2) of the National Energy Conservation
15	Policy Act (42 U.S.C. 8287(a)(2)) (as amended by section
16	512) is amended—
17	(1) in subparagraph (D), by inserting "begin-
18	ning on the date of the delivery order" after "25
19	years"; and
20	(2) by adding at the end the following:
21	"(F) Promotion of contracts.—In car-
22	rying out this section, a Federal agency shall
23	not—
24	"(i) establish a Federal agency policy

that limits the maximum contract term

1	under subparagraph (D) to a period shorter
2	than 25 years; or
3	"(ii) limit the total amount of obliga-
4	tions under energy savings performance
5	contracts or other private financing of en-
6	ergy savings measures.
7	"(G) Measurement and verification re-
8	QUIREMENTS FOR PRIVATE FINANCING.—
9	"(i) In general.—In the case of en-
10	ergy savings performance contracts, the
11	evaluations and savings measurement and
12	verification required under paragraphs (2)
13	and (4) of section 543(f) shall be used by a
14	Federal agency to meet the requirements for
15	the need for energy audits, calculation of
16	energy savings, and any other evaluation of
17	costs and savings needed to implement the
18	guarantee of savings under this section.
19	"(ii) Modification of existing con-
20	TRACTS.—Not later than 18 months after
21	the date of enactment of this subparagraph,
22	each Federal agency shall, to the maximum
23	extent practicable, modify any indefinite
24	delivery and indefinite quantity energy sav-
25	ings performance contracts, and other in-

1	definite delivery and indefinite quantity
2	contracts using private financing, to con-
3	form to the amendments made by subtitle B
4	of title V of the Energy Independence and
5	Security Act of 2007.".
6	SEC. 514. PERMANENT REAUTHORIZATION.
7	Section 801 of the National Energy Conservation Pol-
8	icy Act (42 U.S.C. 8287) is amended by striking subsection
9	(c).
10	SEC. 515. DEFINITION OF ENERGY SAVINGS.
11	Section 804(2) of the National Energy Conservation
12	Policy Act (42 U.S.C. 8287c(2)) is amended—
13	(1) by redesignating subparagraphs (A), (B),
14	and (C) as clauses (i), (ii), and (iii), respectively,
15	and indenting appropriately;
16	(2) by striking "means a reduction" and insert-
17	ing "means—
18	"(A) a reduction";
19	(3) by striking the period at the end and insert-
20	ing a semicolon; and
21	(4) by adding at the end the following:
22	"(B) the increased efficient use of an exist-
23	ing energy source by cogeneration or heat recov-
24	ery;

1	"(C) if otherwise authorized by Federal or
2	State law (including regulations), the sale or
3	transfer of electrical or thermal energy generated
4	on-site from renewable energy sources or cogen-
5	eration, but in excess of Federal needs, to utili-
6	ties or non-Federal energy users; and
7	"(D) the increased efficient use of existing
8	water sources in interior or exterior applica-
9	tions.".
10	SEC. 516. RETENTION OF SAVINGS.
11	Section 546(c) of the National Energy Conservation
12	Policy Act (42 U.S.C. 8256(c)) is amended by striking
13	paragraph (5).
14	SEC. 517. TRAINING FEDERAL CONTRACTING OFFICERS TO
15	NEGOTIATE ENERGY EFFICIENCY CON-
16	TRACTS.
17	(a) Program.—The Secretary shall create and admin-
18	ister in the Federal Energy Management Program a train-
19	ing program to educate Federal contract negotiation and
20	contract management personnel so that the contract officers
21	are prepared to—
22	(1) negotiate energy savings performance con-
23	tracts;

1	(2) conclude effective and timely contracts for en-
2	ergy efficiency services with all companies offering en-
3	ergy efficiency services; and
4	(3) review Federal contracts for all products and
5	services for the potential energy efficiency opportuni-
6	ties and implications of the contracts.
7	(b) Schedule.—Not later than 1 year after the date
8	of enactment of this Act, the Secretary shall plan, staff, an-
9	nounce, and begin training under the Federal Energy Man-
10	agement Program.
11	(c) Personnel to Be Trained.—Personnel appro-
12	priate to receive training under the Federal Energy Man-
13	agement Program shall be selected by and sent for the train-
14	ing from—
15	(1) the Department of Defense;
16	(2) the Department of Veterans Affairs;
17	(3) the Department;
18	(4) the General Services Administration;
19	(5) the Department of Housing and Urban De-
20	velopment;
21	(6) the United States Postal Service; and
22	(7) all other Federal agencies and departments
23	that enter contracts for buildings, building services,
24	electricity and electricity services, natural gas and
25	natural gas services, heating and air conditioning

- services, building fuel purchases, and other types of
 procurement or service contracts determined by the
 Secretary, in carrying out the Federal Energy Management Program, to offer the potential for energy
 savings and greenhouse gas emission reductions if neqotiated with taking into account those goals.
- 7 (d) Training under the Federal Energy 8 Management Program may be conducted by—
- 9 (1) attorneys or contract officers with experience 10 in negotiating and managing contracts described in 11 subsection (c)(7) from any agency, except that the 12 Secretary shall reimburse the related salaries and ex-13 penses of the attorneys or contract officers from 14 amounts made available for carrying out this section 15 to the extent the attorneys or contract officers are not 16 employees of the Department; and
 - (2) private experts hired by the Secretary for the purposes of this section, except that the Secretary may not hire experts who are simultaneously employed by any company under contract to provide energy efficiency services to the Federal Government.
- 22 (e) AUTHORIZATION OF APPROPRIATIONS.—There are 23 authorized to be appropriated to the Secretary to carry out 24 this section \$750,000 for each of fiscal years 2008 through 25 2012.

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I	SEC. 518. STUDY OF ENERGY AND COST SAVINGS IN NON-
2	BUILDING APPLICATIONS.
3	(a) Definitions.—In this section:
4	(1) Nonbuilding application.—The term
5	"nonbuilding application" means—
6	(A) any class of vehicles, devices, or equip-
7	ment that is transportable under the power of the
8	applicable vehicle, device, or equipment by land,
9	sea, or air and that consumes energy from any
10	fuel source for the purpose of—
11	(i) that transportation; or
12	(ii) maintaining a controlled environ-
13	ment within the vehicle, device, or equip-
14	ment; and
15	(B) any federally-owned equipment used to
16	generate electricity or transport water.
17	(2) Secondary savings.—
18	(A) In General.—The term "secondary
19	savings" means additional energy or cost savings
20	that are a direct consequence of the energy sav-
21	ings that result from the energy efficiency im-
22	provements that were financed and implemented
23	pursuant to an energy savings performance con-
24	tract.
25	(B) Inclusions.—The term "secondary
26	savings" includes—

1	(i) energy and cost savings that result
2	from a reduction in the need for fuel deliv-
3	ery and logistical support;
4	(ii) personnel cost savings and envi-
5	ronmental benefits; and
6	(iii) in the case of electric generation
7	equipment, the benefits of increased effi-
8	ciency in the production of electricity, in-
9	cluding revenues received by the Federal
10	Government from the sale of electricity so
11	produced.
12	(b) STUDY.—
13	(1) In general.—As soon as practicable after
14	the date of enactment of this Act, the Secretary and
15	the Secretary of Defense shall jointly conduct, and
16	submit to Congress and the President a report of, a
17	study of the potential for the use of energy savings
18	performance contracts to reduce energy consumption
19	and provide energy and cost savings in nonbuilding
20	applications.
21	(2) Requirements.—The study under this sub-
22	section shall include—
23	(A) an estimate of the potential energy and
24	cost savings to the Federal Government, includ-

1	ing secondary savings and benefits, from in-
2	creased efficiency in nonbuilding applications;
3	(B) an assessment of the feasibility of ex-
4	tending the use of energy savings performance
5	contracts to nonbuilding applications, including
6	an identification of any regulatory or statutory
7	barriers to that use; and
8	(C) such recommendations as the Secretary
9	and Secretary of Defense determine to be appro-
10	priate.
11	Subtitle C—Energy Efficiency in
12	Federal Agencies
13	SEC. 521. INSTALLATION OF PHOTOVOLTAIC SYSTEM AT DE-
14	PARTMENT OF ENERGY HEADQUARTERS
15	BUILDING.
16	(a) In General.—The Administrator of General
17	Services shall install a photovoltaic system, as set forth in
18	the Sun Wall Design Project, for the headquarters building
19	of the Department located at 1000 Independence Avenue,
20	SW., Washington, DC, commonly known as the Forrestal
21	Building.
22	(b) Funding.—There shall be available from the Fed-
23	eral Buildings Fund established by section 592 of title 40,
24	United States Code, \$30,000,000 to carry out this section.
25	Such sums shall be derived from the unobligated balance

1	of amounts made available from the Fund for fiscal year
2	2007, and prior fiscal years, for repairs and alternations
3	and other activities (excluding amounts made available for
4	the energy program). Such sums shall remain available
5	until expended.
6	SEC. 522. PROHIBITION ON INCANDESCENT LAMPS BY
7	COAST GUARD.
8	(a) Prohibition.—Except as provided by subsection
9	(b), on and after January 1, 2009, a general service incan-
10	descent lamp shall not be purchased or installed in a Coast
11	Guard facility by or on behalf of the Coast Guard.
12	(b) Exception.—A general service incandescent lamp
13	may be purchased, installed, and used in a Coast Guard
14	facility whenever the application of a general service incan-
15	descent lamp is—
16	(1) necessary due to purpose or design, including
17	medical, security, and industrial applications;
18	(2) reasonable due to the architectural or histor-
19	ical value of a light fixture installed before January
20	1, 2009; or
21	(3) the Commandant of the Coast Guard deter-
22	mines that operational requirements necessitate the
23	use of a general service incandescent lamp.
24	(c) Limitation.—In this section, the term "facility"
25	does not include a vessel or aircraft of the Coast Guard.

1	SEC. 523. STANDARD RELATING TO SOLAR HOT WATER
2	HEATERS.
3	Section 305(a)(3)(A) of the Energy Conservation and
4	Production Act (42 U.S.C. 6834(a)(3)(A)) is amended—
5	(1) in clause (i)(II), by striking "and" at the
6	end;
7	(2) in clause (ii), by striking the period at the
8	end and inserting "; and"; and
9	(3) by adding at the end the following:
10	"(iii) if lifecycle cost-effective, as com-
11	pared to other reasonably available tech-
12	nologies, not less than 30 percent of the hot
13	water demand for each new Federal build-
14	ing or Federal building undergoing a major
15	renovation be met through the installation
16	and use of solar hot water heaters.".
17	SEC. 524. FEDERALLY-PROCURED APPLIANCES WITH
18	STANDBY POWER.
19	Section 553 of the National Energy Conservation Pol-
20	icy Act (42 U.S.C. 8259b) is amended—
21	(1) by redesignating subsection (e) as subsection
22	(f); and
23	(2) by inserting after subsection (d) the fol-
24	lowing:
25	"(e) Federally-Procured Appliances With
26	Standby Power.—

1	"(1) Definition of Eligible Product.—In
2	this subsection, the term 'eligible product' means a
3	commercially available, off-the-shelf product that—
4	" $(A)(i)$ uses external standby power devices;
5	or
6	"(ii) contains an internal standby power
7	function; and
8	"(B) is included on the list compiled under
9	paragraph (4).
10	"(2) Federal purchasing requirement.—
11	Subject to paragraph (3), if an agency purchases an
12	eligible product, the agency shall purchase—
13	"(A) an eligible product that uses not more
14	than 1 watt in the standby power consuming
15	mode of the eligible product; or
16	"(B) if an eligible product described in sub-
17	paragraph (A) is not available, the eligible prod-
18	uct with the lowest available standby power
19	wattage in the standby power consuming mode of
20	the eligible product.
21	"(3) Limitation.—The requirements of para-
22	graph (2) shall apply to a purchase by an agency
23	only if—
24	"(A) the lower-wattage eligible product is—
25	"(i) lifecycle cost-effective; and

1	"(ii) practicable; and
2	"(B) the utility and performance of the eli-
3	gible product is not compromised by the lower
4	wattage requirement.
5	"(4) Eligible products.—The Secretary, in
6	consultation with the Secretary of Defense, the Ad-
7	ministrator of the Environmental Protection Agency,
8	and the Administrator of General Services, shall com-
9	pile a publicly accessible list of cost-effective eligible
10	products that shall be subject to the purchasing re-
11	quirements of paragraph (2).".
12	SEC. 525. FEDERAL PROCUREMENT OF ENERGY EFFICIENT
13	PRODUCTS.
14	(a) Amendments.—Section 553 of the National En-
15	ergy Conservation Policy Act (42 U.S.C. 8259b) is amend-
16	ed—
17	(1) in subsection (b)(1), by inserting "in a prod-
18	uct category covered by the Energy Star program or
19	the Federal Energy Management Program for des-
20	ignated products" after "energy consuming product";
21	and
22	(2) in the second sentence of subsection (c)—
23	(A) by inserting 'list in their catalogues,
24	represent as available, and" after "Logistics
25	Agency shall"; and

1	(B) by striking "where the agency" and in-
2	serting "in which the head of the agency".
3	(b) Catalogue Listing Deadline.—Not later than
4	9 months after the date of enactment of this Act, the General
5	Services Administration and the Defense Logistics Agency
6	shall ensure that the requirement established by the amend-
7	ment made by subsection (a)(2)(A) has been fully complied
8	with.
9	SEC. 526. PROCUREMENT AND ACQUISITION OF ALTER-
10	NATIVE FUELS.
11	No Federal agency shall enter into a contract for pro-
12	curement of an alternative or synthetic fuel, including a
13	fuel produced from nonconventional petroleum sources, for
14	any mobility-related use, other than for research or testing,
15	unless the contract specifies that the lifecycle greenhouse gas
16	emissions associated with the production and combustion
17	of the fuel supplied under the contract must, on an ongoing
18	basis, be less than or equal to such emissions from the equiv-
19	alent conventional fuel produced from conventional petro-
20	leum sources.
21	SEC. 527. GOVERNMENT EFFICIENCY STATUS REPORTS.
22	(a) In General.—Each Federal agency subject to any
23	of the requirements of this title or the amendments made
24	by this title shall compile and submit to the Director of

1	the Office of Management and Budget an annual Govern-
2	ment efficiency status report on—
3	(1) compliance by the agency with each of the re-
4	quirements of this title and the amendments made by
5	$this \ title;$
6	(2) the status of the implementation by the agen-
7	cy of initiatives to improve energy efficiency, reduce
8	energy costs, and reduce emissions of greenhouse
9	gases; and
10	(3) savings to the taxpayers of the United States
11	resulting from mandated improvements under this
12	title and the amendments made by this title
13	(b) Submission.—The report shall be submitted—
14	(1) to the Director at such time as the Director
15	requires;
16	(2) in electronic, not paper, format; and
17	(3) consistent with related reporting require-
18	ments.
19	SEC. 528. OMB GOVERNMENT EFFICIENCY REPORTS AND
20	SCORECARDS.
21	(a) Reports.—Not later than April 1 of each year,
22	the Director of the Office of Management and Budget shall
23	submit an annual Government efficiency report to the Com-
24	mittee on Oversight and Government Reform of the House

1	of Representatives and the Committee on Governmental Af-
2	fairs of the Senate, which shall contain—
3	(1) a summary of the information reported by
4	agencies under section 527;
5	(2) an evaluation of the overall progress of the
6	Federal Government toward achieving the goals of
7	this title and the amendments made by this title; and
8	(3) recommendations for additional actions nec-
9	essary to meet the goals of this title and the amend-
10	ments made by this title.
11	(b) Scorecards.—The Director of the Office of Man-
12	agement and Budget shall include in any annual energy
13	scorecard the Director is otherwise required to submit a de-
14	scription of the compliance of each agency with the require-
15	ments of this title and the amendments made by this title.
16	SEC. 529. ELECTRICITY SECTOR DEMAND RESPONSE.
17	(a) In General.—Title V of the National Energy
18	Conservation Policy Act (42 U.S.C. 8241 et seq.) is amend-
19	ed by adding at the end the following:
20	"PART 5—PEAK DEMAND REDUCTION
21	"SEC. 571. NATIONAL ACTION PLAN FOR DEMAND RE-
22	SPONSE.
23	"(a) National Assessment and Report.—The Fed-
24	eral Energy Regulatory Commission ('Commission') shall
25	conduct a National Assessment of Demand Response. The

- 1 Commission shall, within 18 months of the date of enact-
- 2 ment of this part, submit a report to Congress that includes
- 3 each of the following:

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- "(1) Estimation of nationwide demand response
 potential in 5 and 10 year horizons, including data
 on a State-by-State basis, and a methodology for updates of such estimates on an annual basis.
 - "(2) Estimation of how much of this potential can be achieved within 5 and 10 years after the enactment of this part accompanied by specific policy recommendations that if implemented can achieve the estimated potential. Such recommendations shall include options for funding and/or incentives for the development of demand response resources.
 - "(3) The Commission shall further note any barriers to demand response programs offering flexible, non-discriminatory, and fairly compensatory terms for the services and benefits made available, and shall provide recommendations for overcoming such barriers.
- 21 "(4) The Commission shall seek to take advan-22 tage of preexisting research and ongoing work, and 23 shall insure that there is no duplication of effort.
- 24 "(b) National Action Plan on Demand Re-25 Sponse.—The Commission shall further develop a National

- 1 Action Plan on Demand Response, soliciting and accepting
- 2 input and participation from a broad range of industry
- 3 stakeholders, State regulatory utility commissioners, and
- 4 non-governmental groups. The Commission shall seek con-
- 5 sensus where possible, and decide on optimum solutions to
- 6 issues that defy consensus. Such Plan shall be completed
- 7 within one year after the completion of the National Assess-
- 8 ment of Demand Response, and shall meet each of the fol-
- 9 lowing objectives:
- "(1) Identification of requirements for technical
 assistance to States to allow them to maximize the
 amount of demand response resources that can be developed and deployed.
- "(2) Design and identification of requirements
 for implementation of a national communications
 program that includes broad-based customer education and support.
- "(3) Development or identification of analytical tools, information, model regulatory provisions, model contracts, and other support materials for use by customers, states, utilities and demand response providers.
- "(c) Upon completion, the National Action Plan on 24 Demand Response shall be published, together with any fa-25 vorable and dissenting comments submitted by participants

- 1 in its preparation. Six months after publication, the Com-
- 2 mission, together with the Secretary of Energy, shall submit
- 3 to Congress a proposal to implement the Action Plan, in-
- 4 cluding specific proposed assignments of responsibility, pro-
- 5 posed budget amounts, and any agreements secured for par-
- 6 ticipation from State and other participants.
- 7 "(d) Authorization.—There are authorized to be ap-
- 8 propriated to the Commission to carry out this section not
- 9 more than \$10,000,000 for each of the fiscal years 2008,
- 10 2009, and 2010.".
- 11 (b) Table of Contents.—The table of contents for
- 12 the National Energy Conservation Policy Act (42 U.S.C.
- 13 8201 note) is amended by adding after the items relating
- 14 to part 4 of title V the following:

"Part 5—Peak Demand Reduction

"Sec. 571. National Action Plan for Demand Response.".

15 Subtitle D—Energy Efficiency of

- 16 **Public Institutions**
- 17 SEC. 531. REAUTHORIZATION OF STATE ENERGY PRO-
- 18 GRAMS.
- 19 Section 365(f) of the Energy Policy and Conservation
- 20 Act (42 U.S.C. 6325(f)) is amended by striking
- 21 "\$100,000,000 for each of the fiscal years 2006 and 2007
- 22 and \$125,000,000 for fiscal year 2008" and inserting
- 23 "\$125,000,000 for each of fiscal years 2007 through 2012".

1 SEC. 532. UTILITY ENERGY EFFICIENCY PROGRAMS.

2	(a) Electric Utilities.—Section 111(d) of the Pub-
3	lic Utility Regulatory Policies Act of 1978 (16 U.S.C.
4	2621(d)) is amended by adding at the end the following:
5	"(16) Integrated resource planning.—Each
6	electric utility shall—
7	"(A) integrate energy efficiency resources
8	into utility, State, and regional plans; and
9	"(B) adopt policies establishing cost-effective
10	energy efficiency as a priority resource.
11	"(17) Rate design modifications to pro-
12	MOTE ENERGY EFFICIENCY INVESTMENTS.—
13	"(A) In general.—The rates allowed to be
14	charged by any electric utility shall—
15	"(i) align utility incentives with the
16	delivery of cost-effective energy efficiency;
17	and
18	"(ii) promote energy efficiency invest-
19	ments.
20	"(B) Policy options.—In complying with
21	subparagraph (A), each State regulatory author-
22	ity and each nonregulated utility shall con-
23	sider—
24	"(i) removing the throughput incentive
25	and other regulatory and management dis-
26	incentives to energy efficiency;

1	"(ii) providing utility incentives for
2	the successful management of energy effi-
3	ciency programs;
4	"(iii) including the impact on adop-
5	tion of energy efficiency as 1 of the goals of
6	retail rate design, recognizing that energy
7	efficiency must be balanced with other objec-
8	tives;
9	"(iv) adopting rate designs that en-
10	courage energy efficiency for each customer
11	class;
12	"(v) allowing timely recovery of energy
13	efficiency-related costs; and
14	"(vi) offering home energy audits, of-
15	fering demand response programs, publi-
16	cizing the financial and environmental ben-
17	efits associated with making home energy
18	efficiency improvements, and educating
19	homeowners about all existing Federal and
20	State incentives, including the availability
21	of low-cost loans, that make energy effi-
22	ciency improvements more affordable.".
23	(b) Natural Gas Utilities.—Section 303(b) of the
24	Public Utility Regulatory Policies Act of 1978 (15 U.S.C.
25	3203(b)) is amended by adding at the end the following:

1	"(5) Energy efficiency.—Each natural gas
2	utility shall—
3	"(A) integrate energy efficiency resources
4	into the plans and planning processes of the nat-
5	ural gas utility; and
6	"(B) adopt policies that establish energy ef-
7	ficiency as a priority resource in the plans and
8	planning processes of the natural gas utility.
9	"(6) Rate design modifications to promote
10	ENERGY EFFICIENCY INVESTMENTS.—
11	"(A) In general.—The rates allowed to be
12	charged by a natural gas utility shall align util-
13	ity incentives with the deployment of cost-effec-
14	tive energy efficiency.
15	"(B) Policy options.—In complying with
16	subparagraph (A), each State regulatory author-
17	ity and each nonregulated utility shall con-
18	sider—
19	"(i) separating fixed-cost revenue re-
20	covery from the volume of transportation or
21	sales service provided to the customer;
22	"(ii) providing to utilities incentives
23	for the successful management of energy effi-
24	ciency programs, such as allowing utilities

1	to retain a portion of the cost-reducing ben-
2	efits accruing from the programs;
3	"(iii) promoting the impact on adop-
4	tion of energy efficiency as 1 of the goals of
5	retail rate design, recognizing that energy
6	efficiency must be balanced with other objec-
7	tives; and
8	"(iv) adopting rate designs that en-
9	courage energy efficiency for each customer
10	class.
11	For purposes of applying the provisions of this
12	subtitle to this paragraph, any reference in this
13	subtitle to the date of enactment of this Act shall
14	be treated as a reference to the date of enactment
15	of this paragraph.".
16	(c) Conforming Amendment.—Section 303(a) of the
17	Public Utility Regulatory Policies Act of 1978 U.S.C.
18	3203(a)) is amended by striking "and (4)" inserting "(4),
19	(5), and (6)".
20	Subtitle E—Energy Efficiency and
21	Conservation Block Grants
22	SEC. 541. DEFINITIONS.
23	In this subtitle:
24	(1) Eligible enti-The term "eligible enti-
25	ty" means—

1	(A) a State;
2	(B) an eligible unit of local government;
3	and
4	(C) an Indian tribe.
5	(2) Eligible unit of local government.—
6	The term "eligible unit of local government" means—
7	(A) an eligible unit of local government-al-
8	ternative 1; and
9	(B) an eligible unit of local government-al-
10	ternative 2.
11	(3)(A) Eligible unit of local government—
12	ALTERNATIVE 1.—The term "eligible unit of local gov-
13	ernment-alternative 1" means—
14	(i) a city with a population—
15	(I) of at least 35,000; or
16	(II) that causes the city to be 1 of the
17	10 highest-populated cities of the State in
18	which the city is located; and
19	(ii) a county with a population—
20	(I) of at least 200,000; or
21	(II) that causes the county to be 1 of
22	the 10 highest-populated counties of the
23	State in which the county is located.

1	(B) Eligible unit of local government—al-
2	TERNATIVE 2.—The term "eligible unit of local gov-
3	ernment-alternative 2" means—
4	(i) a city with a population of at least
5	50,000; or
6	(ii) a county with a population of at least
7	200,000.
8	(4) Indian tribe" has
9	the meaning given the term in section 4 of the Indian
10	Self- Determination and Education Assistance Act
11	(25 U.S.C. 450b).
12	(5) Program.—The term "program" means the
13	Energy Efficiency and Conservation Block Grant
14	$Program\ established\ under\ section\ 542 (a).$
15	(6) State.—The term "State" means—
16	(A) a State;
17	(B) the District of Columbia;
18	(C) the Commonwealth of Puerto Rico; and
19	(D) any other territory or possession of the
20	United States.
21	SEC. 542. ENERGY EFFICIENCY AND CONSERVATION BLOCK
22	GRANT PROGRAM.
23	(a) Establishment.—The Secretary shall establish a
24	program, to be known as the "Energy Efficiency and Con-
25	servation Block Grant Program", under which the Sec-

1	retary shall provide grants to eligible entities in accordance
2	with this subtitle.
3	(b) Purpose.—The purpose of the program shall be
4	to assist eligible entities in implementing strategies—
5	(1) to reduce fossil fuel emissions created as a re-
6	sult of activities within the jurisdictions of eligible
7	entities in manner that—
8	(A) is environmentally sustainable; and
9	(B) to the maximum extent practicable,
10	maximizes benefits for local and regional com-
11	munities;
12	(2) to reduce the total energy use of the eligible
13	entities; and
14	(3) to improve energy efficiency in—
15	(A) the transportation sector;
16	(B) the building sector; and
17	(C) other appropriate sectors.
18	SEC. 543. ALLOCATION OF FUNDS.
19	(a) In General.—Of amounts made available to pro-
20	vide grants under this subtitle for each fiscal year, the Sec-
21	retary shall allocate—
22	(1) 68 percent to eligible units of local govern-
23	ment in accordance with subsection (b);
24	(2) 28 percent to States in accordance with sub-
25	section (c);

1	(3) 2 percent to Indian tribes in accordance with
2	subsection (d); and
3	(4) 2 percent for competitive grants under sec-
4	tion 546.
5	(b) Eligible Units of Local Government.—Of
6	amounts available for distribution to eligible units of local
7	government under subsection (a)(1), the Secretary shall pro-
8	vide grants to eligible units of local government under this
9	section based on a formula established by the Secretary ac-
10	cording to—
11	(1) the populations served by the eligible units of
12	local government, according to the latest available de-
13	cennial census; and
14	(2) the daytime populations of the eligible units
15	of local government and other similar factors (such as
16	square footage of commercial, office, and industrial
17	space), as determined by the Secretary.
18	(c) States.—Of amounts available for distribution to
19	States under subsection (a)(2), the Secretary shall pro-
20	vide—
21	(1) not less than 1.25 percent to each State; and
22	(2) the remainder among the States, based on a
23	formula to be established by the Secretary that takes
24	into account—
25	(A) the population of each State; and

1	(B) any other criteria that the Secretary de-
2	termines to be appropriate.
3	(d) Indian Tribes.—Of amounts available for dis-
4	tribution to Indian tribes under subsection (a)(3), the Sec-
5	retary shall establish a formula for allocation of the
6	amounts to Indian tribes, taking into account any factors
7	that the Secretary determines to be appropriate.
8	(e) Publication of Allocation Formulas.—Not
9	later than 90 days before the beginning of each fiscal year
10	for which grants are provided under this subtitle, the Sec-
11	retary shall publish in the Federal Register the formulas
12	for allocation established under this section.
13	(f) State and Local Advisory Committee.—The
14	Secretary shall establish a State and local advisory com-
15	mittee to advise the Secretary regarding administration,
16	implementation, and evaluation of the program.
17	SEC. 544. USE OF FUNDS.
18	An eligible entity may use a grant received under this
19	subtitle to carry out activities to achieve the purposes of
20	the program, including—
21	(1) development and implementation of an en-
22	ergy efficiency and conservation strategy under sec-
23	tion 545(b);

1	(2) retaining technical consultant services to as-
2	sist the eligible entity in the development of such a
3	strategy, including—
4	(A) formulation of energy efficiency, energy
5	conservation, and energy usage goals;
6	(B) identification of strategies to achieve
7	those goals—
8	(i) through efforts to increase energy ef-
9	ficiency and reduce energy consumption;
10	and
11	(ii) by encouraging behavioral changes
12	among the population served by the eligible
13	entity;
14	(C) development of methods to measure
15	progress in achieving the goals;
16	(D) development and publication of annual
17	reports to the population served by the eligible
18	entity describing—
19	(i) the strategies and goals; and
20	(ii) the progress made in achieving the
21	strategies and goals during the preceding
22	calendar year; and
23	(E) other services to assist in the implemen-
24	tation of the energy efficiency and conservation
25	strategy;

1	(3) conducting residential and commercial build-
2	ing energy audits;
3	(4) establishment of financial incentive programs
4	for energy efficiency improvements;
5	(5) the provision of grants to nonprofit organiza-
6	tions and governmental agencies for the purpose of
7	performing energy efficiency retrofits;
8	(6) development and implementation of energy
9	efficiency and conservation programs for buildings
10	and facilities within the jurisdiction of the eligible en-
11	tity, including—
12	(A) design and operation of the programs;
13	(B) identifying the most effective methods
14	for achieving maximum participation and effi-
15	ciency rates;
16	(C) public education;
17	(D) measurement and verification protocols;
18	and
19	(E) identification of energy efficient tech-
20	nologies;
21	(7) development and implementation of pro-
22	grams to conserve energy used in transportation, in-
23	cluding—
24	(A) use of flex time by employers;
25	(B) satellite work centers;

1	(C) development and promotion of zoning
2	guidelines or requirements that promote energy
3	efficient development;
4	(D) development of infrastructure, such as
5	bike lanes and pathways and pedestrian walk-
6	ways;
7	(E) synchronization of traffic signals; and
8	(F) other measures that increase energy effi-
9	ciency and decrease energy consumption;
10	(8) development and implementation of building
11	codes and inspection services to promote building en-
12	ergy efficiency;
13	(9) application and implementation of energy
14	distribution technologies that significantly increase
15	energy efficiency, including—
16	(A) distributed resources; and
17	(B) district heating and cooling systems;
18	(10) activities to increase participation and effi-
19	ciency rates for material conservation programs, in-
20	cluding source reduction, recycling, and recycled con-
21	tent procurement programs that lead to increases in
22	energy efficiency;
23	(11) the purchase and implementation of tech-
24	nologies to reduce, capture, and, to the maximum ex-

1	tent practicable, use methane and other greenhouse
2	gases generated by landfills or similar sources;
3	(12) replacement of traffic signals and street
4	lighting with energy efficient lighting technologies, in-
5	cluding—
6	(A) light emitting diodes; and
7	(B) any other technology of equal or greater
8	energy efficiency;
9	(13) development, implementation, and installa-
10	tion on or in any government building of the eligible
11	entity of onsite renewable energy technology that gen-
12	erates electricity from renewable resources, includ-
13	ing—
14	(A) solar energy;
15	(B) wind energy;
16	(C) fuel cells; and
17	(D) biomass; and
18	(14) any other appropriate activity, as deter-
19	mined by the Secretary, in consultation with—
20	(A) the Administrator of the Environmental
21	$Protection\ Agency;$
22	(B) the Secretary of Transportation; and
23	(C) the Secretary of Housing and Urban
24	Development.

1 SEC. 545. REQUIREMENTS FOR ELIGIBLE ENTITIES.

2	(a) Construction Requirement.—
3	(1) In general.—To be eligible to receive a
4	grant under the program, each eligible applicant shall
5	submit to the Secretary a written assurance that all
6	laborers and mechanics employed by any contractor
7	or subcontractor of the eligible entity during any con-
8	struction, alteration, or repair activity funded, in
9	whole or in part, by the grant shall be paid wages at
10	rates not less than the prevailing wages for similar
11	construction activities in the locality, as determined
12	by the Secretary of Labor, in accordance with sections
13	3141 through 3144, 3146, and 3147 of title 40,
14	United States Code.
15	(2) Secretary of Labor.—With respect to the
16	labor standards referred to in paragraph (1), the Sec-
17	retary of Labor shall have the authority and functions
18	described in—
19	(A) Reorganization Plan Numbered 14 of
20	1950 (5 U.S.C. 903 note); and
21	(B) section 3145 of title 40, United States
22	Code.
23	(b) Eligible Units of Local Government and In-
24	DIAN TRIBES.—
25	(1) Proposed strategy.—

1	(A) In general.—Not later than 1 year
2	after the date on which an eligible unit of local
3	government or Indian tribe receives a grant
4	under this subtitle, the eligible unit of local gov-
5	ernment or Indian tribe shall submit to the Sec-
6	retary a proposed energy efficiency and con-
7	servation strategy in accordance with this para-
8	graph.
9	(B) Inclusions.—The proposed strategy
10	under subparagraph (A) shall include—
11	(i) a description of the goals of the eli-
12	gible unit of local government or Indian
13	tribe, in accordance with the purposes of
14	this subtitle, for increased energy efficiency
15	and conservation in the jurisdiction of the
16	eligible unit of local government or Indian
17	tribe; and
18	(ii) a plan for the use of the grant to
19	assist the eligible unit of local government
20	or Indian tribe in achieving those goals, in
21	accordance with section 544.
22	(C) REQUIREMENTS FOR ELIGIBLE UNITS
23	OF LOCAL GOVERNMENT.—In developing the
24	strategy under subparagraph (A), an eligible
25	unit of local government shall—

1	(i) take into account any plans for the
2	use of funds by adjacent eligible units of
3	local governments that receive grants under
4	the program; and
5	(ii) coordinate and share information
6	with the State in which the eligible unit of
7	local government is located regarding ac-
8	tivities carried out using the grant to maxi-
9	mize the energy efficiency and conservation
10	benefits under this subtitle.
11	(2) Approval by secretary.—
12	(A) In General.—The Secretary shall ap-
13	prove or disapprove a proposed strategy under
14	paragraph (1) by not later than 120 days after
15	the date of submission of the proposed strategy.
16	(B) DISAPPROVAL.—If the Secretary dis-
17	approves a proposed strategy under subpara-
18	graph(A)—
19	(i) the Secretary shall provide to the
20	eligible unit of local government or Indian
21	tribe the reasons for the disapproval; and
22	(ii) the eligible unit of local govern-
23	ment or Indian tribe may revise and resub-
24	mit the proposed strategy as many times as

1	necessary until the Secretary approves a
2	$proposed\ strategy.$
3	(C) Requirement.—The Secretary shall
4	not provide to an eligible unit of local govern-
5	ment or Indian tribe any grant under the pro-
6	gram until a proposed strategy of the eligible
7	unit of local government or Indian tribe is ap-
8	proved by the Secretary under this paragraph.
9	(3) Limitations on use of funds.—Of
10	amounts provided to an eligible unit of local govern-
11	ment or Indian tribe under the program, an eligible
12	unit of local government or Indian tribe may use—
13	(A) for administrative expenses, excluding
14	the cost of meeting the reporting requirements of
15	this subtitle, an amount equal to the greater of—
16	(i) 10 percent; and
17	(ii) \$75,000;
18	(B) for the establishment of revolving loan
19	funds, an amount equal to the greater of—
20	(i) 20 percent; and
21	(ii) \$250,000; and
22	(C) for the provision of subgrants to non-
23	governmental organizations for the purpose of
24	assisting in the implementation of the energy ef-
25	ficiency and conservation strategy of the eligible

1	unit of local government or Indian tribe, an
2	amount equal to the greater of—
3	(i) 20 percent; and
4	(ii) \$250,000.
5	(4) Annual report.—Not later than 2 years
6	after the date on which funds are initially provided
7	to an eligible unit of local government or Indian tribe
8	under the program, and annually thereafter, the eligi-
9	ble unit of local government or Indian tribe shall sub-
10	mit to the Secretary a report describing—
11	(A) the status of development and imple-
12	mentation of the energy efficiency and conserva-
13	tion strategy of the eligible unit of local govern-
14	ment or Indian tribe; and
15	(B) as practicable, an assessment of energy
16	efficiency gains within the jurisdiction of the eli-
17	gible unit of local government or Indian tribe.
18	(c) States.—
19	(1) Distribution of funds.—
20	(A) In general.—A State that receives a
21	grant under the program shall use not less than
22	60 percent of the amount received to provide sub-
23	grants to units of local government in the State
24	that are not eligible units of local government.

1	(B) Deadline.—The State shall provide
2	the subgrants required under subparagraph (A)
3	by not later than 180 days after the date on
4	which the Secretary approves a proposed energy
5	efficiency and conservation strategy of the State
6	under paragraph (3).
7	(2) Revision of conservation plan; pro-
8	POSED STRATEGY.—Not later than 120 days after the
9	date of enactment of this Act, each State shall—
10	(A) modify the State energy conservation
11	plan of the State under section 362 of the En-
12	ergy Policy and Conservation Act (42 U.S.C.
13	6322) to establish additional goals for increased
14	energy efficiency and conservation in the State;
15	and
16	(B) submit to the Secretary a proposed en-
17	ergy efficiency and conservation strategy that—
18	(i) establishes a process for providing
19	subgrants as required under paragraph (1);
20	and
21	(ii) includes a plan of the State for the
22	use of funds received under a the program
23	to assist the State in achieving the goals es-
24	tablished under subparagraph (A), in ac-
25	cordance with sections 542(b) and 544.

1	(3) Approval by Secretary.—
2	(A) In general.—The Secretary shall ap-
3	prove or disapprove a proposed strategy under
4	paragraph (2)(B) by not later than 120 days
5	after the date of submission of the proposed strat-
6	egy.
7	(B) DISAPPROVAL.—If the Secretary dis-
8	approves a proposed strategy under subpara-
9	graph(A)—
10	(i) the Secretary shall provide to the
11	State the reasons for the disapproval; and
12	(ii) the State may revise and resubmit
13	the proposed strategy as many times as nec-
14	essary until the Secretary approves a pro-
15	$posed\ strategy.$
16	(C) REQUIREMENT.—The Secretary shall
17	not provide to a State any grant under the pro-
18	gram until a proposed strategy of the State is
19	approved the Secretary under this paragraph.
20	(4) Limitations on use of funds.—A State
21	may use not more than 10 percent of amounts pro-
22	vided under the program for administrative expenses.
23	(5) Annual reports.—Each State that receives
24	a grant under the program shall submit to the Sec-
25	retary an annual report that describes—

1	(A) the status of development and imple-
2	mentation of the energy efficiency and conserva-
3	tion strategy of the State during the preceding
4	calendar year;
5	(B) the status of the subgrant program of
6	the State under paragraph (1);
7	(C) the energy efficiency gains achieved
8	through the energy efficiency and conservation
9	strategy of the State during the preceding cal-
10	endar year; and
11	(D) specific energy efficiency and conserva-
12	tion goals of the State for subsequent calendar
13	years.
14	SEC. 546. COMPETITIVE GRANTS.
15	(a) In General.—Of the total amount made available
16	for each fiscal year to carry out this subtitle, the Secretary
17	shall use not less than 2 percent to provide grants under
18	this section, on a competitive basis, to—
19	(1) units of local government (including Indian
20	tribes) that are not eligible entities; and
21	(2) consortia of units of local government de-
22	scribed in paragraph (1).
23	(b) APPLICATIONS.—To be eligible to receive a grant
24	under this section, a unit of local government or consortia
25	shall submit to the Secretary an application at such time,

- 1 in such manner, and containing such information as the
- 2 Secretary may require, including a plan of the unit of local
- 3 government to carry out an activity described in section
- 4 544.
- 5 (c) Priority.—In providing grants under this section,
- 6 the Secretary shall give priority to units of local govern-
- 7 *ment*—
- 8 (1) located in States with populations of less
- 9 than 2,000,000; or
- 10 (2) that plan to carry out projects that would re-
- sult in significant energy efficiency improvements or
- 12 reductions in fossil fuel use.
- 13 SEC. 547. REVIEW AND EVALUATION.
- 14 (a) In General.—The Secretary may review and
- 15 evaluate the performance of any eligible entity that receives
- 16 a grant under the program, including by conducting an
- 17 audit, as the Secretary determines to be appropriate.
- 18 (b) Withholding of Funds.—The Secretary may
- 19 withhold from an eligible entity any portion of a grant to
- 20 be provided to the eligible entity under the program if the
- 21 Secretary determines that the eligible entity has failed to
- 22 achieve compliance with—
- 23 (1) any applicable guideline or regulation of the
- 24 Secretary relating to the program, including the mis-

1	use or misappropriation of funds provided under the
2	program; or
3	(2) the energy efficiency and conservation strat-
4	egy of the eligible entity.
5	SEC. 548. FUNDING.
6	(a) Authorization of Appropriations.—
7	(1) Grants.—There is authorized to be appro-
8	priated to the Secretary for the provision of grants
9	under the program \$2,000,000,000 for each of fiscal
10	years 2008 through 2012; provided that 49 percent of
11	the appropriated funds shall be distributed using the
12	definition of eligible unit of local government-alter-
13	native 1 in section 541(3)(A) and 49 percent of the
14	appropriated funds shall be distributed using the defi-
15	nition of eligible unit of local government-alternative
16	2 in section 541(3)(B).
17	(2) Administrative costs.—There are author-
18	ized to be appropriated to the Secretary for adminis-
19	trative expenses of the program—
20	(A) \$20,000,000 for each of fiscal years
21	2008 and 2009;
22	(B) \$25,000,000 for each of fiscal years
23	2010 and 2011; and
24	(C) \$30,000,000 for fiscal year 2012.

1	(b) Maintenance of Funding pro-
2	vided under this section shall supplement (and not sup-
3	plant) other Federal funding provided under—
4	(1) a State energy conservation plan established
5	under part D of title III of the Energy Policy and
6	Conservation Act (42 U.S.C. 6321 et seq.); or
7	(2) the Weatherization Assistance Program for
8	Low-Income Persons established under part A of title
9	IV of the Energy Conservation and Production Act
10	(42 U.S.C. 6861 et seq.).
11	TITLE VI—ACCELERATED
12	RESEARCH AND DEVELOPMENT
13	Subtitle A—Solar Energy
14	SEC. 601. SHORT TITLE.
15	This subtitle may be cited as the "Solar Energy Re-
16	search and Advancement Act of 2007".
17	SEC. 602. THERMAL ENERGY STORAGE RESEARCH AND DE-
18	VELOPMENT PROGRAM.
19	(a) Establishment.—The Secretary shall establish a
20	program of research and development to provide lower cost
21	and more viable thermal energy storage technologies to en-
22	able the shifting of electric power loads on demand and ex-
23	tend the operating time of concentrating solar power electric
24	generating plants.

- 1 (b) AUTHORIZATION OF APPROPRIATIONS.—There are
- 2 authorized to be appropriated to the Secretary for carrying
- 3 out this section \$5,000,000 for fiscal year 2008, \$7,000,000
- 4 for fiscal year 2009, \$9,000,000 for fiscal year 2010,
- 5 \$10,000,000 for fiscal year 2011, and \$12,000,000 for fiscal
- 6 year 2012.

7 SEC. 603. CONCENTRATING SOLAR POWER COMMERCIAL

- 8 APPLICATION STUDIES.
- 9 (a) Integration.—The Secretary shall conduct a
- 10 study on methods to integrate concentrating solar power
- 11 and utility-scale photovoltaic systems into regional elec-
- 12 tricity transmission systems, and to identify new trans-
- 13 mission or transmission upgrades needed to bring elec-
- 14 tricity from high concentrating solar power resource areas
- 15 to growing electric power load centers throughout the
- 16 United States. The study shall analyze and assess cost-effec-
- 17 tive approaches for management and large-scale integration
- 18 of concentrating solar power and utility-scale photovoltaic
- 19 systems into regional electric transmission grids to improve
- 20 electric reliability, to efficiently manage load, and to reduce
- 21 demand on the natural gas transmission system for electric
- 22 power. The Secretary shall submit a report to Congress on
- 23 the results of this study not later than 12 months after the
- 24 date of enactment of this Act.

1	(b) Water Consumption.—Not later than 6 months
2	after the date of the enactment of this Act, the Secretary
3	of Energy shall transmit to Congress a report on the results
4	of a study on methods to reduce the amount of water con-
5	sumed by concentrating solar power systems.
6	SEC. 604. SOLAR ENERGY CURRICULUM DEVELOPMENT AND
7	CERTIFICATION GRANTS.
8	(a) Establishment.—The Secretary shall establish
9	in the Office of Solar Energy Technologies a competitive
10	grant program to create and strengthen solar industry
11	workforce training and internship programs in installa-
12	tion, operation, and maintenance of solar energy products.
13	The goal of this program is to ensure a supply of well-
14	trained individuals to support the expansion of the solar
15	energy industry.
16	(b) Authorized Activities.—Grant funds may be
17	used to support the following activities:
18	(1) Creation and development of a solar energy
19	curriculum appropriate for the local educational, en-
20	trepreneurial, and environmental conditions, includ-
21	ing curriculum for community colleges.
22	(2) Support of certification programs for indi-
23	vidual solar energy system installers, instructors, and
24	training programs.

1	(3) Internship programs that provide hands-on
2	participation by students in commercial applications.
3	(4) Activities required to obtain certification of
4	training programs and facilities by an industry-ac-
5	$cepted\ quality \hbox{-} control\ certification\ program.$
6	(5) Incorporation of solar-specific learning mod-
7	ules into traditional occupational training and in-
8	$ternship\ programs\ for\ construction\ related\ trades.$
9	(6) The purchase of equipment necessary to
10	carry out activities under this section.
11	(7) Support of programs that provide guidance
12	and updates to solar energy curriculum instructors.
13	(c) Administration of Grants.—Grants may be
14	awarded under this section for up to 3 years. The Secretary
15	shall award grants to ensure sufficient geographic distribu-
16	tion of training programs nationally. Grants shall only be
17	awarded for programs certified by an industry-accepted
18	quality-control certification institution, or for new and
19	growing programs with a credible path to certification. Due
20	consideration shall be given to women, underrepresented
21	minorities, and persons with disabilities.
22	(d) Report.—The Secretary shall make public, on the
23	website of the Department or upon request, information on

 $24\ \ the\ name\ and\ institution\ for\ all\ grants\ awarded\ under\ this$

- 1 section, including a brief description of the project as well
- 2 as the grant award amount.
- 3 (e) Authorization of Appropriations.—There are
- 4 authorized to be appropriated to the Secretary for carrying
- 5 out this section \$10,000,000 for each of the fiscal years 2008
- 6 through 2012.
- 7 SEC. 605. DAYLIGHTING SYSTEMS AND DIRECT SOLAR
- 8 LIGHT PIPE TECHNOLOGY.
- 9 (a) Establishment.—The Secretary shall establish a
- 10 program of research and development to provide assistance
- 11 in the demonstration and commercial application of direct
- 12 solar renewable energy sources to provide alternatives to
- 13 traditional power generation for lighting and illumination,
- 14 including light pipe technology, and to promote greater en-
- 15 ergy conservation and improved efficiency. All direct solar
- 16 renewable energy devices supported under this program
- 17 shall have the capability to provide measurable data on the
- 18 amount of kilowatt-hours saved over the traditionally pow-
- 19 ered light sources they have replaced.
- 20 (b) Reporting.—The Secretary shall transmit to Con-
- 21 gress an annual report assessing the measurable data de-
- 22 rived from each project in the direct solar renewable energy
- 23 sources program and the energy savings resulting from its
- 24 *use*.
- 25 (c) Definitions.—For purposes of this section—

1	(1) the term "direct solar renewable energy"
2	means energy from a device that converts sunlight
3	into useable light within a building, tunnel, or other
4	enclosed structure, replacing artificial light generated
5	by a light fixture and doing so without the conversion
6	of the sunlight into another form of energy; and
7	(2) the term 'light pipe' means a device de-
8	signed to transport visible solar radiation from its
9	collection point to the interior of a building while ex-
10	cluding interior heat gain in the nonheating season.
11	(d) Authorization of Appropriations.—There are
12	authorized to be appropriated to the Secretary for carrying
13	out this section \$3,500,000 for each of the fiscal years 2008
14	through 2012.
15	SEC. 606. SOLAR AIR CONDITIONING RESEARCH AND DE-
16	VELOPMENT PROGRAM.
17	(a) Establishment.—The Secretary shall establish a
18	research, development, and demonstration program to pro-
19	mote less costly and more reliable decentralized distributed
20	solar-powered air conditioning for individuals and busi-
21	nesses.
22	(b) Authorized Activities.—Grants made available
23	under this section may be used to support the following ac-
24	tivities:

- (1) Advancing solar thermal collectors, including
 concentrating solar thermal and electric systems, flat
 plate and evacuated tube collector performance.
 - (2) Achieving technical and economic integration of solar-powered distributed air-conditioning systems with existing hot water and storage systems for residential applications.
 - (3) Designing and demonstrating mass manufacturing capability to reduce costs of modular standardized solar-powered distributed air conditioning systems and components.
 - (4) Improving the efficiency of solar-powered distributed air-conditioning to increase the effectiveness of solar-powered absorption chillers, solar-driven compressors and condensors, and cost-effective precooling approaches.
 - (5) Researching and comparing performance of solar-powered distributed air conditioning systems in different regions of the country, including potential integration with other onsite systems, such as solar, biogas, geothermal heat pumps, and propane assist or combined propane fuel cells, with a goal to develop site-specific energy production and management systems that ease fuel and peak utility loading.

1	(c) Cost Sharing.—Section 988 of the Energy Policy
2	Act of 2005 (42 U.S.C. 16352) shall apply to a project car-
3	ried out under this section.
4	(d) Authorization of Appropriations.—There are
5	authorized to be appropriated to the Secretary for carrying
6	out this section \$2,500,000 for each of the fiscal years 2008
7	through 2012.
8	SEC. 607. PHOTOVOLTAIC DEMONSTRATION PROGRAM.
9	(a) In General.—The Secretary shall establish a pro-
10	gram of grants to States to demonstrate advanced photo-
11	$voltaic\ technology.$
12	(b) Requirements.—
13	(1) Ability to meet requirements.—To re-
14	ceive funding under the program under this section,
15	a State must submit a proposal that demonstrates, to
16	the satisfaction of the Secretary, that the State will
17	meet the requirements of subsection (f).
18	(2) Compliance with requirements.—If a
19	State has received funding under this section for the
20	preceding year, the State must demonstrate, to the
21	satisfaction of the Secretary, that it complied with the
22	requirements of subsection (f) in carrying out the pro-
23	gram during that preceding year, and that it will do
24	so in the future, before it can receive further funding

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under this section.

1	(c) Competition.—The Secretary shall award grants
2	on a competitive basis to the States with the proposals the
3	Secretary considers most likely to encourage the widespread
4	adoption of photovoltaic technologies. The Secretary shall
5	take into consideration the geographic distribution of
6	awards.
7	(d) Proposals.—Not later than 6 months after the
8	date of enactment of this Act, and in each subsequent fiscal
9	year for the life of the program, the Secretary shall solicit
10	proposals from the States to participate in the program
11	under this section.
12	(e) Competitive Criteria.—In awarding funds in a
13	competitive allocation under subsection (c), the Secretary
14	shall consider—
15	(1) the likelihood of a proposal to encourage the
16	demonstration of, or lower the costs of, advanced pho-
17	tovoltaic technologies; and
18	(2) the extent to which a proposal is likely to—
19	(A) maximize the amount of photovoltaics
20	demonstrated;
21	(B) maximize the proportion of non-Federal
22	cost share; and
23	(C) limit State administrative costs.
24	(f) State Program.—A program operated by a State
25	with funding under this section shall provide competitive

1	awards for the demonstration of advanced photo-voltaic
2	technologies. Each State program shall—
3	(1) require a contribution of at least 60 percent
4	per award from non-Federal sources, which may in-
5	clude any combination of State, local, and private
6	funds, except that at least 10 percent of the funding
7	must be supplied by the State;
8	(2) endeavor to fund recipients in the commer-
9	cial, industrial, institutional, governmental, and resi-
10	dential sectors;
11	(3) limit State administrative costs to no more
12	than 10 percent of the grant;
13	(4) report annually to the Secretary on—
14	(A) the amount of funds disbursed;
15	(B) the amount of photovoltaics purchased;
16	and
17	(C) the results of the monitoring under
18	paragraph (5);
19	(5) provide for measurement and verification of
20	the output of a representative sample of the
21	photovoltaics systems demonstrated throughout the av-
22	erage working life of the systems, or at least 20 years;
23	and
24	(6) require that applicant buildings must have
25	received an independent energy efficiency audit dur-

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ing the 6-month period preceding the filing of the ap-
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         plication.
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         (q) Unexpended Funds.—If a State fails to expend
    any funds received under this section within 3 years of re-
    ceipt, such remaining funds shall be returned to the Treas-
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    ury.
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         (h) Reports.—The Secretary shall report to Congress
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    5 years after funds are first distributed to the States under
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    this section—
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              (1) the amount of photovoltaics demonstrated;
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              (2) the number of projects undertaken;
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              (3) the administrative costs of the program;
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              (4) the results of the monitoring under subsection
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         (f)(5); and
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              (5) the total amount of funds distributed, includ-
         ing a breakdown by State.
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         (i) AUTHORIZATION OF APPROPRIATIONS.—There are
    authorized to be appropriated to the Secretary for the pur-
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    poses of carrying out this section—
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              (1) $15,000,000 for fiscal year 2008;
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              (2) $30,000,000 for fiscal year 2009;
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              (3) $45,000,000 for fiscal year 2010;
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              (4) $60,000,000 for fiscal year 2011; and
              (5) $70,000,000 for fiscal year 2012.
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1 Subtitle B—Geothermal Energy

2	SEC. 611. SHORT TITLE.
3	This subtitle may be cited as the "Advanced Geo-
4	thermal Energy Research and Development Act of 2007".
5	SEC. 612. DEFINITIONS.
6	For purposes of this subtitle:
7	(1) Engineered.—When referring to enhanced
8	geothermal systems, the term "engineered" means sub-
9	jected to intervention, including intervention to ad-
10	dress one or more of the following issues:
11	(A) Lack of effective permeability or poros-
12	ity or open fracture connectivity within the res-
13	ervoir.
14	(B) Insufficient contained geofluid in the
15	reservoir.
16	(C) A low average geothermal gradient,
17	which necessitates deeper drilling.
18	(2) Enhanced geothermal systems.—The
19	term "enhanced geothermal systems" means geo-
20	thermal reservoir systems that are engineered, as op-
21	posed to occurring naturally.
22	(3) Geofluid.—The term "geofluid" means any
23	fluid used to extract thermal energy from the Earth
24	which is transported to the surface for direct use or

- electric power generation, except that such term shall
 not include oil or natural gas.
- (4) Geopressured resources Resources.—The term
 "geopressured resources" mean geothermal deposits
 found in sedimentary rocks under higher than normal
 pressure and saturated with gas or methane.
 - (5) Geothermal.—The term "geothermal" refers to heat energy stored in the Earth's crust that can be accessed for direct use or electric power generation.
 - (6) Hydrothermal.—The term "hydrothermal" refers to naturally occurring subsurface reservoirs of hot water or steam.
- 14 (7) Systems Approach.—The term "systems 15 approach" means an approach to solving problems or 16 designing systems that attempts to optimize the per-17 formance of the overall system, rather than a par-18 ticular component of the system.

19 SEC. 613. HYDROTHERMAL RESEARCH AND DEVELOPMENT.

- 20 (a) In General.—The Secretary shall support pro-21 grams of research, development, demonstration, and com-22 mercial application to expand the use of geothermal energy 23 production from hydrothermal systems, including the pro-24 grams described in subsection (b).
- 25 *(b) Programs.*—

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- 1 (1)ADVANCED HYDROTHERMALRESOURCE2 TOOLS.—The Secretary, in consultation with other 3 appropriate agencies, shall support a program to de-4 velop advanced geophysical, geochemical, and geologic 5 tools to assist in locating hidden hydrothermal re-6 sources, and to increase the reliability of site charac-7 terization before, during, and after initial drilling. The program shall develop new prospecting techniques 8 9 to assist in prioritization of targets for characteriza-10 tion. The program shall include a field component.
 - (2) Industry coupled exploratory drillIng.—The Secretary shall support a program of costshared field demonstration programs, to be pursued,
 simultaneously and independently, in collaboration
 with industry partners, for the demonstration of advanced technologies and techniques of siting and exploratory drilling for undiscovered resources in a variety of geologic settings. The program shall include
 incentives to encourage the use of advanced technologies and techniques.

21 SEC. 614. GENERAL GEOTHERMAL SYSTEMS RESEARCH AND

22 **DEVELOPMENT.**

(a) Subsurface Components and Systems.—The
 Secretary shall support a program of research, development,
 demonstration, and commercial application of components

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1	and systems capable of withstanding extreme geothermal
2	environments and necessary to cost-effectively develop,
3	produce, and monitor geothermal reservoirs and produce
4	geothermal energy. These components and systems shall in-
5	clude advanced casing systems (expandable tubular casing,
6	low-clearance casing designs, and others), high-temperature
7	cements, high-temperature submersible pumps, and high-
8	temperature packers, as well as technologies for under-ream-
9	ing, multilateral completions, high-temperature and high-
10	pressure logging, logging while drilling, deep fracture stim-
11	ulation, and reservoir system diagnostics.
12	(b) Reservoir Performance Modeling.—The Sec-
13	retary shall support a program of research, development,
14	demonstration, and commercial application of models of
15	geothermal reservoir performance, with an emphasis on ac-
16	curately modeling performance over time. Models shall be
17	developed to assist both in the development of geothermal
18	reservoirs and to more accurately account for stress-related
19	effects in stimulated hydrothermal and enhanced geothermal
20	systems production environments.
21	(c) Environmental Impacts.—The Secretary shall—
22	(1) support a program of research development

(1) support a program of research, development, demonstration, and commercial application of technologies and practices designed to mitigate or preclude potential adverse environmental impacts of geo-

- thermal energy development, production or use, and seek to ensure that geothermal energy development is consistent with the highest practicable standards of environmental stewardship;
 - (2) in conjunction with the Assistant Administrator for Research and Development at the Environmental Protection Agency, support a research program to identify potential environmental impacts of geothermal energy development, production, and use, and ensure that the program described in paragraph (1) addresses such impacts, including effects on groundwater and local hydrology; and
 - (3) support a program of research to compare the potential environmental impacts identified as part of the development, production, and use of geothermal energy with the potential emission reductions of greenhouse gases gained by geothermal energy development, production, and use.

19 SEC. 615. ENHANCED GEOTHERMAL SYSTEMS RESEARCH 20 AND DEVELOPMENT.

- 21 (a) In General.—The Secretary shall support a pro-22 gram of research, development, demonstration, and commer-23 cial application for enhanced geothermal systems, including 24 the programs described in subsection (b).
- 25 *(b) Programs.*—

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1	(1) Enhanced geothermal systems tech-
2	NOLOGIES.—The Secretary shall support a program
3	of research, development, demonstration, and commer-
4	cial application of the technologies and knowledge
5	necessary for enhanced geothermal systems to advance
6	to a state of commercial readiness, including advances
7	in—
8	$(A)\ reservoir\ stimulation;$
9	(B) reservoir characterization, monitoring,
10	and modeling;
11	$(C)\ stress\ mapping;$
12	(D) tracer development;
13	(E) three-dimensional tomography; and
14	(F) understanding seismic effects of res-
15	ervoir engineering and stimulation.
16	(2) Enhanced geothermal systems res-
17	ERVOIR STIMULATION.—
18	(A) Program.—In collaboration with in-
19	dustry partners, the Secretary shall support a
20	program of research, development, and dem-
21	onstration of enhanced geothermal systems res-
22	$ervoir\ stimulation\ technologies\ and\ techniques.\ A$
23	minimum of 4 sites shall be selected in locations
24	that show particular promise for enhanced geo-
25	thermal sustems development. Each site shall—

1	(i) represent a different class of sub-
2	surface geologic environments; and
3	(ii) take advantage of an existing site
4	where subsurface characterization has been
5	conducted or existing drill holes can be uti-
6	lized, if possible.
7	(B) Consideration of existing site.—
8	The Desert Peak, Nevada, site, where a Depart-
9	ment of Energy and industry cooperative en-
10	hanced geothermal systems project is already un-
11	derway, may be considered for inclusion among
12	the sites selected under subparagraph (A) .
13	SEC. 616. GEOTHERMAL ENERGY PRODUCTION FROM OIL
14	AND GAS FIELDS AND RECOVERY AND PRO-
15	DUCTION OF GEOPRESSURED GAS RE-
16	SOURCES.
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	(a) In General.—The Secretary shall establish a pro-
18	(a) In General.—The Secretary shall establish a program of research, development, demonstration, and commer-
18 19	
	gram of research, development, demonstration, and commer-
19	gram of research, development, demonstration, and commercial application to support development of geothermal en-
19 20	gram of research, development, demonstration, and commercial application to support development of geothermal energy production from oil and gas fields and production and
19 20 21	gram of research, development, demonstration, and commercial application to support development of geothermal energy production from oil and gas fields and production and recovery of energy, including electricity, from geopressured

1	(b) Geothermal Energy Production From Oil
2	AND GAS FIELDS.—The Secretary shall implement a grant
3	program in support of geothermal energy production from
4	oil and gas fields. The program shall include grants for a
5	total of not less than three demonstration projects of the
6	use of geothermal techniques such as advanced organic
7	rankine cycle systems at marginal, unproductive, and pro-
8	ductive oil and gas wells. The Secretary shall, to the extent
9	practicable and in the public interest, make awards that—
10	(1) include not less than five oil or gas well sites
11	per project award;
12	(2) use a range of oil or gas well hot water
13	source temperatures from 150 degrees Fahrenheit to
14	300 degrees Fahrenheit;
15	(3) cover a range of sizes up to one megawatt;
16	(4) are located at a range of sites;
17	(5) can be replicated at a wide range of sites;
18	(6) facilitate identification of optimum tech-
19	niques among competing alternatives;
20	(7) include business commercialization plans
21	that have the potential for production of equipment at
22	high volumes and operation and support at a large
23	number of sites: and

1	(8) satisfy other criteria that the Secretary deter-
2	mines are necessary to carry out the program and
3	collect necessary data and information.
4	The Secretary shall give preference to assessments that ad-
5	dress multiple elements contained in paragraphs (1)
6	through (8).
7	(c) Grant Awards.—Each grant award for dem-
8	onstration of geothermal technology such as advanced or-
9	ganic rankine cycle systems at oil and gas wells made by
10	the Secretary under subsection (b) shall include—
11	(1) necessary and appropriate site engineering
12	study;
13	(2) detailed economic assessment of site specific
14	conditions;
15	(3) appropriate feasibility studies to determine
16	whether the demonstration can be replicated;
17	(4) design or adaptation of existing technology
18	for site specific circumstances or conditions;
19	(5) installation of equipment, service, and sup-
20	port;
21	(6) operation for a minimum of one year and
22	monitoring for the duration of the demonstration; and
23	(7) validation of technical and economic assump-
24	tions and documentation of lessons learned.

- 1 (d) Geopressured Gas Resource Recovery and
- 2 Production.—(1) The Secretary shall implement a pro-
- 3 gram to support the research, development, demonstration,
- 4 and commercial application of cost-effective techniques to
- 5 produce energy from geopressured resources.
- 6 (2) The Secretary shall solicit preliminary engineering
- 7 designs for geopressured resources production and recovery
- 8 facilities.
- 9 (3) Based upon a review of the preliminary designs,
- 10 the Secretary shall award grants, which may be cost-shared,
- 11 to support the detailed development and completion of engi-
- 12 neering, architectural and technical plans needed to support
- 13 construction of new designs.
- 14 (4) Based upon a review of the final design plans
- 15 above, the Secretary shall award cost-shared development
- 16 and construction grants for demonstration geopressured
- 17 production facilities that show potential for economic recov-
- 18 ery of the heat, kinetic energy and gas resources from
- 19 geopressured resources.
- 20 (e) Competitive Grant Selection.—Not less than
- 21 90 days after the date of the enactment of this Act, the Sec-
- 22 retary shall conduct a national solicitation for applications
- 23 for grants under the programs outlined in subsections (b)
- 24 and (d). Grant recipients shall be selected on a competitive
- 25 basis based on criteria in the respective subsection.

1	(f) Well Drilling.—No funds may be used under
2	this section for the purpose of drilling new wells.
3	SEC. 617. COST SHARING AND PROPOSAL EVALUATION.
4	(a) Federal Share.—The Federal share of costs of
5	projects funded under this subtitle shall be in accordance
6	with section 988 of the Energy Policy Act of 2005.
7	(b) Organization and Administration of Pro-
8	GRAMS.—Programs under this subtitle shall incorporate the
9	following elements:
10	(1) The Secretary shall coordinate with, and
11	where appropriate may provide funds in furtherance
12	of the purposes of this subtitle to, other Department
13	of Energy research and development programs focused
14	on drilling, subsurface characterization, and other re-
15	lated technologies.
16	(2) In evaluating proposals, the Secretary shall
17	give priority to proposals that demonstrate clear evi-
18	dence of employing a systems approach.
19	(3) The Secretary shall coordinate and consult
20	with the appropriate Federal land management agen-
21	cies in selecting proposals for funding under this sub-
22	title.
23	(4) Nothing in this subtitle shall be construed to
24	alter or affect any law relating to the management or
25	protection of Federal lands.

1	SEC. 618. CENTER FOR GEOTHERMAL TECHNOLOGY TRANS-
2	FER.
3	(a) In General.—The Secretary shall award to an
4	institution of higher education (or consortium thereof) a
5	grant to establish a Center for Geothermal Technology
6	Transfer (referred to in this section as the "Center").
7	(b) Duties.—The Center shall—
8	(1) serve as an information clearinghouse for the
9	geothermal industry by collecting and disseminating
10	information on best practices in all areas relating to
11	developing and utilizing geothermal resources;
12	(2) make data collected by the Center available
13	to the public; and
14	(3) seek opportunities to coordinate efforts and
15	share information with domestic and international
16	partners engaged in research and development of geo-
17	thermal systems and related technology.
18	(c) Selection Criteria.—In awarding the grant
19	under subsection (a) the Secretary shall select an institution
20	of higher education (or consortium thereof) best suited to
21	provide national leadership on geothermal related issues
22	and perform the duties enumerated under subsection (b).
23	(d) Duration of Grant.—A grant made under sub-
24	section (a)—
25	(1) shall be for an initial period of 5 years; and

1	(2) may be renewed for additional 5-year periods
2	on the basis of—
3	(A) satisfactory performance in meeting the
4	duties outlined in subsection (b); and
5	(B) any other requirements specified by the
6	Secretary.
7	SEC. 619. GEOPOWERING AMERICA.
8	The Secretary shall expand the Department of Ener-
9	gy's GeoPowering the West program to extend its geo-
10	thermal technology transfer activities throughout the entire
11	United States. The program shall be renamed
12	"GeoPowering America". The program shall continue to be
13	based in the Department of Energy office in Golden, Colo-
14	rado.
15	SEC. 620. EDUCATIONAL PILOT PROGRAM.
16	The Secretary shall seek to award grant funding, on
17	a competitive basis, to an institution of higher education
18	for a geothermal-powered energy generation facility on the
19	institution's campus. The purpose of the facility shall be
20	to provide electricity and space heating. The facility shall
21	also serve as an educational resource to students in relevant
22	fields of study, and the data generated by the facility shall
23	be available to students and the general public. The total
24	funding award shall not exceed \$2,000,000.

SEC. 621. REPORTS.

2	(a) Reports on Advanced Uses of Geothermal
3	Energy.—Not later than 3 years and 5 years after the date
4	of enactment of this Act, the Secretary shall report to the
5	Committee on Science and Technology of the House of Rep-
6	resentatives and the Committee on Energy and Natural Re-
7	sources of the Senate on advanced concepts and technologies
8	to maximize the geothermal resource potential of the United
9	States. The reports shall include—
10	(1) the use of carbon dioxide as an alternative
11	geofluid with potential carbon sequestration benefits;
12	(2) mineral recovery from geofluids;
13	(3) use of geothermal energy to produce hydro-
14	gen;
15	(4) use of geothermal energy to produce biofuels;
16	(5) use of geothermal heat for oil recovery from
17	oil shales and tar sands; and
18	(6) other advanced geothermal technologies, in-
19	cluding advanced drilling technologies and advanced
20	power conversion technologies.
21	(b) Progress Reports.—(1) Not later than 36
22	months after the date of enactment of this Act, the Secretary
23	shall submit to the Committee on Science and Technology
24	of the House of Representatives and the Committee on En-
25	ergy and Natural Resources of the Senate an interim report
26	describing the progress made under this subtitle. At the end

- 1 of 60 months, the Secretary shall submit to Congress a re-
- 2 port on the results of projects undertaken under this subtitle
- 3 and other such information the Secretary considers appro-
- 4 priate.
- 5 (2) As necessary, the Secretary shall report to the Con-
- 6 gress on any legal, regulatory, or other barriers encountered
- 7 that hinder economic development of these resources, and
- 8 provide recommendations on legislative or other actions
- 9 needed to address such impediments.

10 SEC. 622. APPLICABILITY OF OTHER LAWS.

- Nothing in this subtitle shall be construed as waiving,
- 12 modifying, or superseding the applicability of any require-
- 13 ment under any environmental or other Federal or State
- 14 law. To the extent that activities authorized in this subtitle
- 15 take place in coastal and ocean areas, the Secretary shall
- 16 consult with the Secretary of Commerce, acting through the
- 17 Under Secretary of Commerce for Oceans and Atmosphere,
- 18 regarding the potential marine environmental impacts and
- 19 measures to address such impacts.

20 SEC. 623. AUTHORIZATION OF APPROPRIATIONS.

- 21 There are authorized to be appropriated to the Sec-
- 22 retary to carry out this subtitle \$90,000,000 for each of the
- 23 fiscal years 2008 through 2012, of which \$10,000,000 for
- 24 each fiscal year shall be for carrying out section 616. There
- 25 are also authorized to be appropriated to the Secretary for

1	$the\ Intermountain\ West\ Geothermal\ Consortium\ \$5,000,000$
2	for each of the fiscal years 2008 through 2012.
3	SEC. 624. INTERNATIONAL GEOTHERMAL ENERGY DEVEL-
4	OPMENT.
5	(a) In General.—The Secretary of Energy, in coordi-
6	nation with other appropriate Federal and multilateral
7	agencies (including the United States Agency for Inter-
8	national Development) shall support international collabo-
9	rative efforts to promote the research, development, and de-
10	ployment of geothermal technologies used to develop hydro-
11	thermal and enhanced geothermal system resources, includ-
12	ing as partners (as appropriate) the African Rift Geo-
13	thermal Development Facility, Australia, China, France,
14	the Republic of Iceland, India, Japan, and the United
15	Kingdom.
16	(b) United States Trade and Development
17	AGENCY.—The Director of the United States Trade and De-
18	velopment Agency may—
19	(1) encourage participation by United States
20	firms in actions taken to carry out subsection (a);
21	and
22	(2) provide grants and other financial support
23	for feasibility and resource assessment studies con-
24	ducted in, or intended to benefit, less developed coun-
25	tries.

1	(c) Authorization of Appropriations.—There are
2	authorized to be appropriated to carry out this section
3	\$5,000,000 for each of fiscal years 2008 through 2012.
4	SEC. 625. HIGH COST REGION GEOTHERMAL ENERGY
5	GRANT PROGRAM.
6	(a) Definitions.—In this section:
7	(1) Eligible enti-The term "eligible enti-
8	ty" means—
9	(A) a utility;
10	(B) an electric cooperative;
11	(C) a State;
12	(D) a political subdivision of a State;
13	(E) an Indian tribe; or
14	(F) a Native corporation.
15	(2) High-cost region.—The term "high-cost
16	region" means a region in which the average cost of
17	electrical power exceeds 150 percent of the national
18	average retail cost, as determined by the Secretary.
19	(b) Program.—The Secretary shall use amounts made
20	available to carry out this section to make grants to eligible
21	entities for activities described in subsection (c).
22	(c) Eligible Activities.—An eligible entity may use
23	grant funds under this section, with respect to a geothermal
24	energy project in a high-cost region, only—

1	(1) to conduct a feasibility study, including a
2	study of exploration, geochemical testing, geomagnetic
3	surveys, geologic information gathering, baseline envi-
4	ronmental studies, well drilling, resource character-
5	ization, permitting, and economic analysis;
6	(2) for design and engineering costs, relating to
7	the project; and
8	(3) to demonstrate and promote commercial ap-
9	plication of technologies related to geothermal energy
10	as part of the project.
11	(d) Cost Sharing.—The cost-sharing requirements of
12	section 988 of the Energy Policy Act of 2005 (42 U.S.C.
13	16352) shall apply to any project carried out under this
14	section.
15	(e) Authorization of Appropriations.—There are
16	authorized to be appropriated such sums as are necessary
17	to carry out this section.
18	Subtitle C—Marine and
19	Hydrokinetic Renewable Energy
20	Technologies
21	SEC. 631. SHORT TITLE.
22	This subtitle may be cited as the "Marine and
23	Hydrokinetic Renewable Energy Research and Development
24	Act".

1 SEC. 632. DEFINITION.

2	For purposes of this subtitle, the term "marine and
3	hydrokinetic renewable energy" means electrical energy
4	from—:
5	(1) waves, tides, and currents in oceans, estu-
6	aries, and tidal areas;
7	(2) free flowing water in rivers, lakes, and
8	streams;
9	(3) free flowing water in man-made channels;
10	and
11	(4) differentials in ocean temperature (ocean
12	thermal energy conversion).
13	The term "marine and hydrokinetic renewable energy" does
14	not include energy from any source that uses a dam, diver-
15	sionary structure, or impoundment for electric power pur-
16	poses.
17	SEC. 633. MARINE AND HYDROKINETIC RENEWABLE EN-
18	ERGY RESEARCH AND DEVELOPMENT.
19	(a) In General.—The Secretary, in consultation with
20	the Secretary of the Interior and the Secretary of Com-
21	merce, acting through the Under Secretary of Commerce for
22	Oceans and Atmosphere, shall establish a program of re-
23	search, development, demonstration, and commercial appli-
24	cation to expand marine and hydrokinetic renewable energy
25	production, including programs to—

1	(1) study and compare existing marine and
2	hydrokinetic renewable energy technologies;
3	(2) research, develop, and demonstrate marine
4	and hydrokinetic renewable energy systems and tech-
5	nologies;
6	(3) reduce the manufacturing and operation
7	costs of marine and hydrokinetic renewable energy
8	technologies;
9	(4) investigate efficient and reliable integration
10	with the utility grid and intermittency issues;
11	(5) advance wave forecasting technologies;
12	(6) conduct experimental and numerical mod-
13	eling for optimization of marine energy conversion
14	devices and arrays;
15	(7) increase the reliability and survivability of
16	marine and hydrokinetic renewable energy tech-
17	nologies, including development of corrosive-resistant
18	materials;
19	(8) identify, in conjunction with the Secretary of
20	Commerce, acting through the Under Secretary of
21	Commerce for Oceans and Atmosphere, and other
22	Federal agencies as appropriate, the potential envi-
23	ronmental impacts, including potential impacts on
24	fisheries and other marine resources, of marine and

 $hydrokinetic\ renewable\ energy\ technologies,\ measures$

1	to prevent adverse impacts, and technologies and
2	other means available for monitoring and deter-
3	mining environmental impacts;
4	(9) identify, in conjunction with the Secretary of
5	the Department in which the United States Coast
6	Guard is operating, acting through the Commandant
7	of the United States Coast Guard, the potential navi-
8	gational impacts of marine and hydrokinetic renew-
9	able energy technologies and measures to prevent ad-
10	verse impacts on navigation;
11	(10) develop power measurement standards for
12	marine and hydrokinetic renewable energy;
13	(11) develop identification standards for marine
14	and hydrokinetic renewable energy devices;
15	(12) address standards development, demonstra-
16	tion, and technology transfer for advanced systems en-
17	gineering and system integration methods to identify
18	critical interfaces;
19	(13) identifying opportunities for cross fertiliza-
20	tion and development of economies of scale between
21	other renewable sources and marine and hydrokinetic
22	renewable energy sources; and
23	(14) providing public information and oppor-
24	tunity for public comment concerning all technologies.

1	(b) REPORT.—Not later than 18 months after the date
2	of enactment of this Act, the Secretary, in conjunction with
3	the Secretary of Commerce, acting through the Undersecre-
4	tary of Commerce for Oceans and Atmosphere, and the Sec-
5	retary of the Interior, shall provide to the Congress a report
6	that addresses—
7	(1) the potential environmental impacts, includ-
8	ing impacts to fisheries and marine resources, of ma-
9	rine and hydrokinetic renewable energy technologies;
10	(2) options to prevent adverse environmental im-
11	pacts;
12	(3) the potential role of monitoring and adaptive
13	management in identifying and addressing any ad-
14	verse environmental impacts; and
15	(4) the necessary components of such an adaptive
16	management program.
17	SEC. 634. NATIONAL MARINE RENEWABLE ENERGY RE-
18	SEARCH, DEVELOPMENT, AND DEMONSTRA-
19	TION CENTERS.
20	(a) Centers.—The Secretary shall award grants to
21	institutions of higher education (or consortia thereof) for
22	the establishment of 1 or more National Marine Renewable
23	Energy Research, Development, and Demonstration Cen-
24	ters. In selecting locations for Centers, the Secretary shall
25	consider sites that meet one of the following criteria:

- 1 (1) Hosts an existing marine renewable energy 2 research and development program in coordination 3 with an engineering program at an institution of 4 higher education.
 - (2) Has proven expertise to support environmental and policy-related issues associated with harnessing of energy in the marine environment.
- 8 (3) Has access to and utilizes the marine re-9 sources in the Gulf of Mexico, the Atlantic Ocean, or 10 the Pacific Ocean.
- 11 The Secretary may give special consideration to historically
- 12 black colleges and universities and land grant universities
- 13 that also meet one of these criteria. In establishing criteria
- 14 for the selection of the Centers, the Secretary shall consult
- 15 with the Secretary of Commerce, acting through the Under
- 16 Secretary of Commerce for Oceans and Atmosphere, on the
- 17 criteria related to ocean waves, tides, and currents includ-
- 18 ing those for advancing wave forecasting technologies, ocean
- 19 temperature differences, and studying the compatibility of
- 20 marine renewable energy technologies and systems with the
- 21 environment, fisheries, and other marine resources.
- 22 (b) Purposes.—The Centers shall advance research,
- 23 development, demonstration, and commercial application of
- 24 marine renewable energy, and shall serve as an information
- 25 clearinghouse for the marine renewable energy industry,

- 1 collecting and disseminating information on best practices
- 2 in all areas related to developing and managing enhanced
- 3 marine renewable energy systems resources.
- 4 (c) Demonstration of Need.—When applying for a
- 5 grant under this section, an applicant shall include a de-
- 6 scription of why Federal support is necessary for the Center,
- 7 including evidence that the research of the Center will not
- 8 be conducted in the absence of Federal support.
- 9 SEC. 635. APPLICABILITY OF OTHER LAWS.
- Nothing in this subtitle shall be construed as waiving,
- 11 modifying, or superseding the applicability of any require-
- 12 ment under any environmental or other Federal or State
- 13 *law*.
- 14 SEC. 636. AUTHORIZATION OF APPROPRIATIONS.
- There are authorized to be appropriated to the Sec-
- 16 retary to carry out this subtitle \$50,000,000 for each of the
- 17 fiscal years 2008 through 2012, except that no funds shall
- 18 be appropriated under this section for activities that are
- 19 receiving funds under section 931(a)(2)(E)(i) of the Energy
- 20 Policy Act of 2005 (42 U.S.C. 16231(a)(2)(E)(i)).

1	Subtitle D—Energy Storage for
2	Transportation and Electric Power
3	SEC. 641. ENERGY STORAGE COMPETITIVENESS.
4	(a) Short Title.—This section may be cited as the
5	"United States Energy Storage Competitiveness Act of
6	2007".
7	(b) Definitions.—In this section:
8	(1) Council.—The term "Council" means the
9	Energy Storage Advisory Council established under
10	subsection (e).
11	(2) Compressed air energy storage.—The
12	term "compressed air energy storage" means, in the
13	case of an electricity grid application, the storage of
14	energy through the compression of air.
15	(3) Electric drive vehicle.—The term "elec-
16	tric drive vehicle" means—
17	(A) a vehicle that uses an electric motor for
18	all or part of the motive power of the vehicle, in-
19	cluding battery electric, hybrid electric, plug-in
20	hybrid electric, fuel cell, and plug-in fuel cell ve-
21	hicles and rail transportation vehicles; or
22	(B) mobile equipment that uses an electric
23	motor to replace an internal combustion engine
24	for all or part of the work of the equipment.

- 1 (4) Islanding.—The term "islanding" means a 2 distributed generator or energy storage device con-3 tinuing to power a location in the absence of electric 4 power from the primary source.
 - (5) Flywheel.—The term "flywheel" means, in the case of an electricity grid application, a device used to store rotational kinetic energy.
 - (6) MICROGRID.—The term "microgrid" means an integrated energy system consisting of interconnected loads and distributed energy resources (including generators and energy storage devices), which as an integrated system can operate in parallel with the utility grid or in an intentional islanding mode.
 - (7) SELF-HEALING GRID.—The term "self-healing grid" means a grid that is capable of automatically anticipating and responding to power system disturbances (including the isolation of failed sections and components), while optimizing the performance and service of the grid to customers.
 - (8) Spinning reserve services" means a quantity of electric generating capacity in excess of the quantity needed to meet peak electric demand.
- 24 (9) ULTRACAPACITOR.—The term 25 "ultracapacitor" means an energy storage device that

1	has a power density comparable to a conventional ca-
2	pacitor but is capable of exceeding the energy density
3	of a conventional capacitor by several orders of mag-
4	nitude.
5	(c) Program.—The Secretary shall carry out a re-
6	search, development, and demonstration program to sup-
7	port the ability of the United States to remain globally com-
8	petitive in energy storage systems for electric drive vehicles,
9	stationary applications, and electricity transmission and
10	distribution.
11	(d) Coordination.—In carrying out the activities of
12	this section, the Secretary shall coordinate relevant efforts
13	with appropriate Federal agencies, including the Depart-
14	ment of Transportation.
15	(e) Energy Storage Advisory Council.—
16	(1) Establishment.—Not later than 90 days
17	after the date of enactment of this Act, the Secretary
18	shall establish an Energy Storage Advisory Council.
19	(2) Composition.—
20	(A) In general.—Subject to subparagraph
21	(B), the Council shall consist of not less than 15
22	individuals appointed by the Secretary, based on
23	recommendations of the National Academy of
24	Sciences.

1	(B) Energy storage industry.—The
2	Council shall consist primarily of representatives
3	of the energy storage industry of the United
4	States.
5	(C) Chairperson.—The Secretary shall se-
6	lect a Chairperson for the Council from among
7	the members appointed under subparagraph (A).
8	(3) Meetings.—
9	(A) In General.—The Council shall meet
10	not less than once a year.
11	(B) Federal advisory committee act.—
12	The Federal Advisory Committee Act (5 U.S.C.
13	App.) shall apply to a meeting of the Council.
14	(4) Plans.—No later than 1 year after the date
15	of enactment of this Act and every 5 years thereafter,
16	the Council, in conjunction with the Secretary, shall
17	develop a 5-year plan for integrating basic and ap-
18	plied research so that the United States retains a
19	globally competitive domestic energy storage industry
20	for electric drive vehicles, stationary applications,
21	and electricity transmission and distribution.
22	(5) Review.—The Council shall—
23	(A) assess, every 2 years, the performance of
24	the Department in meeting the goals of the plans
25	developed under paragraph (4); and

1	(B) make specific recommendations to the
2	Secretary on programs or activities that should
3	be established or terminated to meet those goals.
4	(f) Basic Research Program.—
5	(1) Basic research.—The Secretary shall con-
6	duct a basic research program on energy storage sys-
7	tems to support electric drive vehicles, stationary ap-
8	plications, and electricity transmission and distribu-
9	tion, including—
10	(A) materials design;
11	(B) materials synthesis and characteriza-
12	tion;
13	(C) electrode-active materials, including
14	electrolytes and bioelectrolytes;
15	(D) surface and interface dynamics;
16	(E) modeling and simulation; and
17	(F) thermal behavior and life degradation
18	mechanisms.
19	(2) Nanoscience centers.—The Secretary, in
20	cooperation with the Council, shall coordinate the ac-
21	tivities of the nanoscience centers of the Department
22	to help the energy storage research centers of the De-
23	partment maintain a globally competitive posture in
24	energy storage systems for electric drive vehicles, sta-

1	tionary applications, and electricity transmission
2	and distribution.
3	(3) Funding.—For activities carried out under
4	this subsection, in addition to funding activities at
5	National Laboratories, the Secretary shall award
6	funds to, and coordinate activities with, a range of
7	stakeholders including the public, private, and aca-
8	demic sectors.
9	(g) Applied Research Program.—
10	(1) In General.—The Secretary shall conduct
11	an applied research program on energy storage sys-
12	tems to support electric drive vehicles, stationary ap-
13	plications, and electricity transmission and distribu-
14	tion technologies, including—
15	$(A)\ ultracapacitors;$
16	$(B)\ flywheels;$
17	(C) batteries and battery systems (including
18	$flow\ batteries);$
19	(D) compressed air energy systems;
20	$(E)\ power\ conditioning\ electronics;$
21	(F) manufacturing technologies for energy
22	storage systems;
23	(G) thermal management systems; and
24	(H) hydrogen as an energy storage medium.

1 (2) Funding.—For activities carried out under 2 this subsection, in addition to funding activities at 3 National Laboratories, the Secretary shall provide 4 funds to, and coordinate activities with, a range of 5 stakeholders, including the public, private, and aca-6 demic sectors.

(h) Energy Storage Research Centers.—

- (1) In General.—The Secretary shall establish, through competitive bids, not more than 4 energy storage research centers to translate basic research into applied technologies to advance the capability of the United States to maintain a globally competitive posture in energy storage systems for electric drive vehicles, stationary applications, and electricity transmission and distribution.
- (2) Program Management.—The centers shall be managed by the Under Secretary for Science of the Department.
- (3) Participation agreements.—As a condition of participating in a center, a participant shall enter into a participation agreement with the center that requires that activities conducted by the participant for the center promote the goal of enabling the United States to compete successfully in global energy storage markets.

- 1 (4) PLANS.—A center shall conduct activities 2 that promote the achievement of the goals of the plans 3 of the Council under subsection (e)(4).
 - (5) NATIONAL LABORATORIES.—A national laboratory (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)) may participate in a center established under this subsection, including a cooperative research and development agreement (as defined in section 12(d) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(d))).
 - (6) DISCLOSURE.—Section 623 of the Energy Policy Act of 1992 (42 U.S.C. 13293) may apply to any project carried out through a grant, contract, or cooperative agreement under this subsection.
 - (7) Intellectual property.—In accordance with section 202(a)(ii) of title 35, United States Code, section 152 of the Atomic Energy Act of 1954 (42 U.S.C. 2182), and section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5908), the Secretary may require, for any new invention developed under this subsection, that—
- 23 (A) if an industrial participant is active in 24 a energy storage research center established 25 under this subsection relating to the advance-

1	ment of energy storage technologies carried out,
2	in whole or in part, with Federal funding, the
3	industrial participant be granted the first option
4	to negotiate with the invention owner, at least in
5	the field of energy storage technologies, nonexclu-
6	sive licenses, and royalties on terms that are rea-
7	sonable, as determined by the Secretary;
8	(B) if 1 or more industry participants are
9	active in a center, during a 2-year period begin-
10	ning on the date on which an invention is
11	made—
12	(i) the patent holder shall not negotiate
13	any license or royalty agreement with any
14	entity that is not an industrial participant
15	under this subsection; and
16	(ii) the patent holder shall negotiate
17	nonexclusive licenses and royalties in good
18	faith with any interested industrial partici-
19	pant under this subsection; and
20	(C) the new invention be developed under
21	such other terms as the Secretary determines to
22	be necessary to promote the accelerated commer-
23	cialization of inventions made under this sub-
24	section to advance the capability of the United

1	States to successfully compete in global energy
2	storage markets.
3	(i) Energy Storage Systems Demonstrations.—
4	(1) In general.—The Secretary shall carry out
5	a program of new demonstrations of advanced energy
6	storage systems.
7	(2) Scope.—The demonstrations shall—
8	(A) be regionally diversified; and
9	(B) expand on the existing technology dem-
10	onstration program of the Department.
11	(3) Stakeholders.—In carrying out the dem-
12	onstrations, the Secretary shall, to the maximum ex-
13	tent practicable, include the participation of a range
14	of stakeholders, including—
15	(A) rural electric cooperatives;
16	(B) investor owned utilities;
17	(C) municipally owned electric utilities;
18	(D) energy storage systems manufacturers;
19	(E) electric drive vehicle manufacturers;
20	(F) the renewable energy production indus-
21	try;
22	(G) State or local energy offices;
23	(H) the fuel cell industry; and
24	(I) institutions of higher education.

1	(4) Objectives.—Each of the demonstrations
2	shall include 1 or more of the following:
3	(A) Energy storage to improve the feasi-
4	bility of microgrids or islanding, or transmission
5	and distribution capability, to improve reli-
6	ability in rural areas.
7	(B) Integration of an energy storage system
8	with a self-healing grid.
9	(C) Use of energy storage to improve secu-
10	rity to emergency response infrastructure and
11	ensure availability of emergency backup power
12	for consumers.
13	(D) Integration with a renewable energy
14	production source, at the source or away from
15	the source.
16	(E) Use of energy storage to provide ancil-
17	lary services, such as spinning reserve services,
18	for grid management.
19	(F) Advancement of power conversion sys-
20	tems to make the systems smarter, more efficient,
21	able to communicate with other inverters, and
22	able to control voltage.
23	(G) Use of energy storage to optimize trans-
24	mission and distribution operation and power
25	quality, which could address overloaded lines

1	and maintenance of transformers and sub-
2	stations.
3	(H) Use of advanced energy storage for peak
4	load management of homes, businesses, and the
5	grid.
6	(I) Use of energy storage devices to store en-
7	ergy during nonpeak generation periods to make
8	better use of existing grid assets.
9	(j) Vehicle Energy Storage Demonstration.—
10	(1) In general.—The Secretary shall carry out
11	a program of electric drive vehicle energy storage
12	$technology\ demonstrations.$
13	(2) Consortia.—The technology demonstrations
14	shall be conducted through consortia, which may in-
15	clude—
16	(A) energy storage systems manufacturers
17	and suppliers of the manufacturers;
18	(B) electric drive vehicle manufacturers;
19	(C) rural electric cooperatives;
20	(D) investor owned utilities;
21	(E) municipal and rural electric utilities;
22	(F) State and local governments;
23	$(G)\ metropolitan\ transportation\ authorities;$
24	and
25	(H) institutions of higher education.

1	(3) Objectives.—The program shall dem-
2	onstrate 1 or more of the following:
3	(A) Novel, high capacity, high efficiency en-
4	ergy storage, charging, and control systems,
5	along with the collection of data on performance
6	characteristics, such as battery life, energy stor-
7	age capacity, and power delivery capacity.
8	(B) Advanced onboard energy management
9	systems and highly efficient battery cooling sys-
10	tems.
11	(C) Integration of those systems on a proto-
12	type vehicular platform, including with
13	drivetrain systems for passenger, commercial,
14	and nonroad electric drive vehicles.
15	(D) New technologies and processes that re-
16	duce manufacturing costs.
17	(E) Integration of advanced vehicle tech-
18	nologies with electricity distribution system and
19	smart metering technology.
20	(F) Control systems that minimize emis-
21	sions profiles in cases in which clean diesel en-
22	gines are part of a plug-in hybrid drive system.
23	(k) Secondary Applications and Disposal of
24	Electric Drive Vehicle Batteries.—The Secretary

- 1 shall carry out a program of research, development, and
- 2 demonstration of—
- 3 (1) secondary applications of energy storage de-
- 4 vices following service in electric drive vehicles; and
- 5 (2) technologies and processes for final recycling
- 6 and disposal of the devices.
- 7 (1) Cost Sharing.—The Secretary shall carry out the
- 8 programs established under this section in accordance with
- 9 section 988 of the Energy Policy Act of 2005 (42 U.S.C.
- 10 16352).
- 11 (m) Merit Review of Proposals.—The Secretary
- 12 shall carry out the programs established under subsections
- 13 (i), (j), and (k) in accordance with section 989 of the En-
- 14 ergy Policy Act of 2005 (42 U.S.C. 16353).
- 15 (n) Coordination and Nonduplication.—To the
- 16 maximum extent practicable, the Secretary shall coordinate
- 17 activities under this section with other programs and lab-
- 18 oratories of the Department and other Federal research pro-
- 19 grams.
- 20 (o) Review by National Academy of Sciences.—
- 21 On the business day that is 5 years after the date of enact-
- 22 ment of this Act, the Secretary shall offer to enter into an
- 23 arrangement with the National Academy of Sciences to as-
- 24 sess the performance of the Department in carrying out this
- 25 section.

1	(p) Authorization of Appropriations.—There are
2	authorized to be appropriated to carry out—
3	(1) the basic research program under subsection
4	(f) \$50,000,000 for each of fiscal years 2009 through
5	2018;
6	(2) the applied research program under sub-
7	section (g) \$80,000,000 for each of fiscal years 2009
8	through 2018; and;
9	(3) the energy storage research center program
10	under subsection (h) \$100,000,000 for each of fiscal
11	years 2009 through 2018;
12	(4) the energy storage systems demonstration
13	program under subsection (i) \$30,000,000 for each of
14	fiscal years 2009 through 2018;
15	(5) the vehicle energy storage demonstration pro-
16	gram under subsection (j) \$30,000,000 for each of fis-
17	cal years 2009 through 2018; and
18	(6) the secondary applications and disposal of
19	electric drive vehicle batteries program under sub-
20	section (k) \$5,000,000 for each of fiscal years 2009
21	through 2018.

1	Subtitle E—Miscellaneous
2	Provisions
3	SEC. 651. LIGHTWEIGHT MATERIALS RESEARCH AND DE-
4	VELOPMENT.
5	(a) In General.—As soon as practicable after the
6	date of enactment of this Act, the Secretary of Energy shall
7	establish a program to determine ways in which the weight
8	of motor vehicles could be reduced to improve fuel efficiency
9	without compromising passenger safety by conducting re-
10	search, development, and demonstration relating to—
11	(1) the development of new materials (including
12	cast metal composite materials formed by
13	autocombustion synthesis) and material processes that
14	yield a higher strength-to-weight ratio or other prop-
15	erties that reduce vehicle weight; and
16	(2) reducing the cost of—
17	(A) lightweight materials (including high-
18	strength steel alloys, aluminum, magnesium,
19	metal composites, and carbon fiber reinforced
20	polymer composites) with the properties required
21	for construction of lighter-weight vehicles; and
22	(B) materials processing, automated manu-
23	facturing, joining, and recycling lightweight ma-
24	terials for high-volume applications.

1	(b) Authorization of Appropriations.—There is
2	authorized to be appropriated to carry out this section
3	\$80,000,000 for the period of fiscal years 2008 through
4	2012.
5	SEC. 652. COMMERCIAL INSULATION DEMONSTRATION
6	PROGRAM.
7	(a) Definitions.—In this section:
8	(1) Advanced insulation.—The term "ad-
9	vanced insulation" means insulation that has an R
10	value of not less than R35 per inch.
11	(2) Covered refrigeration unit.—The term
12	"covered refrigeration unit" means any—
13	(A) commercial refrigerated truck;
14	(B) commercial refrigerated trailer; or
15	(C) commercial refrigerator, freezer, or re-
16	frigerator-freezer described in section 342(c) of
17	the Energy Policy and Conservation Act (42
18	$U.S.C. \ 6313(c)$).
19	(b) REPORT.—Not later than 90 days after the date
20	of enactment of this Act, the Secretary shall submit to Con-
21	gress a report that includes an evaluation of—
22	(1) the state of technological advancement of ad-
23	vanced insulation, and

(2) the projected amount of cost savings that would be generated by implementing advanced insulation into covered refrigeration units.

(c) Demonstration Program.—

- (1) Establishment.—If the Secretary determines in the report described in subsection (b) that the implementation of advanced insulation into covered refrigeration units would generate an economically justifiable amount of cost savings, the Secretary, in cooperation with manufacturers of covered refrigeration units, shall establish a demonstration program under which the Secretary shall demonstrate the cost-effectiveness of advanced insulation.
- (2) DISCLOSURE.—The Secretary may, for a period of up to five years after an award is granted under the demonstration program, exempt from mandatory disclosure under section 552 of title 5, United States Code (popularly known as the Freedom of Information Act) information that the Secretary determines would be a privileged or confidential trade secret or commercial or financial information under subsection (b)(4) of such section if the information had been obtained from a non-Government party.

1	(3) Cost-sharing.—Section 988 of the Energy
2	Policy Act of 2005 (42 U.S.C. 16352) shall apply to
3	any project carried out under this subsection.
4	(d) Authorization of Appropriations.—There is
5	authorized to be appropriated to carry out this section
6	\$8,000,000 for the period of fiscal years 2009 through 2014.
7	SEC. 653. TECHNICAL CRITERIA FOR CLEAN COAL POWER
8	INITIATIVE.
9	Section 402(b)(1)(B)(ii) of the Energy Policy Act of
10	2005 (42 U.S.C. 15962(b)(1)(B)(ii)) is amended by striking
11	subclause (I) and inserting the following:
12	"(I)(aa) to remove at least 99 per-
13	cent of sulfur dioxide; or
14	"(bb) to emit not more than 0.04
15	pound SO ₂ per million Btu, based on
16	a 30-day average;".
17	SEC. 654. H-PRIZE.
18	Section 1008 of the Energy Policy Act of 2005 (42
19	U.S.C. 16396) is amended by adding at the end the fol-
20	lowing new subsection:
21	"(f) H-Prize.—
22	"(1) Prize Authority.—
23	"(A) In General.—As part of the program
24	under this section, the Secretary shall carry out
25	a program to competitively award cash prizes in

1	conformity with this subsection to advance the
2	research, development, demonstration, and com-
3	mercial application of hydrogen energy tech-
4	nologies.
5	"(B) Advertising and solicitation of
6	COMPETITORS.—
7	"(i) Advertising.—The Secretary
8	shall widely advertise prize competitions
9	under this subsection to encourage broad
10	participation, including by individuals,
11	universities (including historically Black
12	colleges and universities and other minority
13	serving institutions), and large and small
14	businesses (including businesses owned or
15	controlled by socially and economically dis-
16	advantaged persons).
17	"(ii) Announcement through fed-
18	ERAL REGISTER NOTICE.—The Secretary
19	shall announce each prize competition
20	under this subsection by publishing a notice
21	in the Federal Register. This notice shall
22	include essential elements of the competition
23	such as the subject of the competition, the
24	duration of the competition, the eligibility

requirements for participation in the com-

1	petition, the process for participants to reg-
2	ister for the competition, the amount of the
3	prize, and the criteria for awarding the
4	prize.
5	"(C) Administering the competitions.—
6	The Secretary shall enter into an agreement with
7	a private, nonprofit entity to administer the
8	prize competitions under this subsection, subject
9	to the provisions of this subsection (in this sub-
10	section referred to as the 'administering entity').
11	The duties of the administering entity under the
12	agreement shall include—
13	"(i) advertising prize competitions
14	under this subsection and their results;
15	"(ii) raising funds from private enti-
16	ties and individuals to pay for administra-
17	tive costs and to contribute to cash prizes,
18	including funds provided in exchange for
19	the right to name a prize awarded under
20	$this\ subsection;$
21	"(iii) developing, in consultation with
22	and subject to the final approval of the Sec-
23	retary, the criteria for selecting winners in
24	prize competitions under this subsection,
25	based on goals provided by the Secretary:

1	"(iv) determining, in consultation with
2	the Secretary, the appropriate amount and
3	funding sources for each prize to be award-
4	ed under this subsection, subject to the final
5	approval of the Secretary with respect to
6	$Federal\ funding;$
7	"(v) providing advice and consultation
8	to the Secretary on the selection of judges in
9	$accordance\ with\ paragraph\ (2)(D),\ using$
10	criteria developed in consultation with and
11	subject to the final approval of the Sec-
12	retary; and
13	"(vi) protecting against the admin-
14	istering entity's unauthorized use or disclo-
15	sure of a registered participant's trade se-
16	crets and confidential business information.
17	Any information properly identified as
18	trade secrets or confidential business infor-
19	mation that is submitted by a participant
20	as part of a competitive program under this
21	subsection may be withheld from public dis-
22	closure.
23	"(D) Funding sources.—Prizes under
24	this subsection shall consist of Federal appro-
25	priated funds and any funds provided by the ad-

ministering entity (including funds raised pursuant to subparagraph (C)(ii)) for such cash prize programs. The Secretary may accept funds from other Federal agencies for such cash prizes and, notwithstanding section 3302(b) of title 31, United States Code, may use such funds for the cash prize program under this subsection. Other than publication of the names of prize sponsors, the Secretary may not give any special consideration to any private sector entity or individual in return for a donation to the Secretary or administering entity.

"(E) Announcement of prizes.—The Secretary may not issue a notice required by subparagraph (B)(ii) until all the funds needed to pay out the announced amount of the prize have been appropriated or committed in writing by the administering entity. The Secretary may increase the amount of a prize after an initial announcement is made under subparagraph (B)(ii) if—

"(i) notice of the increase is provided in the same manner as the initial notice of the prize; and

1	"(ii) the funds needed to pay out the
2	announced amount of the increase have been
3	appropriated or committed in writing by
4	the administering entity.
5	"(F) Sunset.—The authority to announce
6	prize competitions under this subsection shall
7	terminate on September 30, 2018.
8	"(2) Prize categories.—
9	"(A) Categories.—The Secretary shall es-
10	tablish prizes under this subsection for—
11	"(i) advancements in technologies,
12	components, or systems related to—
13	$``(I)\ hydrogen\ production;$
14	$``(II)\ hydrogen\ storage;$
15	"(III) hydrogen distribution; and
16	"(IV) hydrogen utilization;
17	"(ii) prototypes of hydrogen-powered
18	vehicles or other hydrogen-based products
19	that best meet or exceed objective perform-
20	ance criteria, such as completion of a race
21	over a certain distance or terrain or genera-
22	tion of energy at certain levels of efficiency;
23	and
24	"(iii) transformational changes in
25	technologies for the distribution or produc-

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tion of hydrogen that meet or exceed farreaching objective criteria, which shall include minimal carbon emissions and which may include cost criteria designed to facilitate the eventual market success of a winning technology.

"(B) AWARDS.—

"(i) Advancements.—To the extent permitted under paragraph (1)(E), the authorizedunder subparagraph prizes (A)(i) shall be awarded biennially to the most significant advance made in each of the four subcategories described in subclauses (I) through (IV) of subparagraph (A)(i) since the submission deadline of the previous prize competition in the same category under subparagraph (A)(i) or the date of enactment of this subsection, whichever is later, unless no such advance is significant enough to merit an award. No one such prize may exceed \$1,000,000. If less than \$4,000,000 is available for a prize competition under subparagraph (A)(i), the Secretary may omit one or more subcategories,

1 reduce the amount of the prizes, or not hold 2 a prize competition.

"(ii) PROTOTYPES.—To the extent permitted under paragraph (1)(E), prizes authorized under subparagraph (A)(ii) shall be awarded biennially in alternate years from the prizes authorized under subparagraph (A)(i). The Secretary is authorized to award up to one prize in this category in each 2-year period. No such prize may exceed \$4,000,000. If no registered participants meet the objective performance criteria established pursuant to subparagraph (C) for a competition under this clause, the Secretary shall not award a prize.

"(iii) Transformational tech-Nologies.—To the extent permitted under paragraph (1)(E), the Secretary shall announce one prize competition authorized under subparagraph (A)(iii) as soon after the date of enactment of this subsection as is practicable. A prize offered under this clause shall be not less than \$10,000,000, paid to the winner in a lump sum, and an additional amount paid to the winner as a

1	match for each dollar of private funding
2	raised by the winner for the hydrogen tech-
3	nology beginning on the date the winner
4	was named. The match shall be provided for
5	3 years after the date the prize winner is
6	named or until the full amount of the prize
7	has been paid out, whichever occurs first. A
8	prize winner may elect to have the match
9	amount paid to another entity that is con-
10	tinuing the development of the winning
11	technology. The Secretary shall announce
12	the rules for receiving the match in the no-
13	tice required by paragraph $(1)(B)(ii)$. The
14	Secretary shall award a prize under this
15	clause only when a registered participant
16	has met the objective criteria established for
17	the prize pursuant to subparagraph (C) and
18	announced pursuant to paragraph
19	(1)(B)(ii). Not more than \$10,000,000 in
20	Federal funds may be used for the prize
21	award under this clause. The administering
22	entity shall seek to raise \$40,000,000 to-
23	ward the matching award under this clause.
24	"(C) Criteria.—In establishing the cri-
25	teria required by this subsection, the Secretary—

1	"(i) shall consult with the Depart-
2	ment's Hydrogen Technical and Fuel Cell
3	$Advisory\ Committee;$
4	"(ii) shall consult with other Federal
5	agencies, including the National Science
6	Foundation; and
7	"(iii) may consult with other experts
8	such as private organizations, including
9	professional societies, industry associations,
10	and the National Academy of Sciences and
11	the National Academy of Engineering.
12	"(D) Judges.—For each prize competition
13	under this subsection, the Secretary in consulta-
14	tion with the administering entity shall assemble
15	a panel of qualified judges to select the winner
16	or winners on the basis of the criteria established
17	under subparagraph (C). Judges for each prize
18	competition shall include individuals from out-
19	side the Department, including from the private
20	sector. A judge, spouse, minor children, and
21	members of the judge's household may not—
22	"(i) have personal or financial inter-
23	ests in, or be an employee, officer, director,
24	or agent of, any entity that is a registered

1	participant in the prize competition for
2	which he or she will serve as a judge; or
3	"(ii) have a familial or financial rela-
4	tionship with an individual who is a reg-
5	istered participant in the prize competition
6	for which he or she will serve as a judge.
7	"(3) Eligibility.—To be eligible to win a prize
8	under this subsection, an individual or entity—
9	"(A) shall have complied with all the re-
10	quirements in accordance with the Federal Reg-
11	$ister\ notice\ required\ under\ paragraph\ (1)(B)(ii);$
12	"(B) in the case of a private entity, shall be
13	incorporated in and maintain a primary place
14	of business in the United States, and in the case
15	of an individual, whether participating singly or
16	in a group, shall be a citizen of, or an alien law-
17	fully admitted for permanent residence in, the
18	United States; and
19	"(C) shall not be a Federal entity, a Federal
20	employee acting within the scope of his employ-
21	ment, or an employee of a national laboratory
22	acting within the scope of his employment.
23	"(4) Intellectual property.—The Federal
24	Government shall not, by virtue of offering or award-
25	ing a prize under this subsection be entitled to any

intellectual property rights derived as a consequence of, or direct relation to, the participation by a registered participant in a competition authorized by this subsection. This paragraph shall not be construed to prevent the Federal Government from negotiating a license for the use of intellectual property developed for a prize competition under this subsection.

"(5) Liability.—

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"(A) Waiver of liability.—The Secretary may require registered participants to waive claims against the Federal Government and the administering entity (except claims for willful misconduct) for any injury, death, damage, or loss of property, revenue, or profits arising from the registered participants' participation in a competition under this subsection. The Secretary shall give notice of any waiver required under this subparagraph in the notice required by paragraph (1)(B)(ii). The Secretary may not require a registered participant to waive claims against the administering entity arising out of the unauthorized use or disclosure by the administering entity of the registered participant's trade secrets or confidential business information.

1	"(B) Liability insurance.—
2	"(i) Requirements.—Registered par-
3	ticipants in a prize competition under this
4	subsection shall be required to obtain liabil-
5	ity insurance or demonstrate financial re-
6	sponsibility, in amounts determined by the
7	Secretary, for claims by—
8	"(I) a third party for death, bod-
9	ily injury, or property damage or loss
10	resulting from an activity carried out
11	in connection with participation in a
12	competition under this subsection; and
13	"(II) the Federal Government for
14	damage or loss to Government property
15	resulting from such an activity.
16	"(ii) FEDERAL GOVERNMENT IN-
17	SURED.—The Federal Government shall be
18	named as an additional insured under a
19	registered participant's insurance policy re-
20	quired under clause (i)(I), and registered
21	participants shall be required to agree to
22	indemnify the Federal Government against
23	third party claims for damages arising
24	from or related to competition activities
25	under this subsection.

1	"(6) Report to congress.—Not later than 60
2	days after the awarding of the first prize under this
3	subsection, and annually thereafter, the Secretary
4	shall transmit to the Congress a report that—
5	"(A) identifies each award recipient;
6	"(B) describes the technologies developed by
7	each award recipient; and
8	"(C) specifies actions being taken toward
9	commercial application of all technologies with
10	respect to which a prize has been awarded under
11	this subsection.
12	"(7) Authorization of Appropriations.—
13	"(A) In general.—
14	"(i) AWARDS.—There are authorized to
15	be appropriated to the Secretary for the pe-
16	riod encompassing fiscal years 2008 through
17	2017 for carrying out this subsection—
18	"(I) \$20,000,000 for awards de-
19	$scribed\ in\ paragraph\ (2)(A)(i);$
20	"(II) \$20,000,000 for awards de-
21	scribed in paragraph (2)(A)(ii); and
22	"(III) \$10,000,000 for the award
23	described in paragraph $(2)(A)(iii)$.
24	"(ii) Administration.—In addition
25	to the amounts authorized in clause (i),

there are authorized to be appropriated to
the Secretary for each of fiscal years 2008
and 2009 \$2,000,000 for the administrative
costs of carrying out this subsection.

"(B) CARRYOVER OF FUNDS.—Funds appropriated for prize awards under this subsection shall remain available until expended, and may be transferred, reprogrammed, or expended for other purposes only after the expiration of 10 fiscal years after the fiscal year for which the funds were originally appropriated. No provision in this subsection permits obligation or payment of funds in violation of section 1341 of title 31 of the United States Code (commonly referred to as the Anti-Deficiency Act).

"(8) Nonsubstitution.—The programs created under this subsection shall not be considered a substitute for Federal research and development programs.".

20 SEC. 655. BRIGHT TOMORROW LIGHTING PRIZES.

21 (a) ESTABLISHMENT.—Not later than 1 year after the 22 date of enactment of this Act, as part of the program carried 23 out under section 1008 of the Energy Policy Act of 2005 24 (42 U.S.C. 16396), the Secretary shall establish and award

1	Bright Tomorrow Lighting Prizes for solid state lighting
2	in accordance with this section.
3	(b) Prize Specifications.—
4	(1) 60-watt incandescent replacement lamp
5	PRIZE.—The Secretary shall award a 60-Watt Incan-
6	descent Replacement Lamp Prize to an entrant that
7	produces a solid-state light package simultaneously
8	capable of—
9	(A) producing a luminous flux greater than
10	900 lumens;
11	(B) consuming less than or equal to 10
12	watts;
13	(C) having an efficiency greater than 90
14	lumens per watt;
15	(D) having a color rendering index greater
16	than $90;$
17	(E) having a correlated color temperature of
18	not less than 2,750, and not more than 3,000, de-
19	grees Kelvin;
20	(F) having 70 percent of the lumen value
21	under subparagraph (A) exceeding 25,000 hours
22	under typical conditions expected in residential
23	use;
24	(G) having a light distribution pattern
25	similar to a soft 60-watt incandescent A19 bulb

1	(H) having a size and shape that fits with-
2	in the maximum dimensions of an A19 bulb in
3	accordance with American National Standards
4	Institute standard C78.20–2003, figure C78.20–
5	211;
6	(I) using a single contact medium screw
7	socket; and
8	(I) mass production for a competitive sales
9	commercial market satisfied by producing com-
10	mercially accepted quality control lots of such
11	units equal to or exceeding the criteria described
12	in subparagraphs (A) through (I).
13	(2) PAR TYPE 38 HALOGEN REPLACEMENT LAMP
14	PRIZE.—The Secretary shall award a Parabolic Alu-
15	minized Reflector Type 38 Halogen Replacement
16	Lamp Prize (referred to in this section as the "PAR
17	Type 38 Halogen Replacement Lamp Prize'') to an
18	entrant that produces a solid-state-light package si-
19	multaneously capable of—
20	(A) producing a luminous flux greater than
21	or equal to 1,350 lumens;
22	(B) consuming less than or equal to 11
23	watts;
24	(C) having an efficiency greater than 123
25	lumens per watt;

1	(D) having a color rendering index greater
2	than or equal to 90;
3	(E) having a correlated color coordinate
4	temperature of not less than 2,750, and not more
5	than 3,000, degrees Kelvin;
6	(F) having 70 percent of the lumen value
7	under subparagraph (A) exceeding 25,000 hours
8	under typical conditions expected in residential
9	use;
10	(G) having a light distribution pattern
11	similar to a PAR 38 halogen lamp;
12	(H) having a size and shape that fits with-
13	in the maximum dimensions of a PAR 38 halo-
14	gen lamp in accordance with American National
15	Standards Institute standard C78–21–2003, fig-
16	ure C78.21–238;
17	(I) using a single contact medium screw
18	socket; and
19	(I) mass production for a competitive sales
20	commercial market satisfied by producing com-
21	mercially accepted quality control lots of such
22	units equal to or exceeding the criteria described
23	in subparagraphs (A) through (I).
24	(3) Twenty-first century lamp prize.—The
25	Secretary shall award a Twenty-First Century Lamp

1	Prize to an entrant that produces a solid-state-light-
2	light capable of—
3	(A) producing a light output greater than
4	1,200 lumens;
5	(B) having an efficiency greater than 150
6	lumens per watt;
7	(C) having a color rendering index greater
8	than $90;$
9	(D) having a color coordinate temperature
10	between 2,800 and 3,000 degrees Kelvin; and
11	(E) having a lifetime exceeding 25,000
12	hours.
13	(c) Private Funds.—
14	(1) In general.—Subject to paragraph (2), and
15	notwithstanding section 3302 of title 31, United
16	States Code, the Secretary may accept, retain, and
17	use funds contributed by any person, government en-
18	tity, or organization for purposes of carrying out this
19	subsection—
20	(A) without further appropriation; and
21	(B) without fiscal year limitation.
22	(2) Prize competition.—A private source of
23	funding may not participate in the competition for
24	prizes awarded under this section.

1	(d) Technical Review.—The Secretary shall estab-
2	lish a technical review committee composed of non-Federal
3	officers to review entrant data submitted under this section
4	to determine whether the data meets the prize specifications
5	described in subsection (b).
6	(e) Third Party Administration.—The Secretary
7	may competitively select a third party to administer
8	awards under this section.
9	(f) Eligibility for Prizes.—To be eligible to be
10	awarded a prize under this section—
11	(1) in the case of a private entity, the entity
12	shall be incorporated in and maintain a primary
13	place of business in the United States; and
14	(2) in the case of an individual (whether partici-
15	pating as a single individual or in a group), the in-
16	dividual shall be a citizen or lawful permanent resi-
17	dent of the United States.
18	(g) AWARD AMOUNTS.—Subject to the availability of
19	funds to carry out this section, the amount of—
20	(1) the 60-Watt Incandescent Replacement Lamp
21	Prize described in subsection (b)(1) shall be
22	\$10,000,000;
23	(2) the PAR Type 38 Halogen Replacement
24	Lamp Prize described in subsection (b)(2) shall be
25	\$5,000,000; and

1	(3) the Twenty-First Century Lamp Prize de	e-
2	scribed in subsection (b)(3) shall be \$5,000,000.	

- 3 (h) Federal Procurement of Solid-State-4 Lights.—
- 5 60-WATT INCANDESCENT REPLACEMENT.— 6 Subject to paragraph (3), as soon as practicable after 7 the successful award of the 60-Watt Incandescent Re-8 placement Lamp Prize under subsection (b)(1), the 9 Secretary (in consultation with the Administrator of 10 General Services) shall develop governmentwide Fed-11 eral purchase guidelines with a goal of replacing the 12 use of 60-watt incandescent lamps in Federal Govern-13 ment buildings with a solid-state-light package de-14 scribed in subsection (b)(1) by not later than the date 15 that is 5 years after the date the award is made.
 - (2) PAR 38 HALOGEN REPLACEMENT LAMP RE-PLACEMENT.—Subject to paragraph (3), as soon as practicable after the successful award of the PAR Type 38 Halogen Replacement Lamp Prize under subsection (b)(2), the Secretary (in consultation with the Administrator of General Services) shall develop governmentwide Federal purchase guidelines with the goal of replacing the use of PAR 38 halogen lamps in Federal Government buildings with a solid-state-light package described in subsection (b)(2) by not later

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1 than the date that is 5 years after the date the award 2 is made. (3) Waivers.— 3 4 (A) In General.—The Secretary or the Administrator of General Services may waive the 5 6 application of paragraph (1) or (2) if the Sec-7 retary or Administrator determines that the re-8 turn on investment from the purchase of a solid-9 state-light package described in paragraph (1) or 10 (2) of subsection (b), respectively, is cost prohibi-11 tive. 12 (B) REPORT OF WAIVER.—If the Secretary 13 or Administrator waives the application of para-14 graph (1) or (2), the Secretary or Administrator, 15 respectively, shall submit to Congress an annual report that describes the waiver and provides a 16 17 detailed justification for the waiver. 18 (i) Report.—Not later than 2 years after the date of 19 enactment of this Act, and annually thereafter, the Admin-20 istrator of General Services shall submit to the Energy Information Agency a report describing the quantity, type, and cost of each lighting product purchased by the Federal 23 Government. (i) Bright Tomorrow Lighting Award Fund.— 24

1	(1) Establishment.—There is established in
2	the United States Treasury a Bright Tomorrow
3	Lighting permanent fund without fiscal year limita-
4	tion to award prizes under paragraphs (1), (2), and
5	(3) of subsection (b).
6	(2) Sources of funding.—The fund established
7	under paragraph (1) shall accept—
8	(A) fiscal year appropriations; and
9	(B) private contributions authorized under
10	subsection (c).
11	(k) AUTHORIZATION OF APPROPRIATIONS.—There are
12	authorized to be appropriated such sums as are necessary
13	to carry out this section.
14	SEC. 656. RENEWABLE ENERGY INNOVATION MANUFAC-
15	TURING PARTNERSHIP.
	TURING PARTNERSHIP.
16	(a) Establishment.—The Secretary shall carry out
16 17	
17	(a) Establishment.—The Secretary shall carry out
17	(a) Establishment.—The Secretary shall carry out a program, to be known as the Renewable Energy Innova-
17 18	(a) Establishment.—The Secretary shall carry out a program, to be known as the Renewable Energy Innova- tion Manufacturing Partnership Program (referred to in
17 18 19	(a) ESTABLISHMENT.—The Secretary shall carry out a program, to be known as the Renewable Energy Innovation Manufacturing Partnership Program (referred to in this section as the "Program"), to make assistance awards
17 18 19 20	(a) ESTABLISHMENT.—The Secretary shall carry out a program, to be known as the Renewable Energy Innovation Manufacturing Partnership Program (referred to in this section as the "Program"), to make assistance awards to eligible entities for use in carrying out research, develop-
17 18 19 20 21	(a) ESTABLISHMENT.—The Secretary shall carry out a program, to be known as the Renewable Energy Innovation Manufacturing Partnership Program (referred to in this section as the "Program"), to make assistance awards to eligible entities for use in carrying out research, development, and demonstration relating to the manufacturing of

1	for assistance awards for an eligible project described in
2	subsection (e).
3	(c) Program Purposes.—The purposes of the Pro-
4	gram are—
5	(1) to develop, or aid in the development of, ad-
6	vanced manufacturing processes, materials, and in-
7	frastructure;
8	(2) to increase the domestic production of renew-
9	able energy technology and components; and
10	(3) to better coordinate Federal, State, and pri-
11	vate resources to meet regional and national renew-
12	able energy goals through advanced manufacturing
13	partnerships.
14	(d) Eligible Entities.—An entity shall be eligible
15	to receive an assistance award under the Program to carry
16	out an eligible project described in subsection (e) if the enti-
17	ty is composed of—
18	(1) 1 or more public or private nonprofit institu-
19	tions or national laboratories engaged in research, de-
20	velopment, demonstration, or technology transfer, that
21	would participate substantially in the project; and
22	(2) 1 or more private entities engaged in the
23	manufacturing or development of renewable energy
24	system components (including solar energy, wind en-

1	ergy, biomass, geothermal energy, energy storage, or
2	fuel cells).
3	(e) Eligible Projects.—An eligible entity may use
4	an assistance award provided under this section to carry
5	out a project relating to—
6	(1) the conduct of studies of market opportunities
7	for component manufacturing of renewable energy
8	systems;
9	(2) the conduct of multiyear applied research,
10	development, demonstration, and deployment projects
11	for advanced manufacturing processes, materials, and
12	infrastructure for renewable energy systems; and
13	(3) other similar ventures, as approved by the
14	Secretary, that promote advanced manufacturing of
15	$renewable\ technologies.$
16	(f) Criteria and Guidelines.—The Secretary shall
17	establish criteria and guidelines for the submission, evalua-
18	tion, and funding of proposed projects under the Program.
19	(g) Cost Sharing.—Section 988 of the Energy Policy
20	Act of 2005 (42 U.S.C. 16352) shall apply to a project car-
21	ried out under this section.
22	(h) Disclosure.—The Secretary may, for a period of

23 up to five years after an award is granted under this sec-

24 tion, exempt from mandatory disclosure under section 552

25 of title 5, United States Code (popularly known as the Free-

- 1 dom of Information Act) information that the Secretary de-
- 2 termines would be a privileged or confidential trade secret
- 3 or commercial or financial information under subsection
- 4 (b)(4) of such section if the information had been obtained
- 5 from a non-Government party.
- 6 (i) Sense of the Congress.—It is the sense of the
- 7 Congress that the Secretary should ensure that small busi-
- 8 nesses engaged in renewable manufacturing be given pri-
- 9 ority consideration for the assistance awards provided
- 10 under this section.
- 11 (j) AUTHORIZATION OF APPROPRIATIONS.—There is
- 12 authorized to be appropriated out of funds already author-
- 13 ized to carry out this section \$25,000,000 for each of fiscal
- 14 years 2008 through 2013, to remain available until ex-
- 15 pended.

16 TITLE VII—CARBON CAPTURE

- 17 **AND SEQUESTRATION**
- 18 Subtitle A—Carbon Capture and
- 19 Sequestration Research, Devel-
- 20 opment, and Demonstration
- 21 SEC. 701. SHORT TITLE.
- This subtitle may be cited as the "Department of En-
- 23 ergy Carbon Capture and Sequestration Research, Develop-
- 24 ment, and Demonstration Act of 2007".

1	SEC. 702. CARBON CAPTURE AND SEQUESTRATION RE-
2	SEARCH, DEVELOPMENT, AND DEMONSTRA-
3	TION PROGRAM.
4	(a) Amendment.—Section 963 of the Energy Policy
5	Act of 2005 (42 U.S.C. 16293) is amended—
6	(1) in the section heading, by striking "RE-
7	SEARCH AND DEVELOPMENT" and inserting
8	"AND SEQUESTRATION RESEARCH, DEVELOP-
9	MENT, AND DEMONSTRATION";
10	(2) in subsection (a)—
11	(A) by striking "research and development"
12	and inserting "and sequestration research, devel-
13	opment, and demonstration"; and
14	(B) by striking "capture technologies on
15	combustion-based systems" and inserting "cap-
16	ture and sequestration technologies related to in-
17	dustrial sources of carbon dioxide";
18	(3) in subsection (b)—
19	(A) in paragraph (3), by striking "and" at
20	$the\ end;$
21	(B) in paragraph (4), by striking the period
22	at the end and inserting "; and"; and
23	(C) by adding at the end the following:
24	"(5) to expedite and carry out large-scale testing
25	of carbon sequestration systems in a range of geologic
26	formations that will provide information on the cost

1	and feasibility of deployment of sequestration tech-
2	nologies."; and
3	(4) by striking subsection (c) and inserting the
4	following:
5	"(c) Programmatic Activities.—
6	"(1) Fundamental science and engineering
7	RESEARCH AND DEVELOPMENT AND DEMONSTRATION
8	SUPPORTING CARBON CAPTURE AND SEQUESTRATION
9	TECHNOLOGIES AND CARBON USE ACTIVITIES.—
10	"(A) In General.—The Secretary shall
11	carry out fundamental science and engineering
12	research (including laboratory-scale experiments,
13	numeric modeling, and simulations) to develop
14	and document the performance of new ap-
15	proaches to capture and sequester, or use carbon
16	dioxide to lead to an overall reduction of carbon
17	dioxide emissions.
18	"(B) Program integration.—The Sec-
19	retary shall ensure that fundamental research
20	carried out under this paragraph is appro-
21	priately applied to energy technology develop-
22	ment activities, the field testing of carbon seques-
23	tration, and carbon use activities, including—

1	"(i) development of new or advanced
2	technologies for the capture and sequestra-
3	tion of carbon dioxide;
4	"(ii) development of new or advanced
5	technologies that reduce the cost and in-
6	crease the efficacy of advanced compression
7	of carbon dioxide required for the sequestra-
8	tion of carbon dioxide;
9	"(iii) modeling and simulation of geo-
10	$logic\ sequestration\ field\ demonstrations;$
11	"(iv) quantitative assessment of risks
12	relating to specific field sites for testing of
13	$sequestration\ technologies;$
14	"(v) research and development of new
15	and advanced technologies for carbon use,
16	including recycling and reuse of carbon di-
17	oxide; and
18	"(vi) research and development of new
19	and advanced technologies for the separa-
20	tion of oxygen from air.
21	"(2) Field validation testing activities.—
22	"(A) In General.—The Secretary shall
23	promote, to the maximum extent practicable, re-
24	gional carbon sequestration partnerships to con-
25	duct geologic seguestration tests involving carbon

1	dioxide injection and monitoring, mitigation,
2	and verification operations in a variety of can-
3	didate geologic settings, including—
4	"(i) operating oil and gas fields;
5	"(ii) depleted oil and gas fields;
6	"(iii) unmineable coal seams;
7	"(iv) deep saline formations;
8	"(v) deep geologic systems that may be
9	used as engineered reservoirs to extract eco-
10	nomical quantities of heat from geothermal
11	resources of low permeability or porosity;
12	and
13	"(vi) deep geologic systems containing
14	$basalt\ formations.$
15	"(B) Objectives.—The objectives of tests
16	conducted under this paragraph shall be—
17	"(i) to develop and validate geo-
18	physical tools, analysis, and modeling to
19	monitor, predict, and verify carbon dioxide
20	containment;
21	"(ii) to validate modeling of geologic
22	formations;
23	"(iii) to refine sequestration capacity
24	estimated for particular geologic formations;

1	"(iv) to determine the fate of carbon
2	dioxide concurrent with and following injec-
3	$tion\ into\ geologic\ formations;$
4	"(v) to develop and implement best
5	practices for operations relating to, and
6	monitoring of, carbon dioxide injection and
7	sequestration in geologic formations;
8	"(vi) to assess and ensure the safety of
9	operations related to geologic sequestration
10	of carbon dioxide;
11	"(vii) to allow the Secretary to pro-
12	mulgate policies, procedures, requirements,
13	and guidance to ensure that the objectives of
14	this subparagraph are met in large-scale
15	testing and deployment activities for carbon
16	capture and sequestration that are funded
17	by the Department of Energy; and
18	"(viii) to provide information to
19	States, the Environmental Protection Agen-
20	cy, and other appropriate entities to sup-
21	port development of a regulatory framework
22	for commercial-scale sequestration oper-
23	ations that ensure the protection of human
24	health and the environment.

1	"(3) Large-scale carbon dioxide seques-
2	TRATION TESTING.—
3	"(A) In General.—The Secretary shall
4	conduct not less than 7 initial large-scale seques-
5	tration tests, not including the FutureGen
6	project, for geologic containment of carbon diox-
7	ide to collect and validate information on the
8	cost and feasibility of commercial deployment of
9	technologies for geologic containment of carbon
10	dioxide. These 7 tests may include any Regional
11	Partnership projects awarded as of the date of
12	enactment of the Department of Energy Carbon
13	Capture and Sequestration Research, Develop-
14	ment, and Demonstration Act of 2007.
15	"(B) Diversity of formations to be
16	STUDIED.—In selecting formations for study
17	under this paragraph, the Secretary shall con-
18	sider a variety of geologic formations across the
19	United States, and require characterization and
20	modeling of candidate formations, as determined
21	by the Secretary.
22	"(C) Source of carbon dioxide for
23	$\it LARGE\text{-}SCALE$ $\it SEQUESTRATION$ $\it TESTS.$ — $\it In$ $\it the$
24	process of any acquisition of carbon dioxide for
25	sequestration tests under subparagraph (A), the

Secretary shall give preference to sources of car-1 2 bon dioxide from industrial sources. To the extent feasible, the Secretary shall prefer tests that 3 4 would facilitate the creation of an integrated system of capture, transportation and sequestration 5 6 of carbon dioxide. The preference provided for 7 under this subparagraph shall not delay the im-8 plementation of the large-scale sequestration tests 9 under this paragraph. 10 "(D) DEFINITION.—For purposes of this

- "(D) DEFINITION.—For purposes of this paragraph, the term 'large-scale' means the injection of more than 1,000,000 tons of carbon dioxide from industrial sources annually or a scale that demonstrates the ability to inject and sequester several million metric tons of industrial source carbon dioxide for a large number of years.
- "(4) Preference in project selection from Meritorious proposals.—In making competitive awards under this subsection, subject to the requirements of section 989, the Secretary shall—
 - "(A) give preference to proposals from partnerships among industrial, academic, and government entities; and

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1	"(B) require recipients to provide assur-
2	ances that all laborers and mechanics employed
3	by contractors and subcontractors in the con-
4	struction, repair, or alteration of new or existing
5	facilities performed in order to carry out a dem-
6	onstration or commercial application activity
7	authorized under this subsection shall be paid
8	wages at rates not less than those prevailing on
9	similar construction in the locality, as deter-
10	mined by the Secretary of Labor in accordance
11	with subchapter IV of chapter 31 of title 40,
12	United States Code, and the Secretary of Labor
13	shall, with respect to the labor standards in this
14	paragraph, have the authority and functions set
15	forth in Reorganization Plan Numbered 14 of
16	1950 (15 Fed. Reg. 3176; 5 U.S.C. Appendix)
17	and section 3145 of title 40, United States Code.
18	"(5) Cost sharing.—Activities under this sub-
19	section shall be considered research and development
20	activities that are subject to the cost sharing require-
21	ments of section 988(b).
22	"(6) Program review and report.—During
23	fiscal year 2011, the Secretary shall—
24	"(A) conduct a review of programmatic ac-
25	tivities carried out under this subsection; and

1	"(B) make recommendations with respect to
2	continuation of the activities.
3	"(d) Authorization of Appropriations.—There
4	are authorized to be appropriated to carry out this sec-
5	tion—
6	"(1) \$240,000,000 for fiscal year 2008;
7	"(2) \$240,000,000 for fiscal year 2009;
8	"(3) \$240,000,000 for fiscal year 2010;
9	"(4) \$240,000,000 for fiscal year 2011; and
10	"(5) \$240,000,000 for fiscal year 2012.".
11	(b) Table of Contents Amendment.—The item re-
12	lating to section 963 in the table of contents for the Energy
13	Policy Act of 2005 is amended to read as follows:
	"Sec. 963. Carbon capture and sequestration research, development, and demonstration program.".
14	SEC. 703. CARBON CAPTURE.
15	(a) Program Establishment.—
16	(1) In general.—The Secretary shall carry out
17	a program to demonstrate technologies for the large-
18	scale capture of carbon dioxide from industrial
19	sources. In making awards under this program, the
20	Secretary shall select, as appropriate, a diversity of
21	capture technologies to address the need to capture
22	carbon dioxide from a range of industrial sources.
23	(2) Scope of Award.—Awards under this sec-
24	tion shall be only for the portion of the project that—

1	(A) carries out the large-scale capture (in-
2	cluding purification and compression) of carbon
3	dioxide from industrial sources;
4	(B) provides for the transportation and in-
5	jection of carbon dioxide; and
6	(C) incorporates a comprehensive measure-
7	ment, monitoring, and validation program.
8	(3) Preferences for Award.—To ensure re-
9	duced carbon dioxide emissions, the Secretary shall
10	take necessary actions to provide for the integration
11	of the program under this paragraph with the large-
12	scale carbon dioxide sequestration tests described in
13	section 963(c)(3) of the Energy Policy Act of 2005 (42
14	$U.S.C.\ 16293(c)(3)),\ as\ added\ by\ section\ 702\ of\ this$
15	subtitle. These actions should not delay implementa-
16	tion of these tests. The Secretary shall give priority
17	consideration to projects with the following character-
18	istics:
19	(A) Capacity.—Projects that will capture a
20	high percentage of the carbon dioxide in the
21	treated stream and large volumes of carbon diox-
22	ide as determined by the Secretary.
23	(B) Sequestration.—Projects that cap-
24	ture carbon dioxide from industrial sources that

1	are near suitable geological reservoirs and could
2	continue sequestration including—
3	(i) a field testing validation activity
4	under section 963 of the Energy Policy Act
5	of 2005 (42 U.S.C. 16293), as amended by
6	$this\ Act;\ or$
7	(ii) other geologic sequestration projects
8	approved by the Secretary.
9	(4) Requirement.—For projects that generate
10	carbon dioxide that is to be sequestered, the carbon di-
11	oxide stream shall be of a sufficient purity level to
12	allow for safe transport and sequestration.
13	(5) Cost-sharing.—The cost-sharing require-
14	ments of section 988 of the Energy Policy Act of 2005
15	(42 U.S.C. 16352) for research and development
16	projects shall apply to this section.
17	(b) Authorization of Appropriations.—There is
18	authorized to be appropriated to the Secretary to carry out
19	this section \$200,000,000 per year for fiscal years 2009
20	through 2013.
21	SEC. 704. REVIEW OF LARGE-SCALE PROGRAMS.
22	The Secretary shall enter into an arrangement with
23	the National Academy of Sciences for an independent re-
24	view and oversight, beginning in 2011, of the programs
25	under section 963(c)(3) of the Energy Policy Act of 2005

1	(42 U.S.C. 16293(c)(3)), as added by section 702 of this
2	subtitle, and under section 703 of this subtitle, to ensure
3	that the benefits of such programs are maximized. Not later
4	than January 1, 2012, the Secretary shall transmit to the
5	Congress a report on the results of such review and over-
6	sight.
7	SEC. 705. GEOLOGIC SEQUESTRATION TRAINING AND RE-
8	SEARCH.
9	(a) Study.—
10	(1) In general.—The Secretary shall enter into
11	an arrangement with the National Academy of
12	Sciences to undertake a study that—
13	(A) defines an interdisciplinary program in
14	geology, engineering, hydrology, environmental
15	science, and related disciplines that will support
16	the Nation's capability to capture and sequester
17	carbon dioxide from anthropogenic sources;
18	(B) addresses undergraduate and graduate
19	education, especially to help develop graduate
20	level programs of research and instruction that
21	lead to advanced degrees with emphasis on geo-
22	$logic\ sequestration\ science;$
23	(C) develops guidelines for proposals from
24	colleges and universities with substantial capa-
25	bilities in the required disciplines that seek to

1	implement geologic sequestration science pro-
2	grams that advance the Nation's capacity to ad-
3	dress carbon management through geologic se-
4	questration science; and
5	(D) outlines a budget and recommendations
6	for how much funding will be necessary to estab-
7	lish and carry out the grant program under sub-
8	section (b).
9	(2) Report.—Not later than 1 year after the
10	date of enactment of this Act, the Secretary shall
11	transmit to the Congress a copy of the results of the
12	study provided by the National Academy of Sciences
13	under paragraph (1).
14	(3) Authorization of appropriations.—
15	There are authorized to be appropriated to the Sec-
16	retary for carrying out this subsection \$1,000,000 for
17	fiscal year 2008.
18	(b) Grant Program.—
19	(1) Establishment.—The Secretary shall estab-
20	lish a competitive grant program through which col-
21	leges and universities may apply for and receive 4-
22	year grants for—
23	(A) salary and startup costs for newly des-
24	ignated faculty positions in an integrated geo-
25	logic carbon sequestration science program; and

- 1 (B) internships for graduate students in 2 geologic sequestration science.
- 3 (2) Renewal.—Grants under this subsection 4 shall be renewable for up to 2 additional 3-year 5 terms, based on performance criteria, established by 6 the National Academy of Sciences study conducted 7 under subsection (a), that include the number of grad-8 uates of such programs.
- 9 (3) Interface with regional geologic car-10 BON SEQUESTRATION PARTNERSHIPS.—To the great-11 est extent possible, geologic carbon sequestration 12 science programs supported under this subsection 13 shall interface with the research of the Regional Car-14 bon Sequestration Partnerships operated by the De-15 partment to provide internships and practical train-16 ing in carbon capture and geologic sequestration.
- 17 (4) AUTHORIZATION OF APPROPRIATIONS.—
 18 There are authorized to be appropriated to the Sec19 retary for carrying out this subsection such sums as
 20 may be necessary.

21 SEC. 706. RELATION TO SAFE DRINKING WATER ACT.

The injection and geologic sequestration of carbon di-23 oxide pursuant to this subtitle and the amendments made 24 by this subtitle shall be subject to the requirements of the 25 Safe Drinking Water Act (42 U.S.C. 300f et seg.), including

- 1 the provisions of part C of such Act (42 U.S.C. 300h et
- 2 seq.; relating to protection of underground sources of drink-
- 3 ing water). Nothing in this subtitle and the amendments
- 4 made by this subtitle imposes or authorizes the promulga-
- 5 tion of any requirement that is inconsistent or in conflict
- 6 with the requirements of the Safe Drinking Water Act (42
- 7 U.S.C. 300f et seq.) or regulations thereunder.
- 8 SEC. 707. SAFETY RESEARCH.
- 9 (a) Program.—The Administrator of the Environ-
- 10 mental Protection Agency shall conduct a research program
- 11 to address public health, safety, and environmental impacts
- 12 that may be associated with capture, injection, and seques-
- 13 tration of greenhouse gases in geologic reservoirs.
- 14 (b) Authorization of Appropriations.—There are
- 15 authorized to be appropriated for carrying out this section
- 16 \$5,000,000 for each fiscal year.
- 17 SEC. 708. UNIVERSITY BASED RESEARCH AND DEVELOP-
- 18 **MENT GRANT PROGRAM.**
- 19 (a) Establishment.—The Secretary, in consultation
- 20 with other appropriate agencies, shall establish a university
- 21 based research and development program to study carbon
- 22 capture and sequestration using the various types of coal.
- 23 (b) Rural and Agricultural Institutions.—The
- 24 Secretary shall give special consideration to rural or agri-
- 25 cultural based institutions in areas that have regional

1	sources of coal and that offer interdisciplinary programs
2	in the area of environmental science to study carbon cap-
3	ture and sequestration.
4	(c) Authorization of Appropriations.—There are
5	to be authorized to be appropriated \$10,000,000 to carry
6	out this section.
7	Subtitle B—Carbon Capture and
8	Sequestration Assessment and
9	Framework
10	SEC. 711. CARBON DIOXIDE SEQUESTRATION CAPACITY AS
11	SESSMENT.
12	(a) Definitions.—In this section
13	(1) Assessment.—The term "assessment"
14	means the national assessment of onshore capacity for
15	carbon dioxide completed under subsection (f).
16	(2) CAPACITY.—The term "capacity" means the
17	portion of a sequestration formation that can retain
18	carbon dioxide in accordance with the requirements
19	(including physical, geological, and economic require-
20	ments) established under the methodology developed
21	under subsection (b).
22	(3) Engineered Hazard.—The term "engi-
23	neered hazard" includes the location and completion
24	history of any well that could affect potential seques-
25	tration.

1	(4) RISK.—The term "risk" includes any risk
2	posed by geomechanical, geochemical, hydrogeological,
3	structural, and engineered hazards.
4	(5) Secretary.—The term "Secretary" means
5	the Secretary of the Interior, acting through the Di-
6	rector of the United States Geological Survey.
7	(6) Sequestration formation.—The term "se-
8	questration formation" means a deep saline forma-
9	tion, unmineable coal seam, or oil or gas reservoir
10	that is capable of accommodating a volume of indus-
11	trial carbon dioxide.
12	(b) Methodology.—Not later than 1 year after the
13	date of enactment of this Act, the Secretary shall develop
14	a methodology for conducting an assessment under sub-
15	section (f), taking into consideration—
16	(1) the geographical extent of all potential se-
17	questration formations in all States;
18	(2) the capacity of the potential sequestration
19	formations;
20	(3) the injectivity of the potential sequestration
21	formations;
22	(4) an estimate of potential volumes of oil and
23	gas recoverable by injection and sequestration of in-
24	dustrial carbon dioxide in potential sequestration for-
25	mations;

1	(5) the risk associated with the potential seques-
2	tration formations; and
3	(6) the work done to develop the Carbon Seques-
4	tration Atlas of the United States and Canada that
5	was completed by the Department.
6	(c) Coordination.—
7	(1) Federal coordination.—
8	(A) Consultation.—The Secretary shall
9	consult with the Secretary of Energy and the Ad-
10	ministrator of the Environmental Protection
11	Agency on issues of data sharing, format, devel-
12	opment of the methodology, and content of the
13	assessment required under this section to ensure
14	the maximum usefulness and success of the as-
15	sessment.
16	(B) Cooperation.—The Secretary of En-
17	ergy and the Administrator shall cooperate with
18	the Secretary to ensure, to the maximum extent
19	practicable, the usefulness and success of the as-
20	sessment.
21	(2) State coordination.—The Secretary shall
22	consult with State geological surveys and other rel-
23	evant entities to ensure, to the maximum extent prac-
24	ticable, the usefulness and success of the assessment.

1	(d) External Review and Publication.—On com-
2	pletion of the methodology under subsection (b), the Sec-
3	retary shall—
4	(1) publish the methodology and solicit comments
5	from the public and the heads of affected Federal and
6	State agencies;
7	(2) establish a panel of individuals with exper-
8	tise in the matters described in paragraphs (1)
9	through (5) of subsection (b) composed, as appro-
10	priate, of representatives of Federal agencies, institu-
11	tions of higher education, nongovernmental organiza-
12	tions, State organizations, industry, and inter-
13	national geoscience organizations to review the meth-
14	odology and comments received under paragraph (1);
15	and
16	(3) on completion of the review under paragraph
17	(2), publish in the Federal Register the revised final
18	methodology.
19	(e) Periodic Updates.—The methodology developed
20	under this section shall be updated periodically (including
21	at least once every 5 years) to incorporate new data as the
22	data becomes available.
23	(f) National Assessment.—
24	(1) In general.—Not later than 2 years after
25	the date of publication of the methodology under sub-

1	section (d)(1), the Secretary, in consultation with the
2	Secretary of Energy and State geological surveys,
3	shall complete a national assessment of capacity for
4	carbon dioxide in accordance with the methodology.
5	(2) Geological verification.—As part of the
6	assessment under this subsection, the Secretary shall
7	carry out a drilling program to supplement the geo-
8	logical data relevant to determining sequestration ca-
9	pacity of carbon dioxide in geological sequestration
10	formations, including—
11	(A) well log data;
12	(B) core data; and
13	(C) fluid sample data.
14	(3) Partnership with other drilling pro-
15	GRAMS.—As part of the drilling program under para-
16	graph (2), the Secretary shall enter, as appropriate,
17	into partnerships with other entities to collect and in-
18	tegrate data from other drilling programs relevant to
19	the sequestration of carbon dioxide in geological for-
20	mations.
21	(4) Incorporation into natcarb.—
22	(A) In general.—On completion of the as-
23	sessment, the Secretary of Energy and the Sec-
24	retary of the Interior shall incorporate the re-
25	sults of the assessment using—

1	(i) the NatCarb database, to the max-
2	imum extent practicable; or
3	(ii) a new database developed by the
4	Secretary of Energy, as the Secretary of
5	Energy determines to be necessary.
6	(B) Ranking.—The database shall include
7	the data necessary to rank potential sequestra-
8	tion sites for capacity and risk, across the
9	United States, within each State, by formation,
10	and within each basin.
11	(5) Report.—Not later than 180 days after the
12	date on which the assessment is completed, the Sec-
13	retary shall submit to the Committee on Energy and
14	Natural Resources of the Senate and the Committee
15	on Natural Resources of the House of Representatives
16	a report describing the findings under the assessment.
17	(6) Periodic updates.—The national assess-
18	ment developed under this section shall be updated pe-
19	riodically (including at least once every 5 years) to
20	support public and private sector decisionmaking.
21	(g) Authorization of Appropriations.—There is
22	authorized to be appropriated to carry out this section
23	\$30,000,000 for the period of fiscal years 2008 through
24	2012.

1	SEC. 712. ASSESSMENT OF CARBON SEQUESTRATION AND
2	METHANE AND NITROUS OXIDE EMISSIONS
3	FROM ECOSYSTEMS.
4	(a) Definitions.—In this section:
5	(1) Adaptation strategy.—The term "adapta-
6	tion strategy" means a land use and management
7	strategy that can be used—
8	(A) to increase the sequestration capabilities
9	of covered greenhouse gases of any ecosystem; or
10	(B) to reduce the emissions of covered green-
11	house gases from any ecosystem.
12	(2) Assessment.—The term "assessment"
13	means the national assessment authorized under sub-
14	section (b).
15	(3) Covered Greenhouse Gas.—The term
16	"covered greenhouse gas" means carbon dioxide, ni-
17	trous oxide, and methane gas.
18	(4) Ecosystem.—The term "ecosystem" means
19	any terrestrial, freshwater aquatic, or coastal eco-
20	system, including an estuary.
21	(5) Native plant species.—The term "native
22	plant species" means any noninvasive, naturally oc-
23	curring plant species within an ecosystem.
24	(6) Secretary.—The term "Secretary" means
25	the Secretary of the Interior.

1	(b) Authorization of Assessment.—Not later than
2	2 years after the date on which the final methodology is
3	$published\ under\ subsection\ (f)(3)(D),\ the\ Secretary\ shall$
4	complete a national assessment of—
5	(1) the quantity of carbon stored in and released
6	from ecosystems, including from man-caused and nat-
7	ural fires; and
8	(2) the annual flux of covered greenhouse gases
9	in and out of ecosystems.
10	(c) Components.—In conducting the assessment
11	under subsection (b), the Secretary shall—
12	(1) determine the processes that control the flux
13	of covered greenhouse gases in and out of each eco-
14	system;
15	(2) estimate the potential for increasing carbon
16	sequestration in natural and managed ecosystems
17	through management activities or restoration activi-
18	ties in each ecosystem;
19	(3) develop near-term and long-term adaptation
20	strategies or mitigation strategies that can be em-
21	ployed—
22	(A) to enhance the sequestration of carbon
23	in each ecosystem;
24	(B) to reduce emissions of covered green-
25	house gases from ecosystems; and

1	(C) to adapt to climate change; and
2	(4) estimate the annual carbon sequestration ca-
3	pacity of ecosystems under a range of policies in sup-
4	port of management activities to optimize sequestra-
5	tion.
6	(d) Use of Native Plant Species.—In developing
7	restoration activities under subsection (c)(2) and manage-
8	ment strategies and adaptation strategies under subsection
9	(c)(3), the Secretary shall emphasize the use of native plant
10	species (including mixtures of many native plant species)
11	for sequestering covered greenhouse gas in each ecosystem.
12	(e) Consultation.—
13	(1) In General.—In conducting the assessment
14	under subsection (b) and developing the methodology
15	under subsection (f), the Secretary shall consult
16	with—
17	(A) the Secretary of Energy;
18	(B) the Secretary of Agriculture;
19	(C) the Administrator of the Environmental
20	$Protection \ Agency;$
21	(D) the Secretary of Commerce, acting
22	through the Under Secretary for Oceans and At-
23	mosphere; and
24	(E) the heads of other relevant agencies.

1	(2) Ocean and coastal ecosystems.—In car-
2	rying out this section with respect to ocean and coast-
3	al ecosystems (including estuaries), the Secretary
4	shall work jointly with the Secretary of Commerce,
5	acting through the Under Secretary for Oceans and
6	Atmosphere.
7	(f) Methodology.—
8	(1) In general.—Not later than 1 year after
9	the date of enactment of this Act, the Secretary shall
10	develop a methodology for conducting the assessment.
11	(2) Requirements.—The methodology developed
12	under paragraph (1)—
13	(A) shall—
14	(i) determine the method for meas-
15	uring, monitoring, and quantifying covered
16	greenhouse gas emissions and reductions;
17	(ii) estimate the total capacity of each
18	ecosystem to sequester carbon; and
19	(iii) estimate the ability of each eco-
20	system to reduce emissions of covered green-
21	house gases through management practices;
22	and
23	(B) may employ economic and other sys-
24	tems models, analyses, and estimates, to be devel-

1	oped in consultation with each of the individuals
2	described in subsection (e).
3	(3) External review and publication.—On
4	completion of a proposed methodology, the Secretary
5	shall—
6	(A) publish the proposed methodology;
7	(B) at least 60 days before the date on
8	which the final methodology is published, solicit
9	comments from—
10	(i) the public; and
11	(ii) heads of affected Federal and State
12	agencies;
13	(C) establish a panel to review the proposed
14	methodology published under subparagraph (A)
15	and any comments received under subparagraph
16	(B), to be composed of members—
17	(i) with expertise in the matters de-
18	scribed in subsections (c) and (d); and
19	(ii) that are, as appropriate, represent-
20	atives of Federal agencies, institutions of
21	higher education, nongovernmental organi-
22	zations, State organizations, industry, and
23	international organizations; and

1	(D) on completion of the review under sub-
2	paragraph (C), publish in the Federal register
3	the revised final methodology.
4	(g) Estimate; Review.—The Secretary shall—
5	(1) based on the assessment, prescribe the data,
6	information, and analysis needed to establish a sci-
7	entifically sound estimate of the carbon sequestration
8	capacity of relevant ecosystems; and
9	(2) not later than 180 days after the date on
10	which the assessment is completed, submit to the
11	heads of applicable Federal agencies and the appro-
12	priate committees of Congress a report that describes
13	the results of the assessment.
14	(h) Data and Report Availability.—On completion
15	of the assessment, the Secretary shall incorporate the results
16	of the assessment into a web-accessible database for public
17	use.
18	(i) Authorization.—There is authorized to be appro-
19	priated to carry out this section \$20,000,000 for the period
20	of fiscal years 2008 through 2012.
21	SEC. 713. CARBON DIOXIDE SEQUESTRATION INVENTORY.
22	Section 354 of the Energy Policy Act of 2005 (42
23	U.S.C. 15910) is amended—
24	(1) by redesignating subsection (d) as subsection
25	(e); and

1	(2) by inserting after subsection (c) the fol-
2	lowing:
3	"(d) Records and Inventory.—The Secretary of the
4	Interior, acting through the Bureau of Land Management,
5	shall maintain records on, and an inventory of, the quan-
6	tity of carbon dioxide stored within Federal mineral lease-
7	holds.".
8	SEC. 714. FRAMEWORK FOR GEOLOGICAL CARBON SEQUES-
9	TRATION ON PUBLIC LAND.
10	(a) Report.—Not later than 1 year after the date of
11	enactment of this Act, the Secretary of the Interior shall
12	submit to the Committee on Natural Resources of the House
13	of Representatives and the Committee on Energy and Nat-
14	ural Resources of the Senate a report on a recommended
15	frameworkformanaginggeologicalcarbonsequestrationac-
16	tivities on public land.
17	(b) Contents.—The report required by subsection (a)
18	shall include the following:
19	(1) Recommended criteria for identifying can-
20	didate geological sequestration sites in each of the fol-
21	lowing types of geological settings:
22	(A) Operating oil and gas fields.
23	(B) Depleted oil and gas fields.
24	(C) Unmineable coal seams.
25	(D) Deep saline formations.

1	(E) Deep geological systems that may be
2	used as engineered reservoirs to extract economi-
3	cal quantities of heat from geothermal resources
4	of low permeability or porosity.
5	(F) Deep geological systems containing ba-
6	salt formations.
7	(G) Coalbeds being used for methane recov-
8	ery.
9	(2) A proposed regulatory framework for the
10	leasing of public land or an interest in public land
11	for the long-term geological sequestration of carbon di-
12	oxide, which includes an assessment of options to en-
13	sure that the United States receives fair market value
14	for the use of public land or an interest in public
15	land for geological sequestration.
16	(3) A proposed procedure for ensuring that any
17	geological carbon sequestration activities on public
18	land—
19	(A) provide for public review and comment
20	from all interested persons; and
21	(B) protect the quality of natural and cul-
22	tural resources of the public land overlaying a
23	$geological\ sequestration\ site.$
24	(4) A description of the status of Federal lease-
25	hold or Federal mineral estate liability issues related

- to the geological subsurface trespass of or caused by carbon dioxide stored in public land, including any relevant experience from enhanced oil recovery using carbon dioxide on public land.
 - (5) Recommendations for additional legislation that may be required to ensure that public land management and leasing laws are adequate to accommodate the long-term geological sequestration of carbon dioxide.
 - (6) An identification of the legal and regulatory issues specific to carbon dioxide sequestration on land in cases in which title to mineral resources is held by the United States but title to the surface estate is not held by the United States.
 - (7)(A) An identification of the issues specific to the issuance of pipeline rights-of-way on public land under the Mineral Leasing Act (30 U.S.C. 181 et seq.) or the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) for natural or anthropogenic carbon dioxide.
 - (B) Recommendations for additional legislation that may be required to clarify the appropriate framework for issuing rights-of-way for carbon dioxide pipelines on public land.

1	(c) Consultation With Other Agencies.—In pre-
2	paring the report under this section, the Secretary of the
3	Interior shall coordinate with—
4	(1) the Administrator of the Environmental Pro-
5	$tection\ Agency;$
6	(2) the Secretary of Energy; and
7	(3) the heads of other appropriate agencies.
8	(d) Compliance With Safe Drinking Water
9	Act.—The Secretary shall ensure that all recommendations
10	developed under this section are in compliance with all Fed-
11	eral environmental laws, including the Safe Drinking
12	Water Act (42 U.S.C. 300f et seq.) and regulations under
13	$that\ Act.$
14	TITLE VIII—IMPROVED MANAGE-
15	MENT OF ENERGY POLICY
16	Subtitle A—Management
17	Improvements
18	SEC. 801. NATIONAL MEDIA CAMPAIGN.
19	(a) In General.—The Secretary, acting through the
20	Assistant Secretary for Energy Efficiency and Renewable
21	Energy (referred to in this section as the "Secretary"), shall
22	develop and conduct a national media campaign—
22	
22	(1) to increase energy efficiency throughout the
	(1) to increase energy efficiency throughout the economy of the United States during the 10-year pe-

(2) to promote the national security benefits as-
sociated with increased energy efficiency; and
(3) to decrease oil consumption in the United
States during the 10-year period beginning on the
date of enactment of this Act.
(b) Contract With Entity.—The Secretary shall
carry out subsection (a) directly or through—
(1) competitively bid contracts with 1 or more
nationally recognized media firms for the development
and distribution of monthly television, radio, and
newspaper public service announcements; or
(2) collective agreements with 1 or more nation-
ally recognized institutes, businesses, or nonprofit or-
ganizations for the funding, development, and dis-
tribution of monthly television, radio, and newspaper
public service announcements.
(c) Use of Funds.—
(1) In general.—Amounts made available to
carry out this section shall be used for—
(A) advertising costs, including—
(i) the purchase of media time and
space;
(ii) creative and talent costs;
(iii) testing and evaluation of adver-
$tising; \ and$

1	(iv) evaluation of the effectiveness of
2	the media campaign; and
3	(B) administrative costs, including oper-
4	ational and management expenses.
5	(2) Limitations.—In carrying out this section,
6	the Secretary shall allocate not less than 85 percent
7	of funds made available under subsection (e) for each
8	fiscal year for the advertising functions specified
9	$under\ paragraph\ (1)(A).$
10	(d) Reports.—The Secretary shall annually submit
11	to Congress a report that describes—
12	(1) the strategy of the national media campaign
13	and whether specific objectives of the campaign were
14	accomplished, including—
15	(A) determinations concerning the rate of
16	change of energy consumption, in both absolute
17	and per capita terms; and
18	(B) an evaluation that enables consider-
19	ation of whether the media campaign contributed
20	to reduction of energy consumption;
21	(2) steps taken to ensure that the national media
22	campaign operates in an effective and efficient man-
23	ner consistent with the overall strategy and focus of
24	$the\ campaign;$

1	(3) plans to purchase advertising time and
2	space;
3	(4) policies and practices implemented to ensure
4	that Federal funds are used responsibly to purchase
5	advertising time and space and eliminate the poten-
6	tial for waste, fraud, and abuse; and
7	(5) all contracts or cooperative agreements en-
8	tered into with a corporation, partnership, or indi-
9	vidual working on behalf of the national media cam-
10	paign.
11	(e) Authorization of Appropriations.—
12	(1) In general.—There is authorized to be ap-
13	propriated to carry out this section \$5,000,000 for
14	each of fiscal years 2008 through 2012.
15	(2) Decreased oil consumption.—The Sec-
16	retary shall use not less than 50 percent of the
17	amount that is made available under this section for
18	each fiscal year to develop and conduct a national
19	media campaign to decrease oil consumption in the
20	United States over the next decade.
21	SEC. 802. ALASKA NATURAL GAS PIPELINE ADMINISTRA-
22	TION.
23	Section 106 of the Alaska Natural Gas Pipeline Act
24	(15 U.S.C. 720d) is amended by adding at the end the fol-
25	lowing:

1	"(h) Administration.—
2	"(1) Personnel appointments.—
3	"(A) In General.—The Federal Coordi-
4	nator may appoint and terminate such personnel
5	as the Federal Coordinator determines to be ap-
6	propriate.
7	"(B) Authority of Federal coordi-
8	NATOR.—Personnel appointed by the Federal Co-
9	ordinator under subparagraph (A) shall be ap-
10	pointed without regard to the provisions of title
11	5, United States Code, governing appointments
12	in the competitive service.
13	"(2) Compensation.—
14	"(A) In general.—Subject to subpara-
15	graph (B), personnel appointed by the Federal
16	Coordinator under paragraph (1)(A) shall be
17	paid without regard to the provisions of chapter
18	51 and subchapter III of chapter 53 of title 5,
19	United States Code (relating to classification
20	and General Schedule pay rates).
21	"(B) Maximum level of compensa-
22	TION.—The rate of pay for personnel appointed
23	by the Federal Coordinator under paragraph
24	(1)(A) shall not exceed the maximum level of rate

1	payable for level III of the Executive Schedule (5
2	U.S.C. 5314).
3	"(C) Allowances.—Section 5941 of title 5,
4	United States Code, shall apply to personnel ap-
5	pointed by the Federal Coordinator under para-
6	$graph\ (1)(A).$
7	"(3) Temporary services.—
8	"(A) In General.—The Federal Coordi-
9	nator may procure temporary and intermittent
10	services in accordance with section 3109(b) of
11	title 5, United States Code.
12	"(B) Maximum level of compensa-
13	TION.—The level of compensation of an indi-
14	vidual employed on a temporary or intermittent
15	basis under subparagraph (A) shall not exceed
16	the maximum level of rate payable for level III
17	of the Executive Schedule (5 U.S.C. 5314).
18	"(4) Fees, charges, and commissions.—
19	"(A) In general.—With respect to the du-
20	ties of the Federal Coordinator, as described in
21	this Act, the Federal Coordinator shall have
22	similar authority to establish, change, and abol-
23	ish reasonable filing and service fees, charges,
24	and commissions, require deposits of payments,

and provide refunds as provided to the Secretary

1	of the Interior in section 304 of the Federal
2	Land Policy and Management Act of 1976 (43
3	U.S.C. 1734).
4	"(B) Authority of Secretary of the
5	Interior.—Subparagraph (A) shall not affect
6	the authority of the Secretary of the Interior to
7	establish, change, and abolish reasonable filing
8	and service fees, charges, and commissions, re-
9	quire deposits of payments, and provide refunds
10	under section 304 of the Federal Land Policy
11	and Management Act of 1976 (43 U.S.C. 1734).
12	"(C) Use of funds.—The Federal Coordi-
13	nator is authorized to use, without further ap-
14	propriation, amounts collected under subpara-
15	graph (A) to carry out this section.".
16	SEC. 803. RENEWABLE ENERGY DEPLOYMENT.
17	(a) Definitions.—In this section:
18	(1) Alaska small hydroelectric power.—
19	The term "Alaska small hydroelectric power" means
20	power that—
21	(A) is generated—
22	(i) in the State of Alaska;
23	(ii) without the use of a dam or im-
24	poundment of water; and
25	(iii) through the use of—

1	(I) a lake tap (but not a perched
2	alpine lake); or
3	(II) a run-of-river screened at the
4	point of diversion; and
5	(B) has a nameplate capacity rating of a
6	wattage that is not more than 15 megawatts.
7	(2) Eligible Applicant.—The term "eligible
8	applicant" means any—
9	(A) governmental entity;
10	(B) private utility;
11	(C) public utility;
12	(D) municipal utility;
13	$(E)\ cooperative\ utility;$
14	(F) Indian tribes; and
15	(G) Regional Corporation (as defined in
16	section 3 of the Alaska Native Claims Settlement
17	Act (43 U.S.C. 1602)).
18	(3) Ocean energy.—
19	(A) Inclusions.—The term "ocean energy"
20	includes current, wave, and tidal energy.
21	(B) Exclusion.—The term "ocean energy"
22	excludes thermal energy.
23	(4) Renewable energy project.—The term
24	"renewable energy project" means a project—

1	(A) for the commercial generation of elec-
2	tricity; and
3	(B) that generates electricity from—
4	(i) solar, wind, or geothermal energy
5	or ocean energy;
6	(ii) biomass (as defined in section
7	203(b) of the Energy Policy Act of 2005 (42
8	$U.S.C.\ 15852(b)));$
9	(iii) landfill gas; or
10	(iv) Alaska small hydroelectric power.
11	(b) Renewable Energy Construction Grants.—
12	(1) In general.—The Secretary shall use
13	amounts appropriated under this section to make
14	grants for use in carrying out renewable energy
15	projects.
16	(2) Criteria.—Not later than 180 days after the
17	date of enactment of this Act, the Secretary shall set
18	forth criteria for use in awarding grants under this
19	section.
20	(3) Application.—To receive a grant from the
21	Secretary under paragraph (1), an eligible applicant
22	shall submit to the Secretary an application at such
23	time, in such manner, and containing such informa-
24	tion as the Secretary may require, including a writ-
25	ten assurance that—

- 1 (A) all laborers and mechanics employed by 2 contractors or subcontractors during construc-3 tion, alteration, or repair that is financed, in 4 whole or in part, by a grant under this section 5 shall be paid wages at rates not less than those 6 prevailing on similar construction in the local-7 ity, as determined by the Secretary of Labor in 8 accordance with sections 3141-3144, 3146, and 9 3147 of title 40, United States Code; and
 - (B) the Secretary of Labor shall, with respect to the labor standards described in this paragraph, have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40, United States Code.
 - (4) Non-federal share.—Each eligible applicant that receives a grant under this subsection shall contribute to the total cost of the renewable energy project constructed by the eligible applicant an amount not less than 50 percent of the total cost of the project.
- 22 (c) AUTHORIZATION OF APPROPRIATIONS.—There are 23 authorized to be appropriated to the Fund such sums as 24 are necessary to carry out this section.

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1	SEC. 804. COORDINATION OF PLANNED REFINERY OUT-
2	AGES.
3	(a) Definitions.—In this section:
4	(1) Administrator.—The term "Adminis-
5	trator" means the Administrator of the Energy Infor-
6	$mation\ Administration.$
7	(2) Planned refinery outage.—
8	(A) In General.—The term "planned re-
9	finery outage" means a removal, scheduled before
10	the date on which the removal occurs, of a refin-
11	ery, or any unit of a refinery, from service for
12	maintenance, repair, or modification.
13	(B) Exclusion.—The term "planned refin-
14	ery outage" does not include any necessary and
15	unplanned removal of a refinery, or any unit of
16	a refinery, from service as a result of a compo-
17	nent failure, safety hazard, emergency, or action
18	reasonably anticipated to be necessary to prevent
19	such events.
20	(3) Refined Petroleum Product.—The term
21	"refined petroleum product" means any gasoline, die-
22	sel fuel, fuel oil, lubricating oil, liquid petroleum gas,
23	or other petroleum distillate that is produced through
24	the refining or processing of crude oil or an oil de-
25	rived from tar sands, shale, or coal.

1	(4) Refinery.—The term "refinery" means a
2	facility used in the production of a refined petroleum
3	product through distillation, cracking, or any other
4	process.
5	(b) Review and Analysis of Available Informa-
6	TION.—The Administrator shall, on an ongoing basis—
7	(1) review information on refinery outages that
8	is available from commercial reporting services;
9	(2) analyze that information to determine wheth-
10	er the scheduling of a refinery outage may nationally
11	or regionally substantially affect the price or supply
12	of any refined petroleum product by—
13	(A) decreasing the production of the refined
14	petroleum product; and
15	(B) causing or contributing to a retail or
16	wholesale supply shortage or disruption;
17	(3) not less frequently than twice each year, sub-
18	mit to the Secretary a report describing the results of
19	the review and analysis under paragraphs (1) and
20	(2); and
21	(4) specifically alert the Secretary of any refin-
22	ery outage that the Administrator determines may
23	nationally or regionally substantially affect the price
24	or supply of a refined petroleum product.

1	(c) Action by Secretary.—On a determination by
2	the Secretary, based on a report or alert under paragraph
3	(3) or (4) of subsection (b), that a refinery outage may affect
4	the price or supply of a refined petroleum product, the Sec-
5	retary shall make available to refinery operators informa-
6	tion on planned refinery outages to encourage reductions
7	of the quantity of refinery capacity that is out of service
8	at any time.
9	(d) Limitation.—Nothing in this section shall alter
10	any existing legal obligation or responsibility of a refinery
11	operator, or create any legal right of action, nor shall this
12	section authorize the Secretary—
13	(1) to prohibit a refinery operator from con-
14	ducting a planned refinery outage; or
15	(2) to require a refinery operator to continue to
16	operate a refinery.
17	SEC. 805. ASSESSMENT OF RESOURCES.
18	(a) 5-Year Plan.—
19	(1) Establishment.—The Administrator of the
20	Energy Information Administration (referred to in
21	this section as the "Administrator") shall establish a
22	5-year plan to enhance the quality and scope of the
23	data collection necessary to ensure the scope, accu-
24	racy, and timeliness of the information needed for ef-

1	ficient functioning of energy markets and related fi-
2	nancial operations.
3	(2) Requirement.—In establishing the plan
4	under paragraph (1), the Administrator shall pay
5	particular attention to—
6	(A) data series terminated because of budget
7	constraints;
8	(B) data on demand response;
9	(C) timely data series of State-level infor-
10	mation;
11	(D) improvements in the area of oil and gas
12	data;
13	(E) improvements in data on solid byprod-
14	ucts from coal-based energy-producing facilities;
15	and
16	(F) the ability to meet applicable deadlines
17	under Federal law (including regulations) to
18	provide data required by Congress.
19	(b) Submission to Congress.—The Administrator
20	shall submit to Congress the plan established under sub-
21	section (a), including a description of any improvements
22	needed to enhance the ability of the Administrator to collect
23	and process energy information in a manner consistent
24	with the needs of energy markets.
25	(c) Guidelines.—

1	(1) In general.—The Administrator shall—
2	(A) establish guidelines to ensure the qual-
3	ity, comparability, and scope of State energy
4	data, including data on energy production and
5	consumption by product and sector and renew-
6	able and alternative sources, required to provide
7	a comprehensive, accurate energy profile at the
8	State level;
9	(B) share company-level data collected at
10	the State level with each State involved, in a
11	manner consistent with the legal authorities,
12	confidentiality protections, and stated uses in ef-
13	fect at the time the data were collected, subject to
14	the condition that the State shall agree to reason-
15	able requirements for use of the data, as the Ad-
16	ministrator may require;
17	(C) assess any existing gaps in data ob-
18	tained and compiled by the Energy Information
19	Administration; and
20	(D) evaluate the most cost-effective ways to
21	address any data quality and quantity issues in
22	conjunction with State officials.
23	(2) Consultation.—The Administrator shall
24	consult with State officials and the Federal Energy
25	Regulatory Commission on a regular basis in—

1	(A) establishing guidelines and determining
2	the scope of State-level data under paragraph
3	(1); and
4	(B) exploring ways to address data needs
5	and serve data uses.
6	(d) Assessment of State Data Needs.—Not later
7	than 1 year after the date of enactment of this Act, the Ad-
8	ministrator shall submit to Congress an assessment of
9	State-level data needs, including a plan to address the
10	needs.
11	(e) Authorization of Appropriations.—In addi-
12	tion to any other amounts made available to the Adminis-
13	trator, there are authorized to be appropriated to the Ad-
14	ministrator to carry out this section—
15	(1) \$10,000,000 for fiscal year 2008;
16	(2) \$10,000,000 for fiscal year 2009;
17	(3) \$10,000,000 for fiscal year 2010;
18	(4) \$15,000,000 for fiscal year 2011;
19	(5) \$20,000,000 for fiscal year 2012; and
20	(6) such sums as are necessary for subsequent fis-
21	cal years.
22	SEC. 806. SENSE OF CONGRESS RELATING TO THE USE OF
23	RENEWABLE RESOURCES TO GENERATE EN-
24	ERGY.
25	(a) FINDINGS.—Congress finds that—

- (1) the United States has a quantity of renewable energy resources that is sufficient to supply a significant portion of the energy needs of the United States;
 - (2) the agricultural, forestry, and working land of the United States can help ensure a sustainable domestic energy system;
 - (3) accelerated development and use of renewable energy technologies provide numerous benefits to the United States, including improved national security, improved balance of payments, healthier rural economies, improved environmental quality, and abundant, reliable, and affordable energy for all citizens of the United States;
 - (4) the production of transportation fuels from renewable energy would help the United States meet rapidly growing domestic and global energy demands, reduce the dependence of the United States on energy imported from volatile regions of the world that are politically unstable, stabilize the cost and availability of energy, and safeguard the economy and security of the United States;
 - (5) increased energy production from domestic renewable resources would attract substantial new investments in energy infrastructure, create economic

1	growth, develop new jobs for the citizens of the United
2	States, and increase the income for farm, ranch, and
3	forestry jobs in the rural regions of the United States;
4	(6) increased use of renewable energy is practical
5	and can be cost effective with the implementation of
6	supportive policies and proper incentives to stimulate
7	markets and infrastructure; and
8	(7) public policies aimed at enhancing renewable
9	energy production and accelerating technological im-
10	provements will further reduce energy costs over time
11	and increase market demand.
12	(b) Sense of Congress.—It is the sense of Congress
13	that it is the goal of the United States that, not later than
14	January 1, 2025, the agricultural, forestry, and working
15	land of the United States should—
16	(1) provide from renewable resources not less
17	than 25 percent of the total energy consumed in the
18	United States; and
19	(2) continue to produce safe, abundant, and af-
20	fordable food, feed, and fiber.
21	SEC. 807. GEOTHERMAL ASSESSMENT, EXPLORATION IN-
22	FORMATION, AND PRIORITY ACTIVITIES.
23	(a) In General.—Not later than January 1, 2012,
24	the Secretary of the Interior, acting through the Director
25	of the United States Geological Survey, shall—

1	(1) complete a comprehensive nationwide geo-
2	thermal resource assessment that examines the full
3	range of geothermal resources in the United States;
4	and
5	(2) submit to the the Committee on Natural Re-
6	sources of the House of Representatives and the Com-
7	mittee on Energy and Natural Resources of the Sen-
8	ate a report describing the results of the assessment.
9	(b) Periodic Updates.—At least once every 10 years,
10	the Secretary shall update the national assessment required
11	under this section to support public and private sector deci-
12	sion making.
13	(c) Authorization of Appropriations.—There are
14	authorized to be appropriated to the Secretary of the Inte-
15	rior to carry out this section—
16	(1) \$15,000,000 for each of fiscal years 2008
17	through 2012; and
18	(2) such sums as are necessary for each of fiscal
19	years 2013 through 2022.
20	Subtitle B—Prohibitions on Market
21	Manipulation and False Infor-
22	mation
23	SEC. 811. PROHIBITION ON MARKET MANIPULATION.
24	It is unlawful for any person, directly or indirectly,
25	to use or employ in connection with the purchase or sale

1	of crude oil gasoline or petroleum distillates at wholesale,
2	any manipulative or deceptive device or contrivance, in
3	contravention of such rules and regulations as the Federal
4	Trade Commission may prescribe as necessary or appro-
5	priate in the public interest or for the protection of United
6	States citizens.
7	SEC. 812. PROHIBITION ON FALSE INFORMATION.
8	It is unlawful for any person to report information
9	related to the wholesale price of crude oil gasoline or petro-
10	leum distillates to a Federal department or agency if—
11	(1) the person knew, or reasonably should have
12	known, the information to be false or misleading;
13	(2) the information was required by law to be re-
14	ported; and
15	(3) the person intended the false or misleading
16	data to affect data compiled by the department or
17	agency for statistical or analytical purposes with re-
18	spect to the market for crude oil, gasoline, or petro-
19	leum distillates.
20	SEC. 813. ENFORCEMENT BY THE FEDERAL TRADE COMMIS-
21	SION.
22	(a) Enforcement.—This subtitle shall be enforced by
23	the Federal Trade Commission in the same manner, by the
24	same means, and with the same jurisdiction as though all
25	applicable terms of the Federal Trade Commission Act (15

1	U.S.C. 41 et seq.) were incorporated into and made a part
2	of this subtitle.
3	(b) Violation Is Treated as Unfair or Deceptive
4	ACT OR PRACTICE.—The violation of any provision of this
5	subtitle shall be treated as an unfair or deceptive act or
6	practice proscribed under a rule issued under section
7	18(a)(1)(B) of the Federal Trade Commission Act (15)
8	$U.S.C.\ 57a(a)(1)(B)).$
9	SEC. 814. PENALTIES.
10	(a) Civil Penalty.—In addition to any penalty ap-
11	plicable under the Federal Trade Commission Act (15
12	U.S.C. 41 et seq.), any supplier that violates section 811
13	or 812 shall be punishable by a civil penalty of not more
14	than \$1,000,000.
15	(b) Method.—The penalties provided by subsection
16	(a) shall be obtained in the same manner as civil penalties
17	imposed under section 5 of the Federal Trade Commission
18	Act (15 U.S.C. 45).
19	(c) Multiple Offenses; Mitigating Factors.—In
20	assessing the penalty provided by subsection (a)—
21	(1) each day of a continuing violation shall be
22	considered a separate violation; and
23	(2) the court shall take into consideration,
24	among other factors—
25	(A) the seriousness of the violation: and

1	(B) the efforts of the person committing the
2	violation to remedy the harm caused by the vio-
3	lation in a timely manner.
4	SEC. 815. EFFECT ON OTHER LAWS.
5	(a) Other Authority of the Commission.—Noth-
6	ing in this subtitle limits or affects the authority of the Fed-
7	eral Trade Commission to bring an enforcement action or
8	take any other measure under the Federal Trade Commis-
9	sion Act (15 U.S.C. 41 et seq.) or any other provision of
10	law.
11	(b) Antitrust Law.—Nothing in this subtitle shall be
12	construed to modify, impair, or supersede the operation of
13	any of the antitrust laws. For purposes of this subsection,
14	the term "antitrust laws" shall have the meaning given it
15	in subsection (a) of the first section of the Clayton Act (15
16	U.S.C. 12), except that it includes section 5 of the Federal
17	Trade Commission Act (15 U.S.C. 45) to the extent that
18	such section 5 applies to unfair methods of competition.
19	(c) State Law.—Nothing in this subtitle preempts
20	any State law.
21	TITLE IX—INTERNATIONAL
22	ENERGY PROGRAMS
23	SEC. 901. DEFINITIONS.
24	In this title:

1	(1) Appropriate congressional commit-
2	TEES.—The term "appropriate congressional commit-
3	tees" means—
4	(A) the Committee on Foreign Affairs and
5	the Committee on Energy and Commerce of the
6	House of Representatives; and
7	(B) the Committee on Foreign Relations,
8	the Committee on Energy and Natural Re-
9	sources, the Committee on Environment and
10	Public Works of the Senate, and the Committee
11	on Commerce, Science, and Transportation.
12	(2) Clean and efficient energy tech-
13	NOLOGY.—The term "clean and efficient energy tech-
14	nology" means an energy supply or end-use tech-
15	nology that, compared to a similar technology already
16	in widespread commercial use in a recipient country,
17	will—
18	(A) reduce emissions of greenhouse gases; or
19	(B)(i) increase efficiency of energy produc-
20	tion; or
21	(ii) decrease intensity of energy usage.
22	(3) Greenhouse GAS.—The term "greenhouse
23	gas'' means—
24	(A) carbon dioxide;
25	(B) methane;

1	(C) nitrous oxide;
2	$(D)\ hydrofluor ocarbons;$
3	$(E)\ perfluor ocarbons;\ or$
4	(F) sulfur hexafluoride.
5	Subtitle A-Assistance to Promote
6	Clean and Efficient Energy
7	Technologies in Foreign Coun-
8	tries
9	SEC. 911. UNITED STATES ASSISTANCE FOR DEVELOPING
10	COUNTRIES.
11	(a) Assistance Authorized.—The Administrator of
12	the United States Agency for International Development
13	shall support policies and programs in developing countries
14	that promote clean and efficient energy technologies—
15	(1) to produce the necessary market conditions
16	for the private sector delivery of energy and environ-
17	mental management services;
18	(2) to create an environment that is conducive to
19	accepting clean and efficient energy technologies that
20	support the overall purpose of reducing greenhouse
21	gas emissions, including—
22	(A) improving policy, legal, and regulatory
23	frameworks:

1	(B) increasing institutional abilities to pro-
2	vide energy and environmental management
3	services; and
4	(C) increasing public awareness and par-
5	ticipation in the decision-making of delivering
6	energy and environmental management services;
7	and
8	(3) to promote the use of American-made clean
9	and efficient energy technologies, products, and en-
10	ergy and environmental management services.
11	(b) Report.—The Administrator of the United States
12	Agency for International Development shall submit to the
13	appropriate congressional committees an annual report on
14	the implementation of this section for each of the fiscal
15	years 2008 through 2012.
16	(c) Authorization of Appropriations.—To carry
17	out this section, there are authorized to be appropriated to
18	the Administrator of the United States Agency for Inter-
19	national Development \$200,000,000 for each of the fiscal
20	years 2008 through 2012.
21	SEC. 912. UNITED STATES EXPORTS AND OUTREACH PRO-
22	GRAMS FOR INDIA, CHINA, AND OTHER COUN-
23	TRIES.
24	(a) Assistance Authorized.—The Secretary of
25	Commerce shall direct the United States and Foreign Com-

- 1 mercial Service to expand or create a corps of the Foreign
- 2 Commercial Service officers to promote United States ex-
- 3 ports in clean and efficient energy technologies and build
- 4 the capacity of government officials in India, China, and
- 5 any other country the Secretary of Commerce determines
- 6 appropriate, to become more familiar with the available
- 7 technologies—
- 8 (1) by assigning or training Foreign Commercial
- 9 Service attachés, who have expertise in clean and effi-
- 10 cient energy technologies from the United States, to
- 11 embark on business development and outreach efforts
- 12 to such countries; and
- 13 (2) by deploying the attachés described in para-
- 14 graph (1) to educate provincial, state, and local gov-
- ernment officials in such countries on the variety of
- 16 United States-based technologies in clean and efficient
- 17 energy technologies for the purposes of promoting
- 18 United States exports and reducing global greenhouse
- 19 gas emissions.
- 20 (b) Report.—The Secretary of Commerce shall submit
- 21 to the appropriate congressional committees an annual re-
- 22 port on the implementation of this section for each of the
- 23 fiscal years 2008 through 2012.
- 24 (c) Authorization of Appropriations.—To carry
- 25 out this section, there are authorized to be appropriated to

1	the Secretary of Commerce such sums as may be necessary
2	for each of the fiscal years 2008 through 2012.
3	SEC. 913. UNITED STATES TRADE MISSIONS TO ENCOURAGE
4	PRIVATE SECTOR TRADE AND INVESTMENT.
5	(a) Assistance Authorized.—The Secretary of
6	$Commerce\ shall\ direct\ the\ International\ Trade\ Administra-$
7	tion to expand or create trade missions to and from the
8	United States to encourage private sector trade and invest-
9	ment in clean and efficient energy technologies—
10	(1) by organizing and facilitating trade missions
11	to foreign countries and by matching United States
12	private sector companies with opportunities in for-
13	eign markets so that clean and efficient energy tech-
14	nologies can help to combat increases in global green-
15	house gas emissions; and
16	(2) by creating reverse trade missions in which
17	the Department of Commerce facilitates the meeting of
18	foreign private and public sector organizations with
19	private sector companies in the United States for the
20	purpose of showcasing clean and efficient energy tech-
21	nologies in use or in development that could be ex-
22	ported to other countries.
23	(b) Report.—The Secretary of Commerce shall submit
24	to the appropriate congressional committees an annual re-

1	port on the implementation of this section for each of the
2	fiscal years 2008 through 2012.
3	(c) Authorization of Appropriations.—To carry
4	out this section, there are authorized to be appropriated to
5	the Secretary of Commerce such sums as may be necessary
6	for each of the fiscal years 2008 through 2012.
7	SEC. 914. ACTIONS BY OVERSEAS PRIVATE INVESTMENT
8	CORPORATION.
9	(a) Sense of Congress.—It is the sense of Congress
10	that the Overseas Private Investment Corporation should
11	promote greater investment in clean and efficient energy
12	technologies by—
13	(1) proactively reaching out to United States
14	companies that are interested in investing in clean
15	and efficient energy technologies in countries that are
16	significant contributors to global greenhouse gas emis-
17	sions;
18	(2) giving preferential treatment to the evalua-
19	tion and awarding of projects that involve the invest-
20	ment or utilization of clean and efficient energy tech-
21	nologies; and
22	(3) providing greater flexibility in supporting
23	projects that involve the investment or utilization of
24	clean and efficient energy technologies, including fi-
25	nancing, insurance, and other assistance.

1	(b) Report.—The Overseas Private Investment Cor-
2	poration shall include in its annual report required under
3	section 240A of the Foreign Assistance Act of 1961 (22
4	U.S.C. 2200a)—
5	(1) a description of the activities carried out to
6	implement this section; or
7	(2) if the Corporation did not carry out any ac-
8	tivities to implement this section, an explanation of
9	the reasons therefor.
10	SEC. 915. ACTIONS BY UNITED STATES TRADE AND DEVEL-
11	OPMENT AGENCY.
12	(a) Assistance Authorized.—The Director of the
13	Trade and Development Agency shall establish or support
14	policies that—
15	(1) proactively seek opportunities to fund
16	projects that involve the utilization of clean and effi-
17	cient energy technologies, including in trade capacity
18	building and capital investment projects;
19	(2) where appropriate, advance the utilization of
20	clean and efficient energy technologies, particularly to
21	countries that have the potential for significant reduc-
22	tion in greenhouse gas emissions; and
23	(3) recruit and retain individuals with appro-
24	priate expertise or experience in clean, renewable, and
25	efficient energy technologies to identify and evaluate

1	opportunities for projects that involve clean and effi-
2	cient energy technologies and services.
3	(b) Report.—The President shall include in the an-
4	nual report on the activities of the Trade and Development
5	Agency required under section 661(d) of the Foreign Assist-
6	ance Act of 1961 (22 U.S.C. 2421(d)) a description of the
7	activities carried out to implement this section.
8	SEC. 916. DEPLOYMENT OF INTERNATIONAL CLEAN AND EF-
9	FICIENT ENERGY TECHNOLOGIES AND IN-
10	VESTMENT IN GLOBAL ENERGY MARKETS.
11	(a) Task Force.—
12	(1) Establishment.—Not later than 90 days
13	after the date of the enactment of this Act, the Presi-
14	dent shall establish a Task Force on International Co-
15	operation for Clean and Efficient Energy Tech-
16	nologies (in this section referred to as the "Task
17	Force").
18	(2) Composition.—The Task Force shall be com-
19	posed of representatives, appointed by the head of the
20	respective Federal department or agency, of—
21	(A) the Council on Environmental Quality;
22	(B) the Department of Energy;
23	(C) the Department of Commerce;
24	(D) the Department of the Treasury;
25	(E) the Department of State;

1	$(F)\ the\ Environmental\ Protection\ Agency;$
2	(G) the United States Agency for Inter-
3	$national\ Development;$
4	(H) the Export-Import Bank of the United
5	States;
6	(I) the Overseas Private Investment Cor-
7	poration:
8	(J) the Trade and Development Agency;
9	(K) the Small Business Administration;
10	(L) the Office of the United States Trade
11	Representative; and
12	(M) other Federal departments and agen-
13	cies, as determined by the President.
14	(3) Chairperson.—The President shall des-
15	ignate a Chairperson or Co-Chairpersons of the Task
16	Force.
17	(4) Duties.—The Task Force—
18	(A) shall develop and assist in the imple-
19	mentation of the strategy required under sub-
20	section (c); and
21	(B)(i) shall analyze technology, policy, and
22	market opportunities for the development, dem-
23	onstration, and deployment of clean and efficient
24	energy technologies on an international basis;
25	and

1	(ii) shall examine relevant trade, tax, fi-
2	nance, international, and other policy issues to
3	assess which policies, in the United States and
4	in developing countries, would help open markets
5	and improve the export of clean and efficient en-
6	ergy technologies from the United States.
7	(5) Termination.—The Task Force, including
8	any working group established by the Task Force pur-
9	suant to subsection (b), shall terminate 12 years after
10	the date of the enactment of this Act.
11	(b) Working Groups.—
12	(1) Establishment.—The Task Force—
13	(A) shall establish an Interagency Working
14	Group on the Export of Clean and Efficient En-
15	ergy Technologies (in this section referred to as
16	the "Interagency Working Group"); and
17	(B) may establish other working groups as
18	may be necessary to carry out this section.
19	(2) Composition.—The Interagency Working
20	Group shall be composed of—
21	(A) the Secretary of Energy, the Secretary
22	of Commerce, and the Secretary of State, who
23	shall serve as Co-Chairpersons of the Interagency
24	Working Group; and

1	(B) other members, as determined by the
2	Chairperson or Co-Chairpersons of the Task
3	Force.
4	(3) Duties.—The Interagency Working Group
5	shall coordinate the resources and relevant programs
6	of the Department of Energy, the Department of Com-
7	merce, the Department of State, and other relevant
8	Federal departments and agencies to support the ex-
9	port of clean and efficient energy technologies devel-
10	oped or demonstrated in the United States to other
11	countries and the deployment of such clean and effi-
12	cient energy technologies in such other countries.
13	(4) Interagency center.—The Interagency
14	Working Group—
15	(A) shall establish an Interagency Center on
16	the Export of Clean and Efficient Energy Tech-
17	nologies (in this section referred to as the "Inter-
18	agency Center") to assist the Interagency Work-
19	ing Group in carrying out its duties required
20	under paragraph (3); and
21	(B) shall locate the Interagency Center at a
22	site agreed upon by the Co-Chairpersons of the
23	Interagency Working Group, with the approval
24	of Chairperson or Co-Chairpersons of the Task
25	Force.

1	(c) Strategy.—
2	(1) In general.—Not later than 1 year after
3	the date of the enactment of this Act, the Task Force
4	shall develop and submit to the President and the ap-
5	propriate congressional committees a strategy to—
6	(A) support the development and implemen-
7	tation of programs, policies, and initiatives in
8	developing countries to promote the adoption
9	and deployment of clean and efficient energy
10	technologies, with an emphasis on those devel-
11	oping countries that are expected to experience
12	the most significant growth in energy production
13	and use over the next 20 years;
14	(B) open and expand clean and efficient en-
15	ergy technology markets and facilitate the export
16	of clean and efficient energy technologies to de-
17	veloping countries, in a manner consistent with
18	United States obligations as member of the
19	World Trade Organization;
20	(C) integrate into the foreign policy objec-
21	tives of the United States the promotion of—
22	(i) the deployment of clean and effi-
23	cient energy technologies and the reduction
24	of greenhouse gas emissions in developing
25	countries; and

1	(ii) the export of clean and efficient en-
2	ergy technologies; and
3	(D) develop financial mechanisms and in-
4	struments, including securities that mitigate the
5	political and foreign exchange risks of uses that
6	are consistent with the foreign policy objectives
7	of the United States by combining the private
8	sector market and government enhancements,
9	that—
10	(i) are cost-effective; and
11	(ii) facilitate private capital invest-
12	ment in clean and efficient energy tech-
13	nology projects in developing countries.
14	(2) UPDATES.—Not later than 3 years after the
15	date of submission of the strategy under paragraph
16	(1), and every 3 years thereafter, the Task Force shall
17	update the strategy in accordance with the require-
18	ments of paragraph (1).
19	(d) Report.—
20	(1) In general.—Not later than 3 years after
21	the date of submission of the strategy under subsection
22	(c)(1), and every 3 years thereafter, the President
23	shall transmit to the appropriate congressional com-
24	mittees a report on the implementation of this section
25	for the prior 3-year period.

1	(2) Matters to be included.—The report re-
2	quired under paragraph (1) shall include the fol-
3	lowing:
4	(A) The update of the strategy required
5	under subsection (c)(2) and a description of the
6	actions taken by the Task Force to assist in the
7	implementation of the strategy.
8	(B) A description of actions taken by the
9	Task Force to carry out the duties required
10	under subsection $(a)(4)(B)$.
11	(C) A description of assistance provided
12	under this section.
13	(D) The results of programs, projects, and
14	activities carried out under this section.
15	(E) A description of priorities for pro-
16	moting the diffusion and adoption of clean and
17	efficient energy technologies and strategies in de-
18	veloping countries, taking into account economic
19	and security interests of the United States and
20	opportunities for the export of technology of the
21	United States.
22	(F) Recommendations to the heads of ap-
23	propriate Federal departments and agencies on
24	methods to streamline Federal programs and
25	policies to improve the role of such Federal de-

1	partments and agencies in the development, dem-
2	onstration, and deployment of clean and efficient
3	energy technologies on an international basis.
4	(G) Strategies to integrate representatives of
5	the private sector and other interested groups on
6	the export and deployment of clean and efficient
7	energy technologies.
8	(H) A description of programs to dissemi-
9	nate information to the private sector and the
10	public on clean and efficient energy technologies
11	and opportunities to transfer such clean and effi-
12	cient energy technologies.
13	(e) Authorization of Appropriations.—There are
14	authorized to be appropriated to carry out this section
15	\$5,000,000 for each of fiscal years 2008 through 2020.
16	SEC. 917. UNITED STATES-ISRAEL ENERGY COOPERATION.
17	(a) Findings.—Congress finds that—
18	(1) it is in the highest national security interests
19	of the United States to develop renewable energy
20	sources;
21	(2) the State of Israel is a steadfast ally of the
22	United States;
23	(3) the special relationship between the United
24	States and Israel is manifested in a variety of cooper-

1	ative scientific research and development programs,
2	such as—
3	(A) the United States-Israel Binational
4	Science Foundation; and
5	(B) the United States-Israel Binational In-
6	dustrial Research and Development Foundation;
7	(4) those programs have made possible many sci-
8	entific, technological, and commercial breakthroughs
9	in the fields of life sciences, medicine, bioengineering,
10	agriculture, biotechnology, communications, and oth-
11	ers;
12	(5) on February 1, 1996, the Secretary of En-
13	ergy (referred to in this section as the "Secretary")
14	and the Israeli Minister of Energy and Infrastructure
15	signed an agreement to establish a framework for col-
16	laboration between the United States and Israel in
17	energy research and development activities;
18	(6) Israeli scientists and engineers are at the
19	forefront of research and development in the field of
20	renewable energy sources; and
21	(7) enhanced cooperation between the United
22	States and Israel for the purpose of research and de-
23	velopment of renewable energy sources would be in the
24	national interests of both countries.
25	(b) Grant Program.—

1	(1) E STABLISHMENT.— In $implementing$ the
2	agreement entitled the "Agreement between the De-
3	partment of Energy of the United States of America
4	and the Ministry of Energy and Infrastructure of
5	Israel Concerning Energy Cooperation", dated Feb-
6	ruary 1, 1996, the Secretary shall establish a grant
7	program in accordance with the requirements of sec-
8	tions 988 and 989 of the Energy Policy Act of 2005
9	(42 U.S.C. 16352, 16353) to support research, devel-
10	opment, and commercialization of renewable energy
11	or energy efficiency.
12	(2) Types of energy.—In carrying out para-
13	graph (1), the Secretary may make grants to pro-
14	mote—
15	(A) solar energy;
16	(B) biomass energy;
17	(C) energy efficiency;
18	(D) wind energy;
19	$(E)\ geothermal\ energy;$
20	(F) wave and tidal energy; and
21	(G) advanced battery technology.
22	(3) Eligible applicants.—An applicant shall
23	be eligible to receive a grant under this subsection if
24	the project of the applicant—

1	(A) addresses a requirement in the area of
2	improved energy efficiency or renewable energy
3	sources, as determined by the Secretary; and
4	(B) is a joint venture between—
5	(i)(I) a for-profit business entity, aca-
6	demic institution, National Laboratory (as
7	defined in section 2 of the Energy Policy
8	Act of 2005 (42 U.S.C. 15801)), or non-
9	profit entity in the United States; and
10	(II) a for-profit business entity, aca-
11	demic institution, or nonprofit entity in
12	Israel; or
13	(ii)(I) the Federal Government; and
14	(II) the Government of Israel.
15	(4) Applications.—To be eligible to receive a
16	grant under this subsection, an applicant shall sub-
17	mit to the Secretary an application for the grant in
18	accordance with procedures established by the Sec-
19	retary, in consultation with the advisory board estab-
20	lished under paragraph (5).
21	(5) Advisory Board.—
22	(A) Establishment.—The Secretary shall
23	establish an advisory board—

1	(i) to monitor the method by which
2	grants are awarded under this subsection;
3	and
4	(ii) to provide to the Secretary peri-
5	odic performance reviews of actions taken to
6	carry out this subsection.
7	(B) Composition.—The advisory board es-
8	tablished under subparagraph (A) shall be com-
9	posed of 3 members, to be appointed by the Sec-
10	retary, of whom—
11	(i) 1 shall be a representative of the
12	$Federal\ Government;$
13	(ii) 1 shall be selected from a list of
14	nominees provided by the United States-
15	Israel Binational Science Foundation; and
16	(iii) 1 shall be selected from a list of
17	nominees provided by the United States-
18	Israel Binational Industrial Research and
19	$Development\ Foundation.$
20	(6) Contributed funds.—Notwithstanding sec-
21	tion 3302 of title 31, United States Code, the Sec-
22	retary may accept, retain, and use funds contributed
23	by any person, government entity, or organization for
24	purposes of carrying out this subsection—
25	(A) without further appropriation; and

1	(B) without fiscal year limitation.
2	(7) Report.—Not later than 180 days after the
3	date of completion of a project for which a grant is
4	provided under this subsection, the grant recipient
5	shall submit to the Secretary a report that contains—
6	(A) a description of the method by which
7	the recipient used the grant funds; and
8	(B) an evaluation of the level of success of
9	each project funded by the grant.
10	(8) Classification.—Grants shall be awarded
11	under this subsection only for projects that are con-
12	sidered to be unclassified by both the United States
13	and Israel.
14	(c) Termination.—The grant program and the advi-
15	sory committee established under this section terminate on
16	the date that is 7 years after the date of enactment of this
17	Act.
18	(d) Authorization of Appropriations.—The Sec-
19	retary shall use amounts authorized to be appropriated
20	under section 931 of the Energy Policy Act of 2005 (42
21	U.S.C. 16231) to carry out this section.
22	Subtitle B—International Clean
23	Energy Foundation
24	SEC. 921. DEFINITIONS.
25	In this subtitle:

1	(1) BOARD.—The term "Board" means the
2	Board of Directors of the Foundation established pur-
3	$suant\ to\ section\ 922(c).$
4	(2) Chief executive officer.—The term
5	"Chief Executive Officer" means the chief executive of
6	ficer of the Foundation appointed pursuant to section
7	922(b).
8	(3) FOUNDATION.—The term "Foundation"
9	means the International Clean Energy Foundation
10	established by section $922(a)$.
11	SEC. 922. ESTABLISHMENT AND MANAGEMENT OF FOUNDA
12	TION.
13	(a) Establishment.—
14	(1) In general.—There is established in the ex-
15	ecutive branch a foundation to be known as the
16	"International Clean Energy Foundation" that shall
17	be responsible for carrying out the provisions of this
18	subtitle. The Foundation shall be a government cor-
19	poration, as defined in section 103 of title 5, United
20	States Code.
21	(2) Board of directors.—The Foundation
22	shall be governed by a Board of Directors in accord-
23	ance with subsection (c).
24	(3) Intent of congress.—It is the intent of
25	Congress, in establishing the structure of the Founda-

1	tion set forth in this subsection, to create an entity
2	that serves the long-term foreign policy and energy se-
3	curity goals of reducing global greenhouse gas emis-
4	sions.
5	(b) Chief Executive Officer.—
6	(1) In General.—There shall be in the Founda-
7	tion a Chief Executive Officer who shall be responsible
8	for the management of the Foundation.
9	(2) Appointment.—The Chief Executive Officer
10	shall be appointed by the Board, with the advice and
11	consent of the Senate, and shall be a recognized leader
12	in clean and efficient energy technologies and climate
13	change and shall have experience in energy security,
14	business, or foreign policy, chosen on the basis of a
15	rigorous search.
16	(3) Relationship to board.—The Chief Exec-
17	utive Officer shall report to, and be under the direct
18	authority of, the Board.
19	(4) Compensation and rank.—
20	(A) In General.—The Chief Executive Of-
21	ficer shall be compensated at the rate provided
22	for level III of the Executive Schedule under sec-
23	tion 5314 of title 5, United States Code.

1	(B) Amendment.—Section 5314 of title 5,
2	United States Code, is amended by adding at the
3	end the following:
4	"Chief Executive Officer, International Clean Energy
5	Foundation.".
6	(C) Authorities and duties.—The Chief
7	Executive Officer shall be responsible for the
8	management of the Foundation and shall exer-
9	cise the powers and discharge the duties of the
10	Foundation.
11	(D) Authority to appoint officers.—In
12	consultation and with approval of the Board, the
13	Chief Executive Officer shall appoint all officers
14	of the Foundation.
15	(c) Board of Directors.—
16	(1) Establishment.—There shall be in the
17	Foundation a Board of Directors.
18	(2) Duties.—The Board shall perform the func-
19	tions specified to be carried out by the Board in this
20	subtitle and may prescribe, amend, and repeal by-
21	laws, rules, regulations, and procedures governing the
22	manner in which the business of the Foundation may
23	be conducted and in which the powers granted to it
24	by law may be exercised.
25	(3) Membership.—The Board shall consist of—

1	(A) the Secretary of State (or the Sec-
2	retary's designee), the Secretary of Energy (or
3	the Secretary's designee), and the Administrator
4	of the United States Agency for International
5	Development (or the Administrator's designee);
6	and
7	(B) four other individuals with relevant ex-
8	perience in matters relating to energy security
9	(such as individuals who represent institutions
10	of energy policy, business organizations, foreign
11	policy organizations, or other relevant organiza-
12	tions) who shall be appointed by the President,
13	by and with the advice and consent of the Sen-
14	ate, of whom—
15	(i) one individual shall be appointed
16	from among a list of individuals submitted
17	by the majority leader of the House of Rep-
18	resentatives;
19	(ii) one individual shall be appointed
20	from among a list of individuals submitted
21	by the minority leader of the House of Rep-
22	resentatives;
23	(iii) one individual shall be appointed
24	from among a list of individuals submitted
25	by the majority leader of the Senate; and

1	(iv) one individual shall be appointed
2	from among a list of individuals submitted
3	by the minority leader of the Senate.
4	(4) Chief executive officer.—The Chief Ex-
5	ecutive Officer of the Foundation shall serve as a non-
6	voting, ex officio member of the Board.
7	(5) TERMS.—
8	(A) Officers of the federal govern-
9	MENT.—Each member of the Board described in
10	paragraph (3)(A) shall serve for a term that is
11	concurrent with the term of service of the indi-
12	vidual's position as an officer within the other
13	Federal department or agency.
14	(B) Other members.—Each member of
15	the Board described in paragraph (3)(B) shall be
16	appointed for a term of 3 years and may be re-
17	appointed for a term of an additional 3 years.
18	(C) VACANCIES.—A vacancy in the Board
19	shall be filled in the manner in which the origi-
20	nal appointment was made.
21	(D) ACTING MEMBERS.—A vacancy in the
22	Board may be filled with an appointment of an
23	acting member by the Chairperson of the Board
24	for up to 1 year while a nominee is named and

1	awaits confirmation in accordance with para-
2	graph(3)(B).
3	(6) Chairperson.—There shall be a Chair-
4	person of the Board. The Secretary of State (or the
5	Secretary's designee) shall serve as the Chairperson.
6	(7) QUORUM.—A majority of the members of the
7	Board described in paragraph (3) shall constitute a
8	quorum, which, except with respect to a meeting of
9	the Board during the 135-day period beginning on
10	the date of the enactment of this Act, shall include at
11	least 1 member of the Board described in paragraph
12	(3)(B).
13	(8) Meetings.—The Board shall meet at the call
14	of the Chairperson, who shall call a meeting no less
15	than once a year.
16	(9) Compensation.—
17	(A) Officers of the federal govern-
18	MENT.—
19	(i) In General.—A member of the
20	Board described in paragraph (3)(A) may
21	not receive additional pay, allowances, or
22	benefits by reason of the member's service on
23	$the\ Board.$
24	(ii) Travel expenses.—Each such
25	member of the Board shall receive travel ex-

1	penses, including per diem in lieu of sub-
2	sistence, in accordance with applicable pro-
3	visions under subchapter I of chapter 57 of
4	title 5, United States Code.
5	(B) Other members.—
6	(i) In general.—Except as provided
7	in clause (ii), a member of the Board de-
8	$scribed\ in\ paragraph\ (3)(B)$ —
9	(I) shall be paid compensation out
10	of funds made available for the pur-
11	poses of this subtitle at the daily equiv-
12	alent of the highest rate payable under
13	section 5332 of title 5, United States
14	Code, for each day (including travel
15	time) during which the member is en-
16	gaged in the actual performance of du-
17	ties as a member of the Board; and
18	(II) while away from the mem-
19	ber's home or regular place of business
20	on necessary travel in the actual per-
21	formance of duties as a member of the
22	Board, shall be paid per diem, travel,
23	and transportation expenses in the
24	same manner as is provided under sub-

1	chapter I of chapter 57 of title 5,
2	United States Code.
3	(ii) Limitation.—A member of the
4	Board may not be paid compensation under
5	clause (i)(II) for more than 90 days in any
6	calendar year.
7	SEC. 923. DUTIES OF FOUNDATION.
8	The Foundation shall—
9	(1) use the funds authorized by this subtitle to
10	make grants to promote projects outside of the United
11	States that serve as models of how to significantly re-
12	duce the emissions of global greenhouse gases through
13	clean and efficient energy technologies, processes, and
14	services;
15	(2) seek contributions from foreign governments,
16	especially those rich in energy resources such as mem-
17	ber countries of the Organization of the Petroleum
18	Exporting Countries, and private organizations to
19	supplement funds made available under this subtitle;
20	(3) harness global expertise through collaborative
21	partnerships with foreign governments and domestic
22	and foreign private actors, including nongovern-
23	mental organizations and private sector companies,
24	by leveraging public and private capital, technology,
25	ernertise and services towards innovative models that

1	can be instituted to reduce global greenhouse gas							
2	emissions;							
3	(4) create a repository of information on bes							
4	practices and lessons learned on the utilization and							
5	implementation of clean and efficient energy tech							
6	nologies and processes to be used for future initiative							
7	to tackle the climate change crisis;							
8	(5) be committed to minimizing administration							
9	costs and to maximizing the availability of funds fo							
10	grants under this subtitle; and							
11	(6) promote the use of American-made clean and							
12	efficient energy technologies, processes, and services by							
13	giving preference to entities incorporated in the							
14	United States and whose technology will be substan-							
15	tially manufactured in the United States.							
16	SEC. 924. ANNUAL REPORT.							
17	(a) Report Required.—Not later than March 31,							
18	2008, and each March 31 thereafter, the Foundation shall							
19	submit to the appropriate congressional committees a report							
20	on the implementation of this subtitle during the prior fis-							
21	cal year.							
22	(b) Contents.—The report required by subsection (a)							
23	shall include—							
24	(1) the total financial resources available to the							
25	Foundation during the year, including appropriated							

1	funds, the value and source of any gifts or donations
2	accepted pursuant to section 925(a)(6), and any other
3	resources;
4	(2) a description of the Board's policy priorities
5	for the year and the basis upon which competitive
6	grant proposals were solicited and awarded to non-
7	governmental institutions and other organizations;
8	(3) a list of grants made to nongovernmental in-
9	stitutions and other organizations that includes the
10	identity of the institutional recipient, the dollar
11	amount, and the results of the program; and
12	(4) the total administrative and operating ex-
13	penses of the Foundation for the year, as well as spe-
14	cific information on—
15	(A) the number of Foundation employees
16	and the cost of compensation for Board members,
17	Foundation employees, and personal service con-
18	tractors;
19	(B) costs associated with securing the use of
20	real property for carrying out the functions of
21	$the\ Foundation;$
22	(C) total travel expenses incurred by Board
23	members and Foundation employees in connec-
24	tion with Foundation activities; and
25	(D) total representational expenses.

1	SEC. 925. POWERS OF THE FOUNDATION; RELATED PROVI-
2	SIONS.
3	(a) Powers.—The Foundation—
4	(1) shall have perpetual succession unless dis-
5	solved by a law enacted after the date of the enact-
6	ment of this Act;
7	(2) may adopt, alter, and use a seal, which shall
8	be judicially noticed;
9	(3) may make and perform such contracts,
10	grants, and other agreements with any person or gov-
11	ernment however designated and wherever situated, as
12	may be necessary for carrying out the functions of the
13	Foundation;
14	(4) may determine and prescribe the manner in
15	which its obligations shall be incurred and its ex-
16	penses allowed and paid, including expenses for rep-
17	resentation;
18	(5) may lease, purchase, or otherwise acquire,
19	improve, and use such real property wherever situ-
20	ated, as may be necessary for carrying out the func-
21	tions of the Foundation;
22	(6) may accept money, funds, services, or prop-
23	erty (real, personal, or mixed), tangible or intangible,
24	made available by gift, bequest grant, or otherwise for
25	the purpose of carrying out the provisions of this title

from domestic or foreign private individuals, char-

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1	ities, nongovernmental organizations, corporations, or						
2	governments;						
3	(7) may use the United States mails in the same						
4	manner and on the same conditions as the executive						
5	departments;						
6	(8) may contract with individuals for personal						
7	services, who shall not be considered Federal employ						
8	ees for any provision of law administered by the Of						
9	fice of Personnel Management;						
10	(9) may hire or obtain passenger motor vehicles;						
11	and						
12	(10) shall have such other powers as may be nec-						
13	essary and incident to carrying out this subtitle.						
14	(b) Principal Office.—The Foundation shall main-						
15	tain its principal office in the metropolitan area of Wash-						
16	ington, District of Columbia.						
17	(c) Applicability of Government Corporation						
18	Control Act.—						
19	(1) In general.—The Foundation shall be sub-						
20	ject to chapter 91 of subtitle VI of title 31, United						
21	States Code, except that the Foundation shall not be						
22	authorized to issue obligations or offer obligations to						
23	$the\ public.$						

1	(2) Conforming amendment.—Section 9101(3)						
2	of title 31, United States Code, is amended by adding						
3	at the end the following:						
4	"(R) the International Clean Energy Foun-						
5	dation.".						
6	(d) Inspector General.—						
7	(1) In general.—The Inspector General of the						
8	Department of State shall serve as Inspector General						
9	of the Foundation, and, in acting in such capacity,						
10	may conduct reviews, investigations, and inspections						
11	of all aspects of the operations and activities of the						
12	Foundation.						
13	(2) Authority of the board.—In carrying						
14	out the responsibilities under this subsection, the In-						
15	spector General shall report to and be under the gen-						
16	eral supervision of the Board.						
17	(3) Reimbursement and authorization of						
18	SERVICES.—						
19	(A) Reimbursement.—The Foundation						
20	shall reimburse the Department of State for all						
21	expenses incurred by the Inspector General in						
22	connection with the Inspector General's respon-						
23	sibilities under this subsection.						
24	(B) Authorization for services.—Of						
25	the amount authorized to be appropriated under						

1	section 927(a) for a fiscal year, up to \$500,000
2	is authorized to be made available to the Inspec-
3	tor General of the Department of State to con-
4	duct reviews, investigations, and inspections of
5	operations and activities of the Foundation.
6	SEC. 926. GENERAL PERSONNEL AUTHORITIES.
7	(a) Detail of Personnel.—Upon request of the
8	Chief Executive Officer, the head of an agency may detail
9	any employee of such agency to the Foundation on a reim-
10	bursable basis. Any employee so detailed remains, for the
11	purpose of preserving such employee's allowances, privi-
12	leges, rights, seniority, and other benefits, an employee of
13	the agency from which detailed.
14	(b) REEMPLOYMENT RIGHTS.—
15	(1) In general.—An employee of an agency
16	who is serving under a career or career conditional
17	appointment (or the equivalent), and who, with the
18	consent of the head of such agency, transfers to the
19	Foundation, is entitled to be reemployed in such em-
20	ployee's former position or a position of like seniority,
21	status, and pay in such agency, if such employee—
22	(A) is separated from the Foundation for
23	any reason, other than misconduct, neglect of
24	duty, or malfeasance; and

1	(B) applies for reemployment not later than						
2	90 days after the date of separation from the						
3	Foundation.						
4	(2) Specific rights.—An employee who satis-						
5	fies paragraph (1) is entitled to be reemployed (in ac-						
6	cordance with such paragraph) within 30 days after						
7	applying for reemployment and, on reemployment, is						
8	entitled to at least the rate of basic pay to which such						
9	employee would have been entitled had such employee						
10	never transferred.						
11	(c) Hiring Authority.—Of persons employed by the						
12	Foundation, no more than 30 persons may be appointed,						
13	compensated, or removed without regard to the civil service						
14	laws and regulations.						
15	(d) Basic Pay.—The Chief Executive Officer may fix						
16	the rate of basic pay of employees of the Foundation without						
17	regard to the provisions of chapter 51 of title 5, United						
18	States Code (relating to the classification of positions), sub-						
19	chapter III of chapter 53 of such title (relating to General						
20	Schedule pay rates), except that no employee of the Founda-						
21	tion may receive a rate of basic pay that exceeds the rate						
22	for level IV of the Executive Schedule under section 5315						
23	of such title.						
24	(e) Definitions.—In this section—						

1	(1) the term "agency" means an executive agen-
2	cy, as defined by section 105 of title 5, United States
3	Code; and
4	(2) the term "detail" means the assignment or
5	loan of an employee, without a change of position,
6	from the agency by which such employee is employed
7	to the Foundation.
8	SEC. 927. AUTHORIZATION OF APPROPRIATIONS.
9	(a) Authorization of Appropriations.—To carry
10	out this subtitle, there are authorized to be appropriated
11	\$20,000,000 for each of the fiscal years 2009 through 2013.
12	(b) Allocation of Funds.—
13	(1) In general.—The Foundation may allocate
14	or transfer to any agency of the United States Gov-
15	ernment any of the funds available for carrying out
16	this subtitle. Such funds shall be available for obliga-
17	tion and expenditure for the purposes for which the
18	funds were authorized, in accordance with authority
19	granted in this subtitle or under authority governing
20	the activities of the United States Government agency
21	to which such funds are allocated or transferred.
22	(2) Notification.—The Foundation shall notify
23	the appropriate congressional committees not less
24	than 15 days prior to an allocation or transfer of
25	funds pursuant to paragraph (1).

1	Subtitle C—Miscellaneous
2	Provisions
3	SEC. 931. ENERGY DIPLOMACY AND SECURITY WITHIN THE
4	DEPARTMENT OF STATE.
5	(a) State Department Coordinator for Inter-
6	NATIONAL ENERGY AFFAIRS.—
7	(1) In general.—The Secretary of State should
8	ensure that energy security is integrated into the core
9	mission of the Department of State.
10	(2) Coordinator for international energy
11	AFFAIRS.—There is established within the Office of
12	the Secretary of State a Coordinator for International
13	Energy Affairs, who shall be responsible for—
14	(A) representing the Secretary of State in
15	interagency efforts to develop the international
16	energy policy of the United States;
17	(B) ensuring that analyses of the national
18	security implications of global energy and envi-
19	ronmental developments are reflected in the deci-
20	sion making process within the Department of
21	State;
22	(C) incorporating energy security priorities
23	into the activities of the Department of State:

1	(D) coordinating energy activities of the De-
2	partment of State with relevant Federal agen-
3	cies; and
4	(E) coordinating energy security and other
5	relevant functions within the Department of
6	State currently undertaken by offices within—
7	(i) the Bureau of Economic, Energy
8	and Business Affairs;
9	(ii) the Bureau of Oceans and Inter-
10	national Environmental and Scientific Af-
11	fairs; and
12	(iii) other offices within the Depart-
13	ment of State.
14	(3) Authorization of appropriations.—
15	There are authorized to be appropriated such sums as
16	may be necessary to carry out this subsection.
17	(b) Energy Experts in Key Embassies.—Not later
18	than 180 days after the date of the enactment of this Act,
19	the Secretary of State shall submit a report to the Com-
20	mittee on Foreign Relations of the Senate and the Com-
21	mittee on Foreign Affairs of the House of Representatives
22	that includes—
23	(1) a description of the Department of State per-
24	sonnel who are dedicated to energy matters and are

1	stationed at	embassies	and	consulates	in	countries
2	that are major energy producers or consumers;					

- (2) an analysis of the need for Federal energy specialist personnel in United States embassies and other United States diplomatic missions; and
- 6 (3) recommendations for increasing energy ex-7 pertise within United States embassies among foreign 8 service officers and options for assigning to such em-9 bassies energy attachés from the National Labora-10 tories or other agencies within the Department of En-11 ergy.
- 12 (c) ENERGY ADVISORS.—The Secretary of Energy may
 13 make appropriate arrangements with the Secretary of State
 14 to assign personnel from the Department of Energy or the
 15 National Laboratories of the Department of Energy to serve
 16 as dedicated advisors on energy matters in embassies of the
 17 United States or other United States diplomatic missions.
 18 (d) Report.—Not later than 180 days after the date
- 18 (d) REPORT.—Not later than 180 days after the date 19 of the enactment of this Act, and every 2 years thereafter 20 for the following 20 years, the Secretary of State shall sub-21 mit a report to the Committee on Foreign Relations of the 22 Senate and the Committee on Foreign Affairs of the House 23 of Representatives that describes—

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1	(1) the energy-related activities being conducted
2	by the Department of State, including activities with-
3	in—
4	(A) the Bureau of Economic, Energy and
5	Business Affairs;
6	(B) the Bureau of Oceans and Environ-
7	mental and Scientific Affairs; and
8	(C) other offices within the Department of
9	State;
10	(2) the amount of funds spent on each activity
11	within each office described in paragraph (1); and
12	(3) the number and qualification of personnel in
13	each embassy (or relevant foreign posting) of the
14	United States whose work is dedicated exclusively to
15	energy matters.
16	SEC. 932. NATIONAL SECURITY COUNCIL REORGANIZATION.
17	Section 101(a) of the National Security Act of 1947
18	(50 U.S.C. 402(a)) is amended—
19	(1) by redesignating paragraphs (5), (6), and (7)
20	as paragraphs (6), (7), and (8), respectively; and
21	(2) by inserting after paragraph (4) the fol-
22	lowing:
23	"(5) the Secretary of Energy;".

1	SEC. 933. ANNUAL NATIONAL ENERGY SECURITY STRATEGY
2	REPORT.
3	(a) Reports.—
4	(1) In general.—Subject to paragraph (2), on
5	the date on which the President submits to Congress
6	the budget for the following fiscal year under section
7	1105 of title 31, United States Code, the President
8	shall submit to Congress a comprehensive report on
9	the national energy security of the United States.
10	(2) New presidents.—In addition to the re-
11	ports required under paragraph (1), the President
12	shall submit a comprehensive report on the national
13	energy security of the United States by not later than
14	150 days after the date on which the President as-
15	sumes the office of President after a presidential elec-
16	tion.
17	(b) Contents.—Each report under this section shall
18	describe the national energy security strategy of the United
19	States, including a comprehensive description of—
20	(1) the worldwide interests, goals, and objectives
21	of the United States that are vital to the national en-
22	ergy security of the United States;
23	(2) the foreign policy, worldwide commitments,
24	and national defense capabilities of the United States
25	necessaru—

1	(A) to deter political manipulation of world
2	energy resources; and
3	(B) to implement the national energy secu-
4	rity strategy of the United States;
5	(3) the proposed short-term and long-term uses of
6	the political, economic, military, and other authori-
7	ties of the United States—
8	(A) to protect or promote energy security;
9	and
10	(B) to achieve the goals and objectives de-
11	scribed in paragraph (1);
12	(4) the adequacy of the capabilities of the United
13	States to protect the national energy security of the
14	United States, including an evaluation of the balance
15	among the capabilities of all elements of the national
16	authority of the United States to support the imple-
17	mentation of the national energy security strategy;
18	and
19	(5) such other information as the President de-
20	termines to be necessary to inform Congress on mat-
21	ters relating to the national energy security of the
22	United States.
23	(c) Classified and Unclassified Form.—Each na-
24	tional energy security strategy report shall be submitted to
25	Congress in—

1	(1) a classified form; and
2	(2) an unclassified form.
3	SEC. 934. CONVENTION ON SUPPLEMENTARY COMPENSA-
4	TION FOR NUCLEAR DAMAGE CONTINGENT
5	COST ALLOCATION.
6	(a) Findings and Purpose.—
7	(1) Findings.—Congress finds that—
8	(A) section 170 of the Atomic Energy Act of
9	1954 (42 U.S.C. 2210) (commonly known as the
10	"Price-Anderson Act")—
11	(i) provides a predictable legal frame-
12	work necessary for nuclear projects; and
13	(ii) ensures prompt and equitable com-
14	pensation in the event of a nuclear incident
15	in the United States;
16	(B) the Price-Anderson Act, in effect, pro-
17	vides operators of nuclear powerplants with in-
18	surance for damage arising out of a nuclear in-
19	cident and funds the insurance primarily
20	through the assessment of a retrospective pre-
21	mium from each operator after the occurrence of
22	a nuclear incident;
23	(C) the Convention on Supplementary Com-
24	pensation for Nuclear Damage, done at Vienna

1	on September 12, 1997, will establish a global
2	system—
3	(i) to provide a predictable legal
4	framework necessary for nuclear energy
5	projects; and
6	(ii) to ensure prompt and equitable
7	compensation in the event of a nuclear inci-
8	dent;
9	(D) the Convention benefits United States
10	nuclear suppliers that face potentially unlimited
11	liability for nuclear incidents that are not cov-
12	ered by the Price-Anderson Act by replacing a
13	potentially open-ended liability with a predict-
14	able liability regime that, in effect, provides nu-
15	clear suppliers with insurance for damage aris-
16	ing out of such an incident;
17	(E) the Convention also benefits United
18	States nuclear facility operators that may be
19	publicly liable for a Price-Anderson incident by
20	providing an additional early source of funds to
21	compensate damage arising out of the Price-An-
22	derson incident;
23	(F) the combined operation of the Conven-
24	tion, the Price-Anderson Act, and this section
25	will augment the quantity of assured funds

1	available for victims in a wider variety of nu-
2	clear incidents while reducing the potential li-
3	ability of United States suppliers without in-
4	creasing potential costs to United States opera-
5	tors;
6	(G) the cost of those benefits is the obliga-
7	tion of the United States to contribute to the
8	supplementary compensation fund established by
9	the Convention;
10	(H) any such contribution should be funded
11	in a manner that does not—
12	(i) upset settled expectations based on
13	the liability regime established under the
14	Price-Anderson Act; or
15	(ii) shift to Federal taxpayers liability
16	risks for nuclear incidents at foreign instal-
17	lations;
18	(I) with respect to a Price-Anderson inci-
19	dent, funds already available under the Price-
20	Anderson Act should be used; and
21	(J) with respect to a nuclear incident out-
22	side the United States not covered by the Price-
23	Anderson Act, a retrospective premium should be
24	prorated amona nuclear suppliers relieved from

1	potential liability for which insurance is not
2	available.
3	(2) Purpose.—The purpose of this section is to
4	allocate the contingent costs associated with partici-
5	pation by the United States in the international nu-
6	clear liability compensation system established by the
7	Convention on Supplementary Compensation for Nu-
8	clear Damage, done at Vienna on September 12,
9	1997—
10	(A) with respect to a Price-Anderson inci-
11	dent, by using funds made available under sec-
12	tion 170 of the Atomic Energy Act of 1954 (42
13	U.S.C. 2210) to cover the contingent costs in a
14	manner that neither increases the burdens nor
15	decreases the benefits under section 170 of that
16	Act; and
17	(B) with respect to a covered incident out-
18	side the United States that is not a Price-Ander-
19	son incident, by allocating the contingent costs
20	equitably, on the basis of risk, among the class
21	of nuclear suppliers relieved by the Convention
22	from the risk of potential liability resulting from
23	any covered incident outside the United States.
24	(b) Definitions.—In this section:

1	(1) Commission.—The term "Commission"
2	means the Nuclear Regulatory Commission.
3	(2) Contingent cost.—The term "contingent
4	cost" means the cost to the United States in the event
5	of a covered incident the amount of which is equal to
6	the amount of funds the United States is obligated to
7	make available under paragraph 1(b) of Article III of
8	the Convention.
9	(3) Convention.—The term "Convention"
10	means the Convention on Supplementary Compensa-
11	tion for Nuclear Damage, done at Vienna on Sep-
12	tember 12, 1997.
13	(4) Covered incident.—The term "covered in-
14	cident" means a nuclear incident the occurrence of
15	which results in a request for funds pursuant to Arti-
16	cle VII of the Convention.
17	(5) Covered installation.—The term "covered
18	installation" means a nuclear installation at which
19	the occurrence of a nuclear incident could result in a
20	request for funds under Article VII of the Convention.
21	(6) Covered Person.—
22	(A) In general.—The term "covered per-
23	son" means—
24	(i) a United States person; and

1	(ii) an individual or entity (including
2	an agency or instrumentality of a foreign
3	country) that—
4	(I) is located in the United States;
5	or
6	(II) carries out an activity in the
7	United States.
8	(B) Exclusions.—The term "covered per-
9	son" does not include—
10	(i) the United States; or
11	(ii) any agency or instrumentality of
12	the United States.
13	(7) Nuclear supplier.—The term "nuclear
14	supplier" means a covered person (or a successor in
15	interest of a covered person) that—
16	(A) supplies facilities, equipment, fuel, serv-
17	ices, or technology pertaining to the design, con-
18	struction, operation, or decommissioning of a
19	covered installation; or
20	(B) transports nuclear materials that could
21	result in a covered incident.
22	(8) Price-Anderson incident.—The term
23	"Price-Anderson incident" means a covered incident
24	for which section 170 of the Atomic Energy Act of
25	1954 (42 U.S.C. 2210) would make funds available to

1	compensate for public liability (as defined in section
2	11 of that Act (42 U.S.C. 2014)).
3	(9) Secretary.—The term "Secretary" means
4	the Secretary of Energy.
5	(10) United States.—
6	(A) In General.—The term "United
7	States" has the meaning given the term in sec-
8	tion 11 of the Atomic Energy Act of 1954 (42
9	U.S.C. 2014).
10	(B) Inclusions.—The term "United
11	States" includes—
12	(i) the Commonwealth of Puerto Rico,
13	(ii) any other territory or possession of
14	the United States;
15	(iii) the Canal Zone; and
16	(iv) the waters of the United States ter-
17	ritorial sea under Presidential Proclama-
18	tion Number 5928, dated December 27,
19	1988 (43 U.S.C. 1331 note).
20	(11) United states person.—The term
21	"United States person" means—
22	(A) any individual who is a resident, na-
23	tional, or citizen of the United States (other than
24	an individual residing outside of the United

1	States and employed by a person who is not a
2	United States person); and
3	(B) any corporation, partnership, associa-
4	tion, joint stock company, business trust, unin-
5	corporated organization, or sole proprietorship
6	that is organized under the laws of the United
7	States.
8	(c) Use of Price-Anderson Funds.—
9	(1) In general.—Funds made available under
10	section 170 of the Atomic Energy Act of 1954 (42
11	U.S.C. 2210) shall be used to cover the contingent cost
12	resulting from any Price-Anderson incident.
13	(2) Effect.—The use of funds pursuant to
14	paragraph (1) shall not reduce the limitation on pub-
15	lic liability established under section 170 e. of the
16	Atomic Energy Act of 1954 (42 U.S.C. 2210(e)).
17	(d) Effect on Amount of Public Liability.—
18	(1) In general.—Funds made available to the
19	United States under Article VII of the Convention
20	with respect to a Price-Anderson incident shall be
21	used to satisfy public liability resulting from the
22	Price-Anderson incident.
23	(2) Amount.—The amount of public liability al-
24	lowable under section 170 of the Atomic Energy Act
25	of 1954 (42 U.S.C. 2210) relating to a Price-Ander-

1	son incident under paragraph (1) shall be increased
2	by an amount equal to the difference between—
3	(A) the amount of funds made available for
4	the Price-Anderson incident under Article VII of
5	the Convention; and
6	(B) the amount of funds used under sub-
7	section (c) to cover the contingent cost resulting
8	from the Price-Anderson incident.
9	(e) Retrospective Risk Pooling Program.—
10	(1) In general.—Except as provided under
11	paragraph (2), each nuclear supplier shall participate
12	in a retrospective risk pooling program in accordance
13	with this section to cover the contingent cost resulting
14	from a covered incident outside the United States that
15	is not a Price-Anderson incident.
16	(2) Deferred payment.—
17	(A) In general.—The obligation of a nu-
18	clear supplier to participate in the retrospective
19	risk pooling program shall be deferred until the
20	United States is called on to provide funds pur-
21	suant to Article VII of the Convention with re-
22	spect to a covered incident that is not a Price-
23	$Anderson\ incident.$
24	(B) Amount of Deferred Payment.—The
25	amount of a deferred payment of a nuclear sup-

1	plier under subparagraph (A) shall be based on
2	the risk-informed assessment formula determined
3	under subparagraph (C).
4	(C) RISK-INFORMED ASSESSMENT FOR-
5	MULA.—
6	(i) In general.—Not later than 3
7	years after the date of the enactment of this
8	Act, and every 5 years thereafter, the Sec-
9	retary shall, by regulation, determine the
10	risk-informed assessment formula for the al-
11	location among nuclear suppliers of the con-
12	tingent cost resulting from a covered inci-
13	dent that is not a Price-Anderson incident,
14	taking into account risk factors such as—
15	(I) the nature and intended pur-
16	pose of the goods and services supplied
17	by each nuclear supplier to each cov-
18	ered installation outside the United
19	States;
20	(II) the quantity of the goods and
21	services supplied by each nuclear sup-
22	plier to each covered installation out-
23	side the United States;
24	(III) the hazards associated with
25	the supplied goods and services if the

1	goods and services fail to achieve the
2	$intended \ purposes;$
3	(IV) the hazards associated with
4	the covered installation outside the
5	United States to which the goods and
6	services are supplied;
7	(V) the legal, regulatory, and fi-
8	nancial infrastructure associated with
9	the covered installation outside the
10	United States to which the goods and
11	services are supplied; and
12	(VI) the hazards associated with
13	particular forms of transportation.
14	(ii) Factors for consideration.—
15	In determining the formula, the Secretary
16	may—
17	(I) exclude—
18	(aa) goods and services with
19	$negligible\ risk;$
20	(bb) classes of goods and
21	services not intended specifically
22	for use in a nuclear installation;
23	(cc) a nuclear supplier with
24	a de minimis share of the contin-
25	gent cost; and

1	(dd) a nuclear supplier no
2	longer in existence for which there
3	is no identifiable successor; and
4	(II) establish the period on which
5	the risk assessment is based.
6	(iii) Application.—In applying the
7	formula, the Secretary shall not consider
8	any covered installation or transportation
9	for which funds would be available under
10	section 170 of the Atomic Energy Act of
11	1954 (42 U.S.C. 2210).
12	(iv) Report.—Not later than 5 years
13	after the date of the enactment of this Act,
14	and every 5 years thereafter, the Secretary
15	shall submit to the Committee on Environ-
16	ment and Public Works of the Senate and
17	the Committee on Energy and Commerce of
18	the House of Representatives a report on
19	whether there is a need for continuation or
20	amendment of this section, taking into ac-
21	count the effects of the implementation of
22	the Convention on the United States nuclear
23	industry and suppliers.
24	(f) Reporting.—
25	(1) Collection of information.—

- 1 (A) In GENERAL.—The Secretary may collect information necessary for developing and
 3 implementing the formula for calculating the deferred payment of a nuclear supplier under subsection (e)(2).
 - (B) Provision of information.—Each nuclear supplier and other appropriate persons shall make available to the Secretary such information, reports, records, documents, and other data as the Secretary determines, by regulation, to be necessary or appropriate to develop and implement the formula under subsection (e)(2)(C).
 - (2) Private insurance.—The Secretary shall make available to nuclear suppliers, and insurers of nuclear suppliers, information to support the voluntary establishment and maintenance of private insurance against any risk for which nuclear suppliers may be required to pay deferred payments under this section.
- 21 (g) Effect on Liability.—Nothing in any other law 22 (including regulations) limits liability for a covered inci-23 dent to an amount equal to less than the amount prescribed 24 in paragraph 1(a) of Article IV of the Convention, unless 25 the law—

1	(1) specifically refers to this section; and
2	(2) explicitly repeals, alters, amends, modifies,
3	impairs, displaces, or supersedes the effect of this sub-
4	section.
5	(h) Payments to and by the United States.—
6	(1) Action by nuclear suppliers.—
7	(A) Notification.—In the case of a request
8	for funds under Article VII of the Convention re-
9	sulting from a covered incident that is not a
10	Price-Anderson incident, the Secretary shall no-
11	tify each nuclear supplier of the amount of the
12	deferred payment required to be made by the nu-
13	clear supplier.
14	(B) Payments.—
15	(i) In general.—Except as provided
16	under clause (ii), not later than 60 days
17	after receipt of a notification under sub-
18	paragraph (A), a nuclear supplier shall pay
19	to the general fund of the Treasury the de-
20	ferred payment of the nuclear supplier re-
21	quired under subparagraph (A).
22	(ii) Annual payments.—A nuclear
23	supplier may elect to prorate payment of
24	the deferred payment required under sub-
25	paragraph (A) in 5 equal annual payments

1	(including interest on the unpaid balance at
2	the prime rate prevailing at the time the
3	first payment is due).
4	(C) Vouchers.—A nuclear supplier shall
5	submit payment certification vouchers to the
6	Secretary of the Treasury in accordance with
7	section 3325 of title 31, United States Code.
8	(2) Use of funds.—
9	(A) In general.—Amounts paid into the
10	Treasury under paragraph (1) shall be available
11	to the Secretary of the Treasury, without further
12	appropriation and without fiscal year limita-
13	tion, for the purpose of making the contributions
14	of public funds required to be made by the
15	United States under the Convention.
16	(B) ACTION BY SECRETARY OF TREAS-
17	URY.—The Secretary of the Treasury shall pay
18	the contribution required under the Convention
19	to the court of competent jurisdiction under Arti-
20	cle XIII of the Convention with respect to the ap-
21	plicable covered incident.
22	(3) FAILURE TO PAY.—If a nuclear supplier fails
23	to make a payment required under this subsection,
24	the Secretary may take appropriate action to recover

from the nuclear supplier—

25

1	(A) the amount of the payment due from the
2	nuclear supplier;
3	(B) any applicable interest on the payment;
4	and
5	(C) a penalty of not more than twice the
6	amount of the deferred payment due from the
7	nuclear supplier.
8	(i) Limitation on Judicial Review; Cause of Ac-
9	TION.—
10	(1) Limitation on Judicial Review.—
11	(A) In general.—In any civil action aris-
12	ing under the Convention over which Article
13	XIII of the Convention grants jurisdiction to the
14	courts of the United States, any appeal or review
15	by writ of mandamus or otherwise with respect
16	to a nuclear incident that is not a Price-Ander-
17	son incident shall be in accordance with chapter
18	83 of title 28, United States Code, except that the
19	appeal or review shall occur in the United States
20	Court of Appeals for the District of Columbia
21	Circuit.
22	(B) Supreme court jurisdiction.—Noth-
23	ing in this paragraph affects the jurisdiction of
24	the Supreme Court of the United States under
25	chapter 81 of title 28. United States Code.

1	(2) Cause of action.—
2	(A) In general.—Subject to subparagraph
3	(B), in any civil action arising under the Con-
4	vention over which Article XIII of the Conven-
5	tion grants jurisdiction to the courts of the
6	United States, in addition to any other cause of
7	action that may exist, an individual or entity
8	shall have a cause of action against the operator
9	to recover for nuclear damage suffered by the in-
10	dividual or entity.
11	(B) Requirement.—Subparagraph (A)
12	shall apply only if the individual or entity seeks
13	a remedy for nuclear damage (as defined in Ar-
14	ticle I of the Convention) that was caused by a
15	nuclear incident (as defined in Article I of the
16	Convention) that is not a Price-Anderson inci-
17	dent.
18	(C) Savings provision.—Nothing in this
19	paragraph may be construed to limit, modify,
20	extinguish, or otherwise affect any cause of ac-
21	tion that would have existed in the absence of en-
22	actment of this paragraph.

23 (j) RIGHT OF RECOURSE.—This section does not pro-24 vide to an operator of a covered installation any right of 25 recourse under the Convention.

1	(k) Protection of Sensitive United States In-
2	FORMATION.—Nothing in the Convention or this section re-
3	quires the disclosure of—
4	(1) any data that, at any time, was Restricted
5	Data (as defined in section 11 of the Atomic Energy
6	Act of 1954 (42 U.S.C. 2014));
7	(2) information relating to intelligence sources or
8	methods protected by section 102A(i) of the National
9	Security Act of 1947 (50 U.S.C. 403–1(i)); or
10	(3) national security information classified
11	under Executive Order 12958 (50 U.S.C. 435 note; re-
12	lating to classified national security information) (or
13	a successor Executive Order or regulation).
14	(1) Regulations.—
15	(1) In General.—The Secretary or the Commis-
16	sion, as appropriate, may prescribe regulations to
17	carry out section 170 of the Atomic Energy Act of
18	1954 (42 U.S.C. 2210) and this section.
19	(2) Requirement.—Rules prescribed under this
20	subsection shall ensure, to the maximum extent prac-
21	ticable, that—
22	(A) the implementation of section 170 of the
23	Atomic Energy Act of 1954 (42 U.S.C. 2210)
24	and this section is consistent and equitable; and

1	(B) the financial and operational burden on
2	a Commission licensee in complying with section
3	170 of that Act is not greater as a result of the
4	enactment of this section.
5	(3) Applicability of provision.—Section 553
6	of title 5, United States Code, shall apply with re-
7	spect to the promulgation of regulations under this
8	subsection.
9	(4) Effect of subsection.—The authority
10	provided under this subsection is in addition to, and
11	does not impair or otherwise affect, any other author-
12	ity of the Secretary or the Commission to prescribe
13	regulations.
14	(m) Effective Date.—This section shall take effect
15	on the date of the enactment of this Act.
16	SEC. 935. TRANSPARENCY IN EXTRACTIVE INDUSTRIES RE-
17	SOURCE PAYMENTS.
18	(a) Purpose.—The purpose of this section is to—
19	(1) ensure greater United States energy security
20	by combating corruption in the governments of for-
21	eign countries that receive revenues from the sale of
22	their natural resources; and
23	(2) enhance the development of democracy and
24	increase political and economic stability in such re-
25	source rich foreign countries.

1	(b) Statement of Policy.—It is the policy of the
2	United States—
3	(1) to increase energy security by promoting
4	anti-corruption initiatives in oil and natural gas rich
5	countries; and
6	(2) to promote global energy security through
7	promotion of programs such as the Extractive Indus-
8	tries Transparency Initiative (EITI) that seek to in-
9	still transparency and accountability into extractive
10	industries resource payments.
11	(c) Sense of Congress.—It is the sense of Congress
12	that the United States should further global energy security
13	and promote democratic development in resource-rich for-
14	eign countries by—
15	(1) encouraging further participation in the
16	EITI by eligible countries and companies; and
17	(2) promoting the efficacy of the EITI program
18	by ensuring a robust and candid review mechanism.
19	(d) Report.—
20	(1) Report required.—Not later than 180
21	days after the date of the enactment of this Act, and
22	annually thereafter, the Secretary of State, in con-
23	sultation with the Secretary of Energy, shall submit
24	to the appropriate congressional committees a report

1	on progress made in promoting transparency in ex-
2	tractive industries resource payments.
3	(2) Matters to be included.—The report re-
4	quired by paragraph (1) shall include a detailed de-
5	scription of United States participation in the EITI,
6	bilateral and multilateral diplomatic efforts to further
7	participation in the EITI, and other United States
8	initiatives to strengthen energy security, deter energy
9	kleptocracy, and promote transparency in the extrac-
10	$tive\ industries.$
11	(e) Authorization of Appropriations.—There is
12	authorized to be appropriated \$3,000,000 for the purposes
13	of United States contributions to the Multi-Donor Trust
14	Fund of the EITI.
15	TITLE X—GREEN JOBS
16	SEC. 1001. SHORT TITLE.
17	This title may be cited as the "Green Jobs Act of
18	2007".
19	SEC. 1002. ENERGY EFFICIENCY AND RENEWABLE ENERGY
20	WORKER TRAINING PROGRAM.
21	Section 171 of the Workforce Investment Act of 1998
22	(29 U.S.C. 2916) is amended by adding at the end the fol-
23	lowing:
24	"(e) Energy Efficiency and Renewable Energy
25	Worker Training Program.—

1	"(1) Grant program.—
2	"(A) In General.—Not later than 6
3	months after the date of enactment of the Green
4	Jobs Act of 2007, the Secretary, in consultation
5	with the Secretary of Energy, shall establish an
6	energy efficiency and renewable energy worker
7	training program under which the Secretary
8	shall carry out the activities described in para-
9	graph (2) to achieve the purposes of this sub-
10	section.
11	"(B) Eligibility.—For purposes of pro-
12	viding assistance and services under the program
13	established under this subsection—
14	"(i) target populations of eligible indi-
15	viduals to be given priority for training
16	and other services shall include—
17	"(I) workers impacted by national
18	energy and environmental policy;
19	"(II) individuals in need of up-
20	dated training related to the energy ef-
21	ficiency and renewable energy indus-
22	tries;
23	"(III) veterans, or past and
24	present members of reserve components
25	of the Armed Forces;

1	"(IV) unemployed individuals;
2	"(V) individuals, including at-
3	risk youth, seeking employment path-
4	ways out of poverty and into economic
5	self-sufficiency; and
6	"(VI) formerly incarcerated, adju-
7	dicated, nonviolent offenders; and
8	"(ii) energy efficiency and renewable
9	energy industries eligible to participate in a
10	program under this subsection include—
11	"(I) the energy-efficient building,
12	construction, and retrofits industries;
13	"(II) the renewable electric power
14	industry;
15	"(III) the energy efficient and ad-
16	vanced drive train vehicle industry;
17	"(IV) the biofuels industry;
18	"(V) the deconstruction and mate-
19	rials use industries;
20	"(VI) the energy efficiency assess-
21	ment industry serving the residential,
22	commercial, or industrial sectors; and
23	"(VII) manufacturers that
24	produce sustainable products using en-

1	vironmentally sustainable processes
2	and materials.
3	"(2) Activities.—
4	"(A) National Research Program.—
5	Under the program established under paragraph
6	(1), the Secretary, acting through the Bureau of
7	Labor Statistics, where appropriate, shall collect
8	and analyze labor market data to track work-
9	force trends resulting from energy-related initia-
10	tives carried out under this subsection. Activities
11	carried out under this paragraph shall include—
12	"(i) tracking and documentation of
13	academic and occupational competencies as
14	well as future skill needs with respect to re-
15	newable energy and energy efficiency tech-
16	nology;
17	"(ii) tracking and documentation of
18	occupational information and workforce
19	training data with respect to renewable en-
20	ergy and energy efficiency technology;
21	"(iii) collaborating with State agen-
22	cies, workforce investments boards, industry,
23	organized labor, and community and non-
24	profit organizations to disseminate informa-
25	tion on successful innovations for labor

1	market services and worker training with
2	respect to renewable energy and energy effi-
3	ciency technology;
4	"(iv) serving as a clearinghouse for
5	best practices in workforce development, job
6	placement, and collaborative training part-
7	nerships;
8	"(v) encouraging the establishment of
9	workforce training initiatives with respect
10	to renewable energy and energy efficiency
11	technologies;
12	"(vi) linking research and development
13	in renewable energy and energy efficiency
14	technology with the development of stand-
15	ards and curricula for current and future
16	jobs;
17	"(vii) assessing new employment and
18	work practices including career ladder and
19	upgrade training as well as high perform-
20	ance work systems; and
21	"(viii) providing technical assistance
22	and capacity building to national and
23	State energy partnerships, including indus-
24	try and labor representatives.

1	"(B) National energy training part-
2	NERSHIP GRANTS.—
3	"(i) In general.—Under the program
4	established under paragraph (1), the Sec-
5	retary shall award National Energy Train-
6	ing Partnerships Grants on a competitive
7	basis to eligible entities to enable such enti-
8	ties to carry out training that leads to eco-
9	nomic self-sufficiency and to develop an en-
10	ergy efficiency and renewable energy indus-
11	tries workforce. Grants shall be awarded
12	under this subparagraph so as to ensure ge-
13	ographic diversity with at least 2 grants
14	awarded to entities located in each of the 4
15	Petroleum Administration for Defense Dis-
16	tricts with no subdistricts, and at least 1
17	grant awarded to an entity located in each
18	of the subdistricts of the Petroleum Admin-
19	istration for Defense District with subdis-
20	tricts.
21	"(ii) Eligibility.—To be eligible to
22	receive a grant under clause (i), an entity
23	shall be a nonprofit partnership that—
24	"(I) includes the equal participa-
25	tion of industry, including public or

1	private employers, and labor organiza-
2	tions, including joint labor-manage-
3	ment training programs, and may in-
4	clude workforce investment boards,
5	community-based organizations, quali-
6	fied service and conservation corps,
7	educational institutions, small busi-
8	nesses, cooperatives, State and local
9	veterans agencies, and veterans service
10	organizations; and
11	$``(II)\ demonstrates$ —
12	"(aa) experience in imple-
13	menting and operating worker
14	skills training and education pro-
15	grams;
16	"(bb) the ability to identify
17	and involve in training programs
18	carried out under this grant, tar-
19	get populations of individuals
20	who would benefit from training
21	and be actively involved in activi-
22	ties related to energy efficiency
23	and renewable energy industries;
24	and

1	"(cc) the ability to help indi-
2	viduals achieve economic self-suf-
3	ficiency.
4	"(iii) Priority.—Priority shall be
5	given to partnerships which leverage addi-
6	tional public and private resources to fund
7	training programs, including cash or in-
8	kind matches from participating employers.
9	"(C) State Labor Market Research, in-
10	FORMATION, AND LABOR EXCHANGE RESEARCH
11	PROGRAM.—
12	"(i) In general.—Under the program
13	established under paragraph (1), the Sec-
14	retary shall award competitive grants to
15	States to enable such States to administer
16	labor market and labor exchange informa-
17	tion programs that include the implementa-
18	tion of the activities described in clause (ii),
19	in coordination with the one-stop delivery
20	system.
21	"(ii) Activities.—A State shall use
22	amounts awarded under a grant under this
23	subparagraph to provide funding to the
24	State agency that administers the Wagner-
25	Peyser Act and State unemployment com-

1	pensation programs to carry out the fol-
2	lowing activities using State agency merit
3	staff:
4	``(I) The identification of job
5	openings in the renewable energy and
6	energy efficiency sector.
7	"(II) The administration of skill
8	and aptitude testing and assessment
9	for workers.
10	"(III) The counseling, case man-
11	agement, and referral of qualified job
12	seekers to openings and training pro-
13	grams, including energy efficiency and
14	renewable energy training programs.
15	"(D) State energy training partner-
16	SHIP PROGRAM.—
17	"(i) In general.—Under the program
18	established under paragraph (1), the Sec-
19	retary shall award competitive grants to
20	States to enable such States to administer
21	renewable energy and energy efficiency
22	workforce development programs that in-
23	clude the implementation of the activities
24	described in clause (ii).

"(ii) Partnerships.—A State shall	1
use amounts awarded under a grant under	2
this subparagraph to award competitive	3
grants to eligible State Energy Sector Part-	4
nerships to enable such Partnerships to co-	5
ordinate with existing apprenticeship and	6
labor management training programs and	7
implement training programs that lead to	8
the economic self-sufficiency of trainees.	9
"(iii) Eligibility.—To be eligible to	0
receive a grant under this subparagraph, a	1
State Energy Sector Partnership shall—	2
"(I) consist of nonprofit organiza-	3
tions that include equal participation	4
from industry, including public or pri-	5
vate nonprofit employers, and labor or-	6
ganizations, including joint labor-	7
management training programs, and	8
may include representatives from local	9
governments, the workforce investment	0
system, including one-stop career cen-	1
ters, community based organizations,	2
qualified service and conservation	.3
corps, community colleges, and other	4
post-secondary institutions, small busi-	.5

1	nesses, cooperatives, State and local
2	veterans agencies, and veterans service
3	organizations;
4	"(II) demonstrate experience in
5	implementing and operating worker
6	skills training and education pro-
7	grams; and
8	"(III) demonstrate the ability to
9	identify and involve in training pro-
10	grams, target populations of workers
11	who would benefit from training and
12	be actively involved in activities re-
13	lated to energy efficiency and renew-
14	able energy industries.
15	"(iv) Priority.—In awarding grants
16	under this subparagraph, the Secretary
17	shall give priority to States that dem-
18	onstrate that activities under the grant—
19	"(I) meet national energy policies
20	associated with energy efficiency, re-
21	newable energy, and the reduction of
22	emissions of greenhouse gases;
23	"(II) meet State energy policies
24	associated with energy efficiency, re-

1	newable energy, and the reduction of
2	emissions of greenhouse gases; and
3	"(III) leverage additional public
4	and private resources to fund training
5	programs, including cash or in-kind
6	matches from participating employers.
7	"(v) Coordination.—A grantee under
8	this subparagraph shall coordinate activi-
9	ties carried out under the grant with exist-
10	ing other appropriate training programs,
11	including apprenticeship and labor man-
12	agement training programs, including such
13	activities referenced in paragraph $(3)(A)$,
14	and implement training programs that lead
15	to the economic self-sufficiency of trainees.
16	"(E) Pathways out of poverty dem-
17	ONSTRATION PROGRAM.—
18	"(i) In general.—Under the program
19	established under paragraph (1), the Sec-
20	retary shall award competitive grants of
21	sufficient size to eligible entities to enable
22	such entities to carry out training that
23	leads to economic self-sufficiency. The Sec-
24	retary shall give priority to entities that
25	serve individuals in families with income of

1	less than 200 percent of the sufficiency
2	standard for the local areas where the train-
3	ing is conducted that specifies, as defined by
4	the State, or where such standard is not es-
5	tablished, the income needs of families, by
6	family size, the number and ages of children
7	in the family, and sub-State geographical
8	considerations. Grants shall be awards to
9	ensure geographic diversity.
10	"(ii) Eligible entities.—To be eligi-
11	ble to receive a grant an entity shall be a
12	partnership that—
13	``(I) includes community-based
14	non profit organizations, educational
15	institutions with expertise in serving
16	low-income adults or youth, public or
17	private employers from the industry
18	sectors described in paragraph
19	(1)(B)(ii), and labor organizations
20	representing workers in such industry
21	sectors;
22	"(II) demonstrates a record of
23	successful experience in implementing
24	and operating worker skills training
25	and education programs:

1	``(III) coordinates activities,
2	where appropriate, with the workforce
3	investment system; and
4	"(IV) demonstrates the ability to
5	recruit individuals for training and to
6	support such individuals to successful
7	completion in training programs car-
8	ried out under this grant, targeting
9	populations of workers who are or will
10	be engaged in activities related to en-
11	ergy efficiency and renewable energy
12	industries.
13	"(iii) Priorities.—In awarding
14	grants under this paragraph, the Secretary
15	shall give priority to applicants that—
16	"(I) target programs to benefit
17	low-income workers, unemployed youth
18	and adults, high school dropouts, or
19	other underserved sectors of the work-
20	force within areas of high poverty;
21	"(II) ensure that supportive serv-
22	ices are integrated with education and
23	training, and delivered by organiza-
24	tions with direct access to and experi-
25	ence with targeted populations;

1	"(III) leverage additional public
2	and private resources to fund training
3	programs, including cash or in-kind
4	matches from participating employers;
5	"(IV) involve employers and labor
6	organizations in the determination of
7	relevant skills and competencies and
8	ensure that the certificates or creden-
9	tials that result from the training are
10	employer-recognized;
11	"(V) deliver courses at alternative
12	times (such as evening and weekend
13	programs) and locations most conven-
14	ient and accessible to participants and
15	link adult remedial education with oc-
16	cupational skills training; and
17	"(VI) demonstrate substantial ex-
18	perience in administering local, mu-
19	nicipal, State, Federal, foundation, or
20	private entity grants.
21	"(iv) Data collection.—Grantees
22	shall collect and report the following infor-
23	mation:
24	"(I) The number of participants.

1	"(II) The demographic character-
2	istics of participants, including race,
3	gender, age, parenting status, partici-
4	pation in other Federal programs, edu-
5	cation and literacy level at entry, sig-
6	nificant barriers to employment (such
7	as limited English proficiency, crimi-
8	nal record, addiction or mental health
9	problem requiring treatment, or mental
10	disability).
11	"(III) The services received by
12	participants, including training, edu-
13	cation, and supportive services.
14	"(IV) The amount of program
15	spending per participant.
16	"(V) Program completion rates.
17	"(VI) Factors determined as sig-
18	nificantly interfering with program
19	participation or completion.
20	"(VII) The rate of Job placement
21	and the rate of employment retention
22	after 1 year.
23	"(VIII) The average wage at
24	placement, including any benefits, and

1	the rate of average wage increase after
2	1 year.
3	"(IX) Any post-employment sup-
4	portive services provided.
5	The Secretary shall assist grantees in the
6	collection of data under this clause by mak-
7	ing available, where practicable, low-cost
8	means of tracking the labor market out-
9	comes of participants, and by providing
10	standardized reporting forms, where appro-
11	priate.
12	"(3) ACTIVITIES.—
13	"(A) In general.—Activities to be carried
14	out under a program authorized by subpara-
15	graph (B), (D), or (E) of paragraph (2) shall be
16	coordinated with existing systems or providers,
17	as appropriate. Such activities may include—
18	"(i) occupational skills training, in-
19	cluding curriculum development, on-the-job
20	training, and classroom training;
21	"(ii) safety and health training;
22	"(iii) the provision of basic skills, lit-
23	eracy, GED, English as a second language,
24	and job readiness training;

1	"(iv) individual referral and tuition
2	assistance for a community college training
3	program, or any training program leading
4	to an industry-recognized certificate;
5	"(v) internship programs in fields re-
6	lated to energy efficiency and renewable en-
7	ergy;
8	"(vi) customized training in conjunc-
9	tion with an existing registered apprentice-
10	ship program or labor-management part-
11	nership;
12	"(vii) incumbent worker and career
13	ladder training and skill upgrading and re-
14	training;
15	"(viii) the implementation of transi-
16	tional jobs strategies; and
17	"(ix) the provision of supportive serv-
18	ices.
19	"(B) Outreach activities.—In addition
20	to the activities authorized under subparagraph
21	(A), activities authorized for programs under
22	subparagraph (E) of paragraph (2) may include
23	the provision of outreach, recruitment, career
24	guidance, and case management services.

1	"(4) Worker protections and non-
2	DISCRIMINATION REQUIREMENTS.—
3	"(A) APPLICATION OF WIA.—The provisions
4	of sections 181 and 188 of the Workforce Invest-
5	ment Act of 1998 (29 U.S.C. 2931 and 2938)
6	shall apply to all programs carried out with as-
7	sistance under this subsection.
8	"(B) Consultation with labor organi-
9	zations.—If a labor organization represents a
10	substantial number of workers who are engaged
11	in similar work or training in an area that is
12	the same as the area that is proposed to be fund-
13	ed under this Act, the labor organization shall be
14	provided an opportunity to be consulted and to
15	submit comments in regard to such a proposal.
16	"(5) Performance measures.—
17	"(A) In General.—The Secretary shall ne-
18	gotiate and reach agreement with the eligible en-
19	tities that receive grants and assistance under
20	this section on performance measures for the in-
21	dicators of performance referred to in subpara-
22	graphs (A) and (B) of section 136(b)(2) that will
23	be used to evaluate the performance of the eligible
24	entity in carrying out the activities described in
25	subsection (e)(2). $Each$ $performance$ $measure$

shall consist of such an indicator of performance, and a performance level referred to in subparagraph (B).

> "(B) PERFORMANCE LEVELS.—The Secretary shall negotiate and reach agreement with the eligible entity regarding the levels of performance expected to be achieved by the eligible entity on the indicators of performance.

"(6) Report.—

"(A) STATUS REPORT.—Not later than 18 months after the date of enactment of the Green Jobs Act of 2007, the Secretary shall transmit a report to the Senate Committee on Energy and Natural Resources, the Senate Committee on Health, Education, Labor, and Pensions, the House Committee on Education and Labor, and the House Committee on Energy and Commerce on the training program established by this subsection. The report shall include a description of the entities receiving funding and the activities carried out by such entities.

"(B) EVALUATION.—Not later than 3 years after the date of enactment of such Act, the Secretary shall transmit to the Senate Committee on Energy and Natural Resources, the Senate Com-

1	mittee on Health, Education, Labor, and Pen-
2	sions, the House Committee on Education and
3	Labor, and the House Committee on Energy and
4	Commerce an assessment of such program and
5	an evaluation of the activities carried out by en-
6	tities receiving funding from such program.

- "(7) DEFINITION.—As used in this subsection, the term 'renewable energy' has the meaning given such term in section 203(b)(2) of the Energy Policy Act of 2005 (Public Law 109–58).
- "(8) Authorization of appropriated to carry out this subsection, \$125,000,000 for each fiscal years, of which—

"(A) not to exceed 20 percent of the amount appropriated in each such fiscal year shall be made available for, and shall be equally divided between, national labor market research and information under paragraph (2)(A) and State labor market information and labor exchange research under paragraph (2)(C), and not more than 2 percent of such amount shall be for the evaluation and report required under paragraph (4);

1	"(B) 20 percent shall be dedicated to Path-
2	ways Out of Poverty Demonstration Programs
3	under paragraph $(2)(E)$; and
4	"(C) the remainder shall be divided equally
5	between National Energy Partnership Training
6	Grants under paragraph (2)(B) and State en-
7	ergy training partnership grants under para-
8	$graph\ (2)(D)$.".
9	TITLE XI—ENERGY TRANSPOR-
10	TATION AND INFRASTRUC-
11	TURE
12	Subtitle A—Department of
13	Transportation
14	SEC. 1101. OFFICE OF CLIMATE CHANGE AND ENVIRON-
15	MENT.
16	(a) In General.—Section 102 of title 49, United
17	States Code, is amended—
18	(1) by redesignating subsection (g) as subsection
19	(h); and
20	(2) by inserting after subsection (f) the following:
21	"(g) Office of Climate Change and Environ-
22	MENT.—
23	"(1) Establishment.—There is established in
24	the Department an Office of Climate Change and En-
25	vironment to plan, coordinate, and implement—

1	"(A) department-wide research, strategies,
2	and actions under the Department's statutory
3	authority to reduce transportation-related energy
4	use and mitigate the effects of climate change;
5	and
6	"(B) department-wide research strategies
7	and actions to address the impacts of climate
8	change on transportation systems and infra-
9	structure.
10	"(2) Clearinghouse.—The Office shall estab-
11	lish a clearinghouse of solutions, including cost-effec-
12	tive congestion reduction approaches, to reduce air
13	pollution and transportation-related energy use and
14	mitigate the effects of climate change.".
15	(b) Coordination.—The Office of Climate Change
16	and Environment of the Department of Transportation
17	shall coordinate its activities with the United States Global
18	Change Research Program.
19	(c) Transportation System's Impact on Climate
20	Change and Fuel Efficiency.—
21	(1) STUDY.—The Office of Climate Change and
22	Environment, in coordination with the Environ-
23	mental Protection Agency and in consultation with
24	the United States Global Change Research Program,
25	shall conduct a study to examine the impact of the

Nation's transportation system on climate change and the fuel efficiency savings and clean air impacts of major transportation projects, to identify solutions to reduce air pollution and transportation-related energy use and mitigate the effects of climate change, and to examine the potential fuel savings that could result from changes in the current transportation system and through the use of intelligent transportation systems that help businesses and consumers to plan their travel and avoid delays, including Web-based real-time transit information systems, congestion information systems, carpool information systems, parking information systems, freight route management systems, and traffic management systems.

(2) Report.—Not later than one year after the date of enactment of this Act, the Secretary of Transportation, in coordination with the Administrator of the Environmental Protection Agency, shall transmit to the Committee on Transportation and Infrastructure and the Committee on Energy and Commerce of the House of Representatives and the Committee on Commerce, Science, and Transportation and the Committee on Environment and Public Works of the Senate a report that contains the results of the study required under this section.

1	(d) Authorization of Appropriations.—There are
2	authorized to be appropriated to the Secretary of Transpor-
3	tation for the Office of Climate Change and Environment
4	to carry out its duties under section 102(g) of title 49,
5	United States Code (as amended by this Act), such sums
6	as may be necessary for fiscal years 2008 through 2011.
7	$Subtitle\ B-\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$
8	SEC. 1111. ADVANCED TECHNOLOGY LOCOMOTIVE GRANT
9	PILOT PROGRAM.
10	(a) In General.—The Secretary of Transportation,
11	in consultation with the Administrator of the Environ-
12	mental Protection Agency, shall establish and carry out a
13	pilot program for making grants to railroad carriers (as
14	defined in section 20102 of title 49, United States Code)
15	and State and local governments—
16	(1) for assistance in purchasing hybrid or other
17	energy-efficient locomotives, including hybrid switch
18	and generator-set locomotives; and
19	(2) to demonstrate the extent to which such loco-
20	motives increase fuel economy, reduce emissions, and
21	lower costs of operation.
22	(b) Limitation.—Notwithstanding subsection (a), no
23	grant under this section may be used to fund the costs of
24	emissions reductions that are mandated under Federal law.

1	(c) Grant Criteria.—In selecting applicants for
2	grants under this section, the Secretary of Transportation
3	shall consider—
4	(1) the level of energy efficiency that would be
5	achieved by the proposed project;
6	(2) the extent to which the proposed project
7	would assist in commercial deployment of hybrid or
8	other energy-efficient locomotive technologies;
9	(3) the extent to which the proposed project com-
10	plements other private or governmental partnership
11	efforts to improve air quality or fuel efficiency in a
12	particular area; and
13	(4) the extent to which the applicant dem-
14	onstrates innovative strategies and a financial com-
15	mitment to increasing energy efficiency and reducing
16	greenhouse gas emissions of its railroad operations.
17	(d) Competitive Grant Selection Process.—
18	(1) Applications.—A railroad carrier or State
19	or local government seeking a grant under this section
20	shall submit for approval by the Secretary of Trans-
21	portation an application for the grant containing
22	such information as the Secretary of Transportation
23	may require.
24	(2) Competitive selection.—The Secretary of
25	Transportation shall conduct a national solicitation

1	for applications for grants under this section and
2	shall select grantees on a competitive basis.
3	(e) Federal Share.—The Federal share of the cost
4	of a project under this section shall not exceed 80 percent
5	of the project cost.
6	(f) Report.—Not later than 3 years after the date of
7	enactment of this Act, the Secretary of Transportation shall
8	submit to Congress a report on the results of the pilot pro-
9	gram carried out under this section.
10	(g) Authorization of Appropriations.—There is
11	authorized to be appropriated to the Secretary of Transpor-
12	tation \$10,000,000 for each of the fiscal years 2008 through
13	2011 to carry out this section. Such funds shall remain
14	available until expended.
15	SEC. 1112. CAPITAL GRANTS FOR CLASS II AND CLASS III
16	RAILROADS.
17	(a) Amendment.—Chapter 223 of title 49, United
18	States Code, is amended to read as follows:
19	"CHAPTER 223—CAPITAL GRANTS FOR
20	CLASS II AND CLASS III RAILROADS
	"Sec. "22301. Capital grants for class II and class III railroads.
21	"§ 22301. Capital grants for class II and class III rail-
22	roads
23	"(a) Establishment of Program.—

1	"(1) Establishment.—The Secretary of Trans-
2	portation shall establish a program for making cap-
3	ital grants to class II and class III railroads. Such
4	grants shall be for projects in the public interest
5	that—
6	"(A)(i) rehabilitate, preserve, or improve
7	railroad track (including roadbed, bridges, and
8	related track structures) used primarily for
9	$freight\ transportation;$
10	"(ii) facilitate the continued or greater use
11	of railroad transportation for freight shipments;
12	and
13	"(iii) reduce the use of less fuel efficient
14	modes of transportation in the transportation of
15	such shipments; and
16	$``(B)\ demonstrate\ innovative\ technologies$
17	and advanced research and development that in-
18	crease fuel economy, reduce greenhouse gas emis-
19	sions, and lower the costs of operation.
20	"(2) Provision of Grants.—Grants may be
21	provided under this chapter—
22	"(A) directly to the class II or class III
23	$railroad;\ or$

1	"(B) with the concurrence of the class II or
2	class III railroad, to a State or local govern-
3	ment.
4	"(3) State cooperation.—Class II and class
5	III railroad applicants for a grant under this chapter
6	are encouraged to utilize the expertise and assistance
7	of State transportation agencies in applying for and
8	administering such grants. State transportation agen-
9	cies are encouraged to provide such expertise and as-
10	sistance to such railroads.
11	"(4) Regulations.—Not later than October 1,
12	2008, the Secretary shall issue final regulations to
13	implement the program under this section.
14	"(b) Maximum Federal Share.—The maximum
15	Federal share for carrying out a project under this section
16	shall be 80 percent of the project cost. The non-Federal share
17	may be provided by any non-Federal source in cash, equip-
18	ment, or supplies. Other in-kind contributions may be ap-
19	proved by the Secretary on a case-by-case basis consistent
20	with this chapter.
21	"(c) Use of Funds.—Grants provided under this sec-
22	tion shall be used to implement track capital projects as
23	soon as possible. In no event shall grant funds be contrac-
24	tually obligated for a project later than the end of the third
25	Federal fiscal year following the year in which the grant

- 1 was awarded. Any funds not so obligated by the end of such
- 2 fiscal year shall be returned to the Secretary for realloca-
- 3 tion.
- 4 "(d) Employee Protection.—The Secretary shall
- 5 require as a condition of any grant made under this section
- 6 that the recipient railroad provide a fair arrangement at
- 7 least as protective of the interests of employees who are af-
- 8 fected by the project to be funded with the grant as the terms
- 9 imposed under section 11326(a), as in effect on the date
- 10 of the enactment of this chapter.
- 11 "(e) Labor Standards.—
- 12 "(1) Prevailing wages.—The Secretary shall
- ensure that laborers and mechanics employed by con-
- tractors and subcontractors in construction work fi-
- 15 nanced by a grant made under this section will be
- paid wages not less than those prevailing on similar
- 17 construction in the locality, as determined by the Sec-
- 18 retary of Labor under subchapter IV of chapter 31 of
- 19 title 40 (commonly known as the 'Davis-Bacon Act').
- 20 The Secretary shall make a grant under this section
- 21 only after being assured that required labor standards
- will be maintained on the construction work.
- 23 "(2) Wage rates in a collective
- 24 bargaining agreement negotiated under the Railway
- 25 Labor Act (45 U.S.C. 151 et seq.) are deemed for pur-

1	poses of this subsection to comply with the subchapter
2	IV of chapter 31 of title 40.
3	"(f) Study.—The Secretary shall conduct a study of
4	the projects carried out with grant assistance under this
5	section to determine the extent to which the program helps
6	promote a reduction in fuel use associated with the trans-
7	portation of freight and demonstrates innovative tech-
8	nologies that increase fuel economy, reduce greenhouse gas
9	emissions, and lower the costs of operation. Not later than
10	March 31, 2009, the Secretary shall submit a report to the
11	Committee on Transportation and Infrastructure of the
12	House of Representatives and the Committee on Commerce,
13	Science, and Transportation of the Senate on the study, in-
14	cluding any recommendations the Secretary considers ap-
15	propriate regarding the program.
16	"(g) Authorization of Appropriations.—There is
17	authorized to be appropriated to the Secretary \$50,000,000
18	for each of fiscal years 2008 through 2011 for carrying out
19	this section.".
20	(b) Clerical Amendment.—The item relating to
21	chapter 223 in the table of chapters of subtitle V of title
22	49, United States Code, is amended to read as follows:
	"223. CAPITAL GRANTS FOR CLASS II AND CLASS III RAIL- ROADS

1 Subtitle C—Marine Transportation

- 2 SEC. 1121. SHORT SEA TRANSPORTATION INITIATIVE.
- 3 (a) In General.—Title 46, United States Code, is
- 4 amended by adding after chapter 555 the following:

5 "CHAPTER 556—SHORT SEA

6 TRANSPORTATION

 $\hbox{``Sec. 55601. Short sea transportation program.}\\$

7 "§ 55601. Short sea transportation program

- 8 "(a) Establishment.—The Secretary of Transpor-
- 9 tation shall establish a short sea transportation program
- 10 and designate short sea transportation projects to be con-
- 11 ducted under the program to mitigate landside congestion.
- 12 "(b) Program Elements.—The program shall en-
- 13 courage the use of short sea transportation through the de-
- 14 velopment and expansion of—
- 15 "(1) documented vessels;
- 16 "(2) shipper utilization;
- 17 "(3) port and landside infrastructure; and
- 18 "(4) marine transportation strategies by State
- 19 and local governments.
- 20 "(c) Short Sea Transportation Routes.—The
- 21 Secretary shall designate short sea transportation routes as
- 22 extensions of the surface transportation system to focus pub-

[&]quot;Sec. 55602. Cargo and shippers.

[&]quot;Sec. 55603. Interagency coordination.

[&]quot;Sec. 55604. Research on short sea transportation.

[&]quot;Sec. 55605. Short sea transportation defined.

1	lic and private efforts to use the waterways to relieve
2	landside congestion along coastal corridors. The Secretary
3	may collect and disseminate data for the designation and
4	delineation of short sea transportation routes.
5	"(d) Project Designation.—The Secretary may
6	designate a project to be a short sea transportation project
7	if the Secretary determines that the project may—
8	"(1) offer a waterborne alternative to available
9	landside transportation services using documented
10	vessels; and
11	"(2) provide transportation services for pas-
12	sengers or freight (or both) that may reduce conges-
13	tion on landside infrastructure using documented ves-
14	sels.
15	"(e) Elements of Program.—For a short sea trans-
16	portation project designated under this section, the Sec-
17	retary may—
18	"(1) promote the development of short sea trans-
19	portation services;
20	"(2) coordinate, with ports, State departments of
21	transportation, localities, other public agencies, and
22	the private sector and on the development of landside
23	facilities and infrastructure to support short sea
24	transportation services; and

1	"(3) develop performance measures for the short	
2	sea transportation program.	
3	"(f) Multistate, State and Regional Transpor-	
4	TATION PLANNING.—The Secretary, in consultation with	
5	Federal entities and State and local governments, shall de-	
6	velop strategies to encourage the use of short sea transpor-	
7	tation for transportation of passengers and cargo. The Sec-	
8	retary shall—	
9	"(1) assess the extent to which States and local	
10	governments include short sea transportation and	
11	other marine transportation solutions in their trans-	
12	portation planning;	
13	"(2) encourage State departments of transpor-	
14	tation to develop strategies, where appropriate, to in-	
15	corporate short sea transportation, ferries, and other	
16	marine transportation solutions for regional and	
17	interstate transport of freight and passengers in their	
18	transportation planning; and	
19	"(3) encourage groups of States and multi-State	
20	transportation entities to determine how short sea	
21	transportation can address congestion, bottlenecks,	
22	and other interstate transportation challenges.	
23	"§ 55602. Cargo and shippers	
24	"(a) Memorandums of Agreement.—The Secretary	
25	of Transportation shall enter into memorandums of under-	

- 1 standing with the heads of other Federal entities to trans-2 port federally owned or generated cargo using a short sea
- 3 transportation project designated under section 55601 when
- 4 practical or available.
- 5 "(b) Short-Term Incentives.—The Secretary shall
- 6 consult shippers and other participants in transportation
- 7 logistics and develop proposals for short-term incentives to
- 8 encourage the use of short sea transportation.

9 "§ 55603. Interagency coordination

- 10 "The Secretary of Transportation shall establish a
- 11 board to identify and seek solutions to impediments hin-
- 12 dering effective use of short sea transportation. The board
- 13 shall include representatives of the Environmental Protec-
- 14 tion Agency and other Federal, State, and local govern-
- 15 mental entities and private sector entities.

16 "§ 55604. Research on short sea transportation

- 17 "The Secretary of Transportation, in consultation
- 18 with the Administrator of the Environmental Protection
- 19 Agency, may conduct research on short sea transportation,
- 20 regarding—
- 21 "(1) the environmental and transportation bene-
- fits to be derived from short sea transportation alter-
- 23 natives for other forms of transportation;
- 24 "(2) technology, vessel design, and other im-
- 25 provements that would reduce emissions, increase fuel

1	economy, and lower costs of short sea transportation
2	and increase the efficiency of intermodal transfers;
3	and
4	"(3) solutions to impediments to short sea trans-
5	portation projects designated under section 55601.
6	"§ 55605. Short sea transportation defined
7	"In this chapter, the term 'short sea transportation'
8	means the carriage by vessel of cargo—
9	"(1) that is—
10	"(A) contained in intermodal cargo con-
11	tainers and loaded by crane on the vessel; or
12	"(B) loaded on the vessel by means of
13	wheeled technology; and
14	"(2) that is—
15	"(A) loaded at a port in the United States
16	and unloaded either at another port in the
17	United States or at a port in Canada located in
18	the Great Lakes Saint Lawrence Seaway Sys-
19	tem; or
20	"(B) loaded at a port in Canada located in
21	the Great Lakes Saint Lawrence Seaway System
22	and unloaded at a port in the United States.".
23	(b) Clerical Amendment.—The table of chapters at
24	the beginning of subtitle V of such title is amended by in-
25	serting after the item relating to chapter 555 the following:
	"556. Short Sea Transportation55601".

1	(c) Regulations.—
2	(1) Interim regulations.—Not later than 90
3	days after the date of enactment of this Act, the Sec-
4	retary of Transportation shall issue temporary regu-
5	lations to implement the program under this section.
6	Subchapter II of chapter 5 of title 5, United States
7	Code, does not apply to a temporary regulation issued
8	under this paragraph or to an amendment to such a
9	temporary regulation.
10	(2) Final regulations.—Not later than Octo-
11	ber 1, 2008, the Secretary of Transportation shall
12	issue final regulations to implement the program
13	under this section.
14	SEC. 1122. SHORT SEA SHIPPING ELIGIBILITY FOR CAPITAL
15	CONSTRUCTION FUND.
16	(a) Definition of Qualified Vessel.—Section
17	53501 of title 46, United States Code, is amended—
18	(1) in paragraph (5)(A)(iii) by striking "or non-
19	contiguous domestic" and inserting "noncontiguous
20	domestic, or short sea transportation trade"; and
21	(2) by inserting after paragraph (6) the fol-
22	lowing:
23	"(7) Short sea transportation trade.—The
24	term 'short sea transportation trade' means the car-
25	riage by vessel of cargo—

1	"(A) that is—
2	"(i) contained in intermodal cargo
3	containers and loaded by crane on the ves-
4	$sel;\ or$
5	"(ii) loaded on the vessel by means of
6	wheeled technology; and
7	"(B) that is—
8	"(i) loaded at a port in the United
9	States and unloaded either at another port
10	in the United States or at a port in Canada
11	located in the Great Lakes Saint Lawrence
12	Seaway System; or
13	"(ii) loaded at a port in Canada lo-
14	cated in the Great Lakes Saint Lawrence
15	Seaway System and unloaded at a port in
16	the United States.".
17	(b) Allowable Purpose.—Section 53503(b) of such
18	title is amended by striking "or noncontiguous domestic
19	trade" and inserting "noncontiguous domestic, or short sea
20	transportation trade".
21	SEC. 1123. SHORT SEA TRANSPORTATION REPORT.
22	Not later than one year after the date of enactment
23	of this Act, the Secretary of Transportation, in consultation
24	with the Administrator of the Environmental Protection
25	Agency, shall submit to the Committee on Transportation

1	and Infrastructure of the House of Representatives and the
2	Committee on Commerce, Science, and Transportation of
3	the Senate a report on the short sea transportation program
4	established under the amendments made by section 1121.
5	The report shall include a description of the activities con-
6	ducted under the program, and any recommendations for
7	further legislative or administrative action that the Sec-
8	retary of Transportation considers appropriate.
9	Subtitle D—Highways
10	SEC. 1131. INCREASED FEDERAL SHARE FOR CMAQ
11	PROJECTS.
12	Section 120(c) of title 23, United States Code, is
13	amended—
14	(1) in the subsection heading by striking "FOR
15	CERTAIN SAFETY PROJECTS";
16	(2) by striking "The Federal share" and insert-
17	ing the following:
18	"(1) Certain safety projects.—The Federal
19	share"; and
20	(3) by adding at the end the following:
21	"(2) CMAQ PROJECTS.—The Federal share pay-
22	able on account of a project or program carried out
23	under section 149 with funds obligated in fiscal year
24	2008 or 2009, or both, shall be not less than 80 per-

- 1 cent and, at the discretion of the State, may be up
- 2 to 100 percent of the cost thereof.".

3 SEC. 1132. DISTRIBUTION OF RESCISSIONS.

- 4 (a) In General.—Any unobligated balances of
- 5 amounts that are appropriated from the Highway Trust
- 6 Fund for a fiscal year, and apportioned under chapter 1
- 7 of title 23, United States Code, before, on, or after the date
- 8 of enactment of this Act and that are rescinded in fiscal
- 9 year 2008 or fiscal year 2009 shall be distributed by the
- 10 Secretary of Transportation within each State (as defined
- 11 in section 101 of such title) among all programs for which
- 12 funds are apportioned under such chapter for such fiscal
- 13 year, to the extent sufficient funds remain available for obli-
- 14 gation, in the ratio that the amount of funds apportioned
- 15 for each program under such chapter for such fiscal year,
- 16 bears to the amount of funds apportioned for all such pro-
- 17 grams under such chapter for such fiscal year.
- 18 (b) Adjustments.—A State may make adjustments
- 19 to the distribution of a rescission within the State for a
- 20 fiscal year under subsection (a) by transferring the amounts
- 21 to be rescinded among the programs for which funds are
- 22 apportioned under chapter 1 of title 23, United States Code,
- 23 for such fiscal year, except that in making such adjustments
- 24 the State may not rescind from any such program more
- 25 than 110 percent of the funds to be rescinded from the pro-

1	gram for the fiscal year as determined by the Secretary of
2	Transportation under subsection (a).
3	(c) Treatment of Transportation Enhancement
4	Set-Aside and Funds Suballocated to Substate
5	Areas.—Funds set aside under sections 133(d)(2) and
6	133(d)(3) of title 23, United States Code, shall be treated
7	as being apportioned under chapter 1 of such title for pur-
8	poses of subsection (a).
9	SEC. 1133. SENSE OF CONGRESS REGARDING USE OF COM-
10	PLETE STREETS DESIGN TECHNIQUES.
11	It is the sense of Congress that in constructing new
12	roadways or rehabilitating existing facilities, State and
13	local governments should consider policies designed to ac-
14	commodate all users, including motorists, pedestrians, cy-
15	clists, transit riders, and people of all ages and abilities,
16	in order to—
17	(1) serve all surface transportation users by cre-
18	ating a more interconnected and intermodal system;
19	(2) create more viable transportation options;
20	and
21	(3) facilitate the use of environmentally friendly
22	options, such as public transportation, walking, and
23	bicuclina.

TITLE XII—SMALL BUSINESS 1 ENERGY PROGRAMS 2 SEC. 1201. EXPRESS LOANS FOR RENEWABLE ENERGY AND 4 ENERGY EFFICIENCY. 5 Section 7(a)(31) of the Small Business Act (15 U.S.C. 636(a)(31)) is amended by adding at the end the following: 7 "(F) Express loans for renewable en-8 ERGY AND ENERGY EFFICIENCY.— 9 "(i) Definitions.—In this subpara-10 graph— 11 "(I) the term biomass'— 12 "(aa) means any organic 13 material that is available on a re-14 newable or recurring basis, in-15 cluding— 16 "(AA) agricultural 17 crops; 18 "(BB) trees grown for 19 energy production; 20 "(CC) wood waste and 21 wood residues; 22 "(DD) plants (including 23 aquatic plants and grasses); 24 "(EE) residues; "(FF) fibers; 25

1	"(GG) animal wastes
2	and other waste materials;
3	and
4	"(HH) fats, oils, and
5	greases (including recycled
6	fats, oils, and greases); and
7	"(bb) does not include—
8	"(AA) paper that is
9	commonly recycled; or
10	"(BB) unsegregated
11	$solid\ waste;$
12	"(II) the term 'energy efficiency
13	project' means the installation or up-
14	grading of equipment that results in a
15	significant reduction in energy usage;
16	and
17	"(III) the term 'renewable energy
18	system' means a system of energy de-
19	rived from—
20	"(aa) a wind, solar, biomass
21	(including biodiesel), or geo-
22	thermal source; or
23	"(bb) hydrogen derived from
24	biomass or water using an energy
25	source described in item (aa).

1	"(ii) Loans.—The Administrator may
2	make a loan under the Express Loan Pro-
3	gram for the purpose of—
4	"(I) purchasing a renewable en-
5	ergy system; or
6	"(II) carrying out an energy effi-
7	ciency project for a small business con-
8	cern.".
9	SEC. 1202. PILOT PROGRAM FOR REDUCED 7(a) FEES FOR
10	PURCHASE OF ENERGY EFFICIENT TECH-
11	NOLOGIES.
12	Section 7(a) of the Small Business Act (15 U.S.C.
13	636(a)) is amended by adding at the end the following:
14	"(32) Loans for energy efficient tech-
15	NOLOGIES.—
16	"(A) Definitions.—In this paragraph—
17	"(i) the term 'cost' has the meaning
18	given that term in section 502 of the Fed-
19	eral Credit Reform Act of 1990 (2 U.S.C.
20	661a);
21	"(ii) the term 'covered energy efficiency
22	loan' means a loan—
23	"(I) made under this subsection;
24	and

1	"(II) the proceeds of which are
2	used to purchase energy efficient de-
3	signs, equipment, or fixtures, or to re-
4	duce the energy consumption of the
5	borrower by 10 percent or more; and
6	"(iii) the term 'pilot program' means
7	the pilot program established under sub-
8	paragraph (B)
9	"(B) Establishment.—The Administrator
10	shall establish and carry out a pilot program
11	under which the Administrator shall reduce the
12	fees for covered energy efficiency loans.
13	"(C) Duration.—The pilot program shall
14	terminate at the end of the second full fiscal year
15	after the date that the Administrator establishes
16	the pilot program.
17	"(D) Maximum participation.—A covered
18	energy efficiency loan shall include the max-
19	imum participation levels by the Administrator
20	permitted for loans made under this subsection.
21	"(E) $FEES$.—
22	"(i) In general.—The fee on a cov-
23	ered energy efficiency loan shall be equal to
24	50 percent of the fee otherwise applicable to
25	that loan under paragraph (18).

1	"(ii) WAIVER.—The Administrator
2	may waive clause (i) for a fiscal year if—
3	"(I) for the fiscal year before that
4	fiscal year, the annual rate of default
5	of covered energy efficiency loans ex-
6	ceeds that of loans made under this
7	subsection that are not covered energy
8	efficiency loans;
9	"(II) the cost to the Administra-
10	tion of making loans under this sub-
11	section is greater than zero and such
12	cost is directly attributable to the cost
13	of making covered energy efficiency
14	loans; and
15	"(III) no additional sources of
16	revenue authority are available to re-
17	duce the cost of making loans under
18	this subsection to zero.
19	"(iii) Effect of Waiver.—If the Ad-
20	ministrator waives the reduction of fees
21	under clause (ii), the Administrator—
22	"(I) shall not assess or collect fees
23	in an amount greater than necessary
24	to ensure that the cost of the program

1	under this subsection is not greater
2	than zero; and
3	"(II) shall reinstate the fee reduc-
4	tions under clause (i) when the condi-
5	tions in clause (ii) no longer apply.
6	"(iv) No increase of fees.—The Ad-
7	ministrator shall not increase the fees under
8	paragraph (18) on loans made under this
9	subsection that are not covered energy effi-
10	ciency loans as a direct result of the pilot
11	program.
12	"(F) GAO REPORT.—
13	"(i) In general.—Not later than 1
14	year after the date that the pilot program
15	terminates, the Comptroller General of the
16	United States shall submit to the Committee
17	on Small Business of the House of Rep-
18	resentatives and the Committee on Small
19	Business and Entrepreneurship of the Sen-
20	ate a report on the pilot program.
21	"(ii) Contents.—The report sub-
22	mitted under clause (i) shall include—
23	"(I) the number of covered energy
24	efficiency loans for which fees were re-
25	duced under the pilot program;

1	"(II) a description of the energy
2	efficiency savings with the pilot pro-
3	gram;
4	"(III) a description of the impact
5	of the pilot program on the program
6	under this subsection;
7	"(IV) an evaluation of the efficacy
8	and potential fraud and abuse of the
9	pilot program; and
10	"(V) recommendations for improv-
11	ing the pilot program.".
12	SEC. 1203. SMALL BUSINESS ENERGY EFFICIENCY.
13	(a) Definitions.—In this section—
14	(1) the terms "Administration" and "Adminis-
15	trator" mean the Small Business Administration and
16	the Administrator thereof, respectively;
17	(2) the term "association" means the association
18	of small business development centers established
19	under section 21(a)(3)(A) of the Small Business Act
20	$(15\ U.S.C.\ 648(a)(3)(A));$
21	(3) the term "disability" has the meaning given
22	that term in section 3 of the Americans with Disabil-
23	ities Act of 1990 (42 U.S.C. 12102);

1	(4) the term "Efficiency Program" means the
2	Small Business Energy Efficiency Program estab-
3	$lished\ under\ subsection\ (c)(1);$
4	(5) the term "electric utility" has the meaning
5	given that term in section 3 of the Public Utility Reg-
6	ulatory Policies Act of 1978 (16 U.S.C. 2602);
7	(6) the term "high performance green building"
8	has the meaning given that term in section 401;
9	(7) the term "on-bill financing" means a low in-
10	terest or no interest financing agreement between a
11	small business concern and an electric utility for the
12	purchase or installation of equipment, under which
13	the regularly scheduled payment of that small busi-
14	ness concern to that electric utility is not reduced by
15	the amount of the reduction in cost attributable to the
16	new equipment and that amount is credited to the
17	electric utility, until the cost of the purchase or in-
18	stallation is repaid;
19	(8) the term "small business concern" has the
20	same meaning as in section 3 of the Small Business
21	Act (15 U.S.C. 632);
22	(9) the term "small business development center"
23	means a small business development center described
24	in section 21 of the Small Business Act (15 U.S.C.
25	648);

1	(10) the term "telecommuting" means the use of
2	telecommunications to perform work functions under
3	circumstances which reduce or eliminate the need to
4	commute;
5	(11) the term "Telecommuting Pilot Program"
6	means the pilot program established under subsection
7	(d)(1)(A); and
8	(12) the term "veteran" has the meaning given
9	that term in section 101 of title 38, United States
10	Code.
11	(b) Implementation of Small Business Energy
12	Efficiency Program.—
13	(1) In general.—Not later than 90 days after
14	the date of enactment of this Act, the Administrator
15	shall promulgate final rules establishing the Govern-
16	ment-wide program authorized under subsection (d)
17	of section 337 of the Energy Policy and Conservation
18	Act (42 U.S.C. 6307) that ensure compliance with
19	that subsection by not later than 6 months after such
20	date of enactment.
21	(2) Program required.—The Administrator
22	shall develop and coordinate a Government-wide pro-
23	gram, building on the Energy Star for Small Busi-
24	ness program, to assist small business concerns in—
25	(A) becoming more energy efficient;

1	(B) understanding the cost savings from
2	improved energy efficiency; and
3	(C) identifying financing options for energy
4	efficiency upgrades.
5	(3) Consultation and cooperation.—The
6	program required by paragraph (2) shall be developed
7	and coordinated—
8	(A) in consultation with the Secretary of
9	Energy and the Administrator of the Environ-
10	mental Protection Agency; and
11	(B) in cooperation with any entities the Ad-
12	ministrator considers appropriate, such as in-
13	dustry trade associations, industry members, and
14	energy efficiency organizations.
15	(4) Availability of information.—The Ad-
16	ministrator shall make available the information and
17	materials developed under the program required by
18	paragraph (2) to—
19	(A) small business concerns, including
20	smaller design, engineering, and construction
21	firms; and
22	(B) other Federal programs for energy effi-
23	ciency, such as the Energy Star for Small Busi-
24	ness program.
25	(5) Strategy and report.—

1	(A) Strategy required.—The Adminis-
2	trator shall develop a strategy to educate, encour-
3	age, and assist small business concerns in adopt-
4	ing energy efficient building fixtures and equip-
5	ment.
6	(B) Report.—Not later than December 31,
7	2008, the Administrator shall submit to Congress
8	a report containing a plan to implement the
9	$strategy\ developed\ under\ subparagraph\ (A).$
10	(c) Small Business Sustainability Initiative.—
11	(1) Authority.—The Administrator shall estab-
12	lish a Small Business Energy Efficiency Program to
13	provide energy efficiency assistance to small business
14	concerns through small business development centers.
15	(2) Small business development centers.—
16	(A) In general.—In carrying out the Effi-
17	ciency Program, the Administrator shall enter
18	into agreements with small business development
19	centers under which such centers shall—
20	(i) provide access to information and
21	resources on energy efficiency practices, in-
22	cluding on-bill financing options;
23	(ii) conduct training and educational
24	activities;

1	(iii) offer confidential, free, one-on-one,
2	in-depth energy audits to the owners and
3	operators of small business concerns regard-
4	ing energy efficiency practices;
5	(iv) give referrals to certified profes-
6	sionals and other providers of energy effi-
7	ciency assistance who meet such standards
8	for educational, technical, and professional
9	competency as the Administrator shall es-
10	tablish;
11	(v) to the extent not inconsistent with
12	controlling State public utility regulations,
13	act as a facilitator between small business
14	concerns, electric utilities, lenders, and the
15	Administration to facilitate on-bill financ-
16	ing arrangements;
17	(vi) provide necessary support to small
18	business concerns to—
19	(I) evaluate energy efficiency op-
20	portunities and opportunities to design
21	or construct high performance green
22	buildings;
23	(II) evaluate renewable energy
24	sources, such as the use of solar and

1	small wind to supplement power con-
2	sumption;
3	(III) secure financing to achieve
4	energy efficiency or to design or con-
5	struct high performance green build-
6	ings; and
7	(IV) implement energy efficiency
8	projects;
9	(vii) assist owners of small business
10	concerns with the development and commer-
11	cialization of clean technology products,
12	goods, services, and processes that use re-
13	newable energy sources, dramatically reduce
14	the use of natural resources, and cut or
15	eliminate greenhouse gas emissions
16	through—
17	$(I)\ technology\ assessment;$
18	$(II)\ intellectual\ property;$
19	(III) Small Business Innovation
20	Research submissions under section 9
21	of the Small Business Act (15 U.S.C.
22	638);
23	(IV) strategic alliances;
24	(V) business model development;
25	and

1	(VI) preparation for investors;
2	and
3	(viii) help small business concerns im-
4	prove environmental performance by shift-
5	ing to less hazardous materials and reduc-
6	ing waste and emissions, including by pro-
7	viding assistance for small business con-
8	cerns to adapt the materials they use, the
9	processes they operate, and the products and
10	services they produce.
11	(B) Reports.—Each small business devel-
12	opment center participating in the Efficiency
13	Program shall submit to the Administrator and
14	the Administrator of the Environmental Protec-
15	tion Agency an annual report that includes—
16	(i) a summary of the energy efficiency
17	assistance provided by that center under the
18	Efficiency Program;
19	(ii) the number of small business con-
20	cerns assisted by that center under the Effi-
21	ciency Program;
22	(iii) statistics on the total amount of
23	energy saved as a result of assistance pro-
24	vided by that center under the Efficiency
25	Program; and

1	(iv) any additional information deter-
2	mined necessary by the Administrator, in
3	consultation with the association.
4	(C) Reports to congress.—Not later
5	than 60 days after the date on which all reports
6	under subparagraph (B) relating to a year are
7	submitted, the Administrator shall submit to the
8	Committee on Small Business and Entrepreneur-
9	ship of the Senate and the Committee on Small
10	Business of the House of Representatives a report
11	summarizing the information regarding the Effi-
12	ciency Program submitted by small business de-
13	velopment centers participating in that program.
14	(3) Eligibility.—A small business development
15	center shall be eligible to participate in the Efficiency
16	Program only if that center is certified under section
17	21(k)(2) of the Small Business Act (15 U.S.C.
18	648(k)(2)).
19	(4) Selection of participating state pro-
20	GRAMS.—From among small business development
21	centers submitting applications to participate in the
22	Efficiency Program, the Administrator—
23	(A) shall, to the maximum extent prac-
24	ticable, select small business development centers
25	in such a manner so as to promote a nationwide

1	distribution of centers participating in the Effi-
2	ciency Program; and
3	(B) may not select more than 1 small busi-
4	ness development center in a State to participate
5	in the Efficiency Program.
6	(5) Matching requirement.—Subparagraphs
7	(A) and (B) of section 21(a)(4) of the Small Business
8	Act (15 U.S.C. 648(a)(4)) shall apply to assistance
9	made available under the Efficiency Program.
10	(6) Grant amounts.—Each small business de-
11	velopment center selected to participate in the Effi-
12	ciency Program under paragraph (4) shall be eligible
13	to receive a grant in an amount equal to—
14	(A) not less than \$100,000 in each fiscal
15	year; and
16	(B) not more than \$300,000 in each fiscal
17	year.
18	(7) Evaluation and report.—The Comptroller
19	General of the United States shall—
20	(A) not later than 30 months after the date
21	of disbursement of the first grant under the Effi-
22	ciency Program, initiate an evaluation of that
23	program; and
24	(B) not later than 6 months after the date
25	of the initiation of the evaluation under sub-

1	paragraph (A), submit to the Administrator, the
2	Committee on Small Business and Entrepreneur-
3	ship of the Senate, and the Committee on Small
4	Business of the House of Representatives, a re-
5	port containing—
6	(i) the results of the evaluation; and
7	(ii) any recommendations regarding
8	whether the Efficiency Program, with or
9	without modification, should be extended to
10	include the participation of all small busi-
11	ness development centers.
12	(8) Guarantee.—To the extent not inconsistent
13	with State law, the Administrator may guarantee the
14	timely payment of a loan made to a small business
15	concern through an on-bill financing agreement on
16	such terms and conditions as the Administrator shall
17	establish through a formal rule making, after pro-
18	viding notice and an opportunity for comment.
19	(9) Implementation.—Subject to amounts ap-
20	proved in advance in appropriations Acts and sepa-
21	rate from amounts approved to carry out section
22	21(a)(1) of the Small Business Act (15 U.S.C.
23	648(a)(1)), the Administrator may make grants or
24	enter into cooperative agreements to carry out this

25

subsection.

1	(10) Authorization of appropriations.—
2	There are authorized to be appropriated such sums as
3	are necessary to make grants and enter into coopera-
4	tive agreements to carry out this subsection.
5	(11) Termination.—The authority under this
6	subsection shall terminate 4 years after the date of
7	disbursement of the first grant under the Efficiency
8	Program.
9	(d) Small Business Telecommuting.—
10	(1) Pilot program.—
11	(A) In General.—The Administrator shall
12	conduct, in not more than 5 of the regions of the
13	Administration, a pilot program to provide in-
14	formation regarding telecommuting to employers
15	that are small business concerns and to encour-
16	age such employers to offer telecommuting op-
17	tions to employees.
18	(B) Special outreach to individuals
19	WITH DISABILITIES.—In carrying out the Tele-
20	commuting Pilot Program, the Administrator
21	shall make a concerted effort to provide informa-
22	tion to—
23	(i) small business concerns owned by
24	or employing individuals with disabilities.

1	particularly veterans who are individuals
2	with disabilities;
3	(ii) Federal, State, and local agencies
4	having knowledge and expertise in assisting
5	individuals with disabilities, including vet-
6	erans who are individuals with disabilities;
7	and
8	(iii) any group or organization, the
9	primary purpose of which is to aid individ-
10	uals with disabilities or veterans who are
11	individuals with disabilities.
12	(C) Permissible activities.—In carrying
13	out the Telecommuting Pilot Program, the Ad-
14	ministrator may—
15	(i) produce educational materials and
16	conduct presentations designed to raise
17	awareness in the small business community
18	of the benefits and the ease of telecom-
19	muting;
20	(ii) conduct outreach—
21	(I) to small business concerns that
22	are considering offering telecommuting
23	options; and
24	(II) as provided in subparagraph
25	(B); and

	732
1	(iii) acquire telecommuting tech-
2	nologies and equipment to be used for dem-
3	onstration purposes.
4	(D) Selection of regions.—In deter-
5	mining which regions will participate in the
6	Telecommuting Pilot Program, the Adminis-
7	trator shall give priority consideration to regions
8	in which Federal agencies and private-sector em-
9	ployers have demonstrated a strong regional
10	commitment to telecommuting.

- (2) Report to congress.—Not later than 2 years after the date on which funds are first appropriated to carry out this subsection, the Administrator shall transmit to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business of the House of Representatives a report containing the results of an evaluation of the Telecommuting Pilot Program and any recommendations regarding whether the pilot program, with or without modification, should be extended to include the participation of all regions of the Administration.
- TERMINATION.—The Telecommuting Pilot Program shall terminate 4 years after the date on

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1	which funds are first appropriated to carry out this
2	subsection.
3	(4) Authorization of Appropriations.—
4	There is authorized to be appropriated to the Admin-
5	istration \$5,000,000 to carry out this subsection.
6	(e) Encouraging Innovation in Energy Effi-
7	CIENCY.—Section 9 of the Small Business Act (15 U.S.C.
8	638) is amended by adding at the end the following:
9	"(z) Encouraging Innovation in Energy Effi-
10	CIENCY.—
11	"(1) FEDERAL AGENCY ENERGY-RELATED PRI-
12	ORITY.—In carrying out its duties under this section
13	relating to SBIR and STTR solicitations by Federal
14	departments and agencies, the Administrator shall—
15	"(A) ensure that such departments and
16	agencies give high priority to small business con-
17	cerns that participate in or conduct energy effi-
18	ciency or renewable energy system research and
19	development projects; and
20	"(B) include in the annual report to Con-
21	gress under subsection (b)(7) a determination of
22	whether the priority described in subparagraph
23	(A) is being carried out.
24	"(2) Consultation required.—The Adminis-
25	trator shall consult with the heads of other Federal

1	departments and agencies in determining whether
2	priority has been given to small business concerns
3	that participate in or conduct energy efficiency or re-
4	newable energy system research and development
5	projects, as required by this subsection.
6	"(3) Guidelines.—The Administrator shall, as
7	soon as is practicable after the date of enactment of
8	this subsection, issue guidelines and directives to as-
9	sist Federal agencies in meeting the requirements of
10	this subsection.
11	"(4) Definitions.—In this subsection—
12	"(A) the term biomass'—
13	"(i) means any organic material that
14	is available on a renewable or recurring
15	basis, including—
16	$``(I)\ agricultural\ crops;$
17	"(II) trees grown for energy pro-
18	duction;
19	"(III) wood waste and wood resi-
20	dues;
21	"(IV) plants (including aquatic
22	plants and grasses);
23	$"(V) \ residues;$
24	"(VI) fibers;

1	"(VII) animal wastes and other
2	waste materials; and
3	"(VIII) fats, oils, and greases (in-
4	cluding recycled fats, oils, and greases);
5	and
6	"(ii) does not include—
7	"(I) paper that is commonly recy-
8	$cled;\ or$
9	"(II) unsegregated solid waste;
10	"(B) the term 'energy efficiency project'
11	means the installation or upgrading of equip-
12	ment that results in a significant reduction in
13	energy usage; and
14	"(C) the term 'renewable energy system'
15	means a system of energy derived from—
16	"(i) a wind, solar, biomass (including
17	biodiesel), or geothermal source; or
18	"(ii) hydrogen derived from biomass or
19	water using an energy source described in
20	clause (i).".

1	SEC. 1204. LARGER 504 LOAN LIMITS TO HELP BUSINESS
2	DEVELOP ENERGY EFFICIENT TECH-
3	NOLOGIES AND PURCHASES.
4	(a) Eligibility for Energy Efficiency
5	Projects.—Section 501(d)(3) of the Small Business In-
6	vestment Act of 1958 (15 U.S.C. 695(d)(3)) is amended—
7	(1) in subparagraph (G) by striking "or" at the
8	end;
9	(2) in subparagraph (H) by striking the period
10	at the end and inserting a comma;
11	(3) by inserting after subparagraph (H) the fol-
12	lowing:
13	"(I) reduction of energy consumption by at
14	least 10 percent,
15	" (J) increased use of sustainable design, in-
16	cluding designs that reduce the use of greenhouse
17	gas emitting fossil fuels, or low-impact design to
18	produce buildings that reduce the use of non-re-
19	newable resources and minimize environmental
20	impact, or
21	"(K) plant, equipment and process up-
22	grades of renewable energy sources such as the
23	small-scale production of energy for individual
24	buildings or communities consumption, com-
25	monly known as micropower, or renewable fuels

1	producers including biodiesel and ethanol pro-
2	ducers."; and
3	(4) by adding at the end the following: "In sub-
4	paragraphs (J) and (K), terms have the meanings
5	given those terms under the Leadership in Energy
6	and Environmental Design (LEED) standard for
7	green building certification, as determined by the Ad-
8	ministrator.".
9	(b) Loans for Plant Projects Used for Energy-
10	Efficient Purposes.—Section 502(2)(A) of the Small
11	Business Investment Act of 1958 (15 U.S.C. 696(2)(A)) is
12	amended—
13	(1) in clause (ii) by striking "and" at the end;
14	(2) in clause (iii) by striking the period at the
15	end and inserting a semicolon; and
16	(3) by adding at the end the following:
17	"(iv) \$4,000,000 for each project that
18	reduces the borrower's energy consumption
19	by at least 10 percent; and
20	"(v) \$4,000,000 for each project that
21	generates renewable energy or renewable
22	fuels, such as biodiesel or ethanol produc-
23	tion.".

1	SEC. 1205. ENERGY SAVING DEBENTURES.
2	(a) In General.—Section 303 of the Small Business
3	Investment Act of 1958 (15 U.S.C. 683) is amended by add-
4	ing at the end the following:
5	"(k) Energy Saving Debentures.—In addition to
6	any other authority under this Act, a small business invest-
7	ment company licensed in the first fiscal year after the date
8	of enactment of this subsection or any fiscal year thereafter
9	may issue Energy Saving debentures.".
10	(b) Definitions.—Section 103 of the Small Business
11	Investment Act of 1958 (15 U.S.C. 662) is amended—
12	(1) in paragraph (16), by striking "and" at the
13	end;
14	(2) in paragraph (17), by striking the period at
15	the end and inserting a semicolon; and
16	(3) by adding at the end the following:
17	"(18) the term 'Energy Saving debenture' means
18	a deferred interest debenture that—
19	"(A) is issued at a discount;
20	"(B) has a 5-year maturity or a 10-year
21	maturity;
22	"(C) requires no interest payment or an-
23	nual charge for the first 5 years;
24	"(D) is restricted to Energy Saving quali-
25	fied investments; and

1	"(E) is issued at no cost (as defined in sec-
2	tion 502 of the Credit Reform Act of 1990) with
3	respect to purchasing and guaranteeing the de-
4	benture; and
5	"(19) the term 'Energy Saving qualified invest-
6	ment' means investment in a small business concern
7	that is primarily engaged in researching, manufac-
8	turing, developing, or providing products, goods, or
9	services that reduce the use or consumption of non-re-
10	newable energy resources.".
11	SEC. 1206. INVESTMENTS IN ENERGY SAVING SMALL BUSI-
12	NESSES.
13	(a) Maximum Leverage.—Section 303(b)(2) of the
14	Small Business Investment Act of 1958 (15 U.S.C.
15	303(b)(2)) is amended by adding at the end the following:
16	"(D) Investments in energy saving
17	SMALL BUSINESSES.—
18	"(i) In general.—Subject to clause
19	(ii), in calculating the outstanding leverage
20	of a company for purposes of subparagraph
21	(A), the Administrator shall exclude the
22	amount of the cost basis of any Energy Sav-
23	ing qualified investment in a smaller enter-
24	prise made in the first fiscal year after the
25	date of enactment of this subparagraph or

1	any fiscal year thereafter by a company li-
2	censed in the applicable fiscal year.
3	"(ii) Limitations.—
4	"(I) Amount of exclusion.—
5	The amount excluded under clause (i)
6	for a company shall not exceed 33 per-
7	cent of the private capital of that com-
8	pany.
9	"(II) Maximum investment.—A
10	company shall not make an Energy
11	Saving qualified investment in any
12	one entity in an amount equal to more
13	than 20 percent of the private capital
14	of that company.
15	"(III) Other terms.—The exclu-
16	sion of amounts under clause (i) shall
17	be subject to such terms as the Admin-
18	istrator may impose to ensure that
19	there is no cost (as that term is defined
20	in section 502 of the Federal Credit
21	Reform Act of 1990 (2 U.S.C. 661a))
22	with respect to purchasing or guaran-
23	teeing any debenture involved.".
24	(b) Maximum Aggregate Amount of Leverage.—
25	Section 303(b)(4) of the Small Business Investment Act of

1	1958 (15 U.S.C. $303(b)(4)$) is amended by adding at the
2	end the following:
3	"(E) Investments in energy saving
4	SMALL BUSINESSES.—
5	"(i) In general.—Subject to clause
6	(ii), in calculating the aggregate out-
7	standing leverage of a company for pur-
8	poses of subparagraph (A), the Adminis-
9	trator shall exclude the amount of the cost
10	basis of any Energy Saving qualified in-
11	vestment in a smaller enterprise made in
12	the first fiscal year after the date of enact-
13	ment of this subparagraph or any fiscal
14	year thereafter by a company licensed in
15	the applicable fiscal year.
16	"(ii) Limitations.—
17	"(I) Amount of exclusion.—
18	The amount excluded under clause (i)
19	for a company shall not exceed 33 per-
20	cent of the private capital of that com-
21	pany.
22	"(II) Maximum investment.—A
23	company shall not make an Energy
24	Saving qualified investment in any
25	one entity in an amount equal to more

1	than 20 percent of the private capital
2	of that company.
3	"(III) Other terms.—The exclu-
4	sion of amounts under clause (i) shall
5	be subject to such terms as the Admin-
6	istrator may impose to ensure that
7	there is no cost (as that term is defined
8	in section 502 of the Federal Credit
9	Reform Act of 1990 (2 U.S.C. 661a))
10	with respect to purchasing or guaran-
11	teeing any debenture involved.".
12	SEC. 1207. RENEWABLE FUEL CAPITAL INVESTMENT COM-
13	PANY.
14	Title III of the Small Business Investment Act of 1958
15	(15 U.S.C. 681 et seq.) is amended by adding at the end
16	the following:
17	"PART C—RENEWABLE FUEL CAPITAL
18	INVESTMENT PILOT PROGRAM
19	"SEC. 381. DEFINITIONS.
20	"In this part:
21	"(1) Operational assistance.—The term
22	'operational assistance' means management, mar-
23	keting, and other technical assistance that assists a
24	small business concern with business development.

1	"(2) Participation agreement.—The term
2	'participation agreement' means an agreement, be-
3	tween the Administrator and a company granted
4	final approval under section 384(e), that—
5	"(A) details the operating plan and invest-
6	ment criteria of the company; and
7	"(B) requires the company to make invest-
8	ments in smaller enterprises primarily engaged
9	in researching, manufacturing, developing, pro-
10	ducing, or bringing to market goods, products, or
11	services that generate or support the production
12	of renewable energy.
13	"(3) Renewable energy.—The term 'renewable
14	energy' means energy derived from resources that are
15	regenerative or that cannot be depleted, including
16	solar, wind, ethanol, and biodiesel fuels.
17	"(4) Renewable fuel capital investment
18	COMPANY.—The term 'Renewable Fuel Capital Invest-
19	ment company' means a company—
20	"(A) that—
21	"(i) has been granted final approval by
22	the Administrator under section 384(e); and
23	"(ii) has entered into a participation
24	agreement with the Administrator; or

1	"(B) that has received conditional approval
2	under section $384(c)$.
3	"(5) State.—The term 'State' means each of the
4	several States, the District of Columbia, the Common-
5	wealth of Puerto Rico, the Virgin Islands, Guam,
6	American Samoa, the Commonwealth of the Northern
7	Mariana Islands, and any other commonwealth, terri-
8	tory, or possession of the United States.
9	"(6) Venture capital.—The term 'venture cap-
10	ital' means capital in the form of equity capital in-
11	vestments, as that term is defined in section
12	303(g)(4).
13	"SEC. 382. PURPOSES.
14	"The purposes of the Renewable Fuel Capital Invest-
15	ment Program established under this part are—
16	"(1) to promote the research, development, man-
17	ufacture, production, and bringing to market of goods,
18	products, or services that generate or support the pro-
19	duction of renewable energy by encouraging venture
20	capital investments in smaller enterprises primarily
21	engaged such activities; and
22	"(2) to establish a venture capital program, with
23	the mission of addressing the unmet equity invest-
24	ment needs of smaller enterprises engaged in research-
25	ing, developing, manufacturing, producing, and

1	bringing to market goods, products, or services that
2	generate or support the production of renewable en-
3	ergy, to be administered by the Administrator—
4	"(A) to enter into participation agreements
5	with Renewable Fuel Capital Investment compa-
6	nies;
7	"(B) to guarantee debentures of Renewable
8	Fuel Capital Investment companies to enable
9	each such company to make venture capital in-
10	vestments in smaller enterprises engaged in the
11	research, development, manufacture, production,
12	and bringing to market of goods, products, or
13	services that generate or support the production
14	of renewable energy; and
15	"(C) to make grants to Renewable Fuel In-
16	vestment Capital companies, and to other enti-
17	ties, for the purpose of providing operational as-
18	sistance to smaller enterprises financed, or ex-
19	pected to be financed, by such companies.
20	"SEC. 383. ESTABLISHMENT.
21	"The Administrator shall establish a Renewable Fuel
22	Capital Investment Program, under which the Adminis-
23	trator may—
24	"(1) enter into participation agreements for the
25	purposes described in section 382; and

1	"(2) guarantee the debentures issued by Renew-
2	able Fuel Capital Investment companies as provided
3	in section 385.
4	"SEC. 384. SELECTION OF RENEWABLE FUEL CAPITAL IN-
5	VESTMENT COMPANIES.
6	"(a) Eligibility.—A company is eligible to apply to
7	be designated as a Renewable Fuel Capital Investment com-
8	pany if the company—
9	"(1) is a newly formed for-profit entity or a
10	newly formed for-profit subsidiary of an existing enti-
11	ty;
12	"(2) has a management team with experience in
13	alternative energy financing or relevant venture cap-
14	ital financing; and
15	"(3) has a primary objective of investment in
16	smaller enterprises that research, manufacture, de-
17	velop, produce, or bring to market goods, products, or
18	services that generate or support the production of re-
19	newable energy.
20	"(b) APPLICATION.—A company desiring to be des-
21	ignated as a Renewable Fuel Capital Investment company
22	shall submit an application to the Administrator that in-
23	cludes—
24	"(1) a business plan describing how the company
25	intends to make successful venture capital investments

1	in smaller enterprises primarily engaged in the re-
2	search, manufacture, development, production, or
3	bringing to market of goods, products, or services that
4	generate or support the production of renewable en-
5	ergy;
6	"(2) information regarding the relevant venture

- "(2) information regarding the relevant venture capital qualifications and general reputation of the management of the company;
- "(3) a description of how the company intends to seek to address the unmet capital needs of the smaller enterprises served;
- "(4) a proposal describing how the company intends to use the grant funds provided under this part to provide operational assistance to smaller enterprises financed by the company, including information regarding whether the company has employees with appropriate professional licenses or will contract with another entity when the services of such an individual are necessary;
- "(5) with respect to binding commitments to be made to the company under this part, an estimate of the ratio of cash to in-kind contributions;
- "(6) a description of whether and to what extent the company meets the criteria under subsection

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1	(c)(2) and the objectives of the program established
2	under this part;
3	"(7) information regarding the management and
4	financial strength of any parent firm, affiliated firm,
5	or any other firm essential to the success of the busi-
6	ness plan of the company; and
7	"(8) such other information as the Administrator
8	may require.
9	"(c) Conditional Approval.—
10	"(1) In general.—From among companies sub-
11	mitting applications under subsection (b), the Admin-
12	istrator shall conditionally approve companies to op-
13	erate as Renewable Fuel Capital Investment compa-
14	nies.
15	"(2) Selection criteria.—In conditionally
16	approving companies under paragraph (1), the Ad-
17	ministrator shall consider—
18	"(A) the likelihood that the company will
19	meet the goal of its business plan;
20	"(B) the experience and background of the
21	management team of the company;
22	"(C) the need for venture capital invest-
23	ments in the geographic areas in which the com-
24	pany intends to invest;

1	"(D) the extent to which the company will
2	concentrate its activities on serving the geo-
3	graphic areas in which it intends to invest;
4	"(E) the likelihood that the company will be
5	able to satisfy the conditions under subsection
6	(d);
7	"(F) the extent to which the activities pro-
8	posed by the company will expand economic op-
9	portunities in the geographic areas in which the
10	company intends to invest;
11	"(G) the strength of the proposal by the
12	company to provide operational assistance under
13	this part as the proposal relates to the ability of
14	the company to meet applicable cash require-
15	ments and properly use in-kind contributions,
16	including the use of resources for the services of
17	licensed professionals, when necessary, whether
18	provided by employees or contractors; and
19	"(H) any other factor determined appro-
20	priate by the Administrator.
21	"(3) Nationwide distribution.—From among
22	companies submitting applications under subsection
23	(b), the Administrator shall consider the selection cri-
24	teria under paragraph (2) and shall, to the maximum

1	extent practicable, approve at least one company from
2	each geographic region of the Administration.
3	"(d) Requirements To Be Met for Final Ap-
4	PROVAL.—
5	"(1) In General.—The Administrator shall
6	grant each conditionally approved company 2 years
7	to satisfy the requirements of this subsection.
8	"(2) Capital requirement.—Each condi-
9	tionally approved company shall raise not less than
10	\$3,000,000 of private capital or binding capital com-
11	mitments from 1 or more investors (which shall not
12	be departments or agencies of the Federal Govern-
13	ment) who meet criteria established by the Adminis-
14	trator.
15	"(3) Nonadministration resources for
16	OPERATIONAL ASSISTANCE.—
17	"(A) In general.—In order to provide
18	operational assistance to smaller enterprises ex-
19	pected to be financed by the company, each con-
20	ditionally approved company shall have binding
21	commitments (for contribution in cash or in-
22	kind)—
23	"(i) from sources other than the Ad-
24	ministration that meet criteria established
25	by the Administrator; and

1	"(ii) payable or available over a
2	multiyear period determined appropriate by
3	the Administrator (not to exceed 10 years).
4	"(B) Exception.—The Administrator may,
5	in the discretion of the Administrator and based
6	upon a showing of special circumstances and
7	good cause, consider an applicant to have satis-
8	fied the requirements of subparagraph (A) if the
9	applicant has—
10	"(i) a viable plan that reasonably
11	projects the capacity of the applicant to
12	raise the amount (in cash or in-kind) re-
13	quired under subparagraph (A); and
14	"(ii) binding commitments in an
15	amount equal to not less than 20 percent of
16	the total amount required under paragraph
17	(A).
18	"(C) Limitation.—The total amount of a
19	in-kind contributions by a company shall be not
20	more than 50 percent of the total contributions
21	by a company.
22	"(e) Final Approval; Designation.—The Adminis-
23	trator shall, with respect to each applicant conditionally
24	approved under subsection (c)—

1	"(1) grant final approval to the applicant to op-
2	erate as a Renewable Fuel Capital Investment com-
3	pany under this part and designate the applicant as
4	such a company, if the applicant—
5	"(A) satisfies the requirements of subsection
6	(d) on or before the expiration of the time period
7	described in that subsection; and
8	"(B) enters into a participation agreement
9	with the Administrator; or
10	"(2) if the applicant fails to satisfy the require-
11	ments of subsection (d) on or before the expiration of
12	the time period described in paragraph (1) of that
13	subsection, revoke the conditional approval granted
14	under that subsection.
15	"SEC. 385. DEBENTURES.
16	"(a) In General.—The Administrator may guar-
17	antee the timely payment of principal and interest, as
18	scheduled, on debentures issued by any Renewable Fuel
19	Capital Investment company.
20	"(b) Terms and Conditions.—The Administrator
21	may make guarantees under this section on such terms and
22	conditions as it determines appropriate, except that—
23	"(1) the term of any debenture guaranteed under
24	this section shall not exceed 15 years; and
25	"(2) a debenture quaranteed under this section—

1	"(A) shall carry no front-end or annual
2	fees;
3	"(B) shall be issued at a discount;
4	"(C) shall require no interest payments dur-
5	ing the 5-year period beginning on the date the
6	debenture is issued;
7	"(D) shall be prepayable without penalty
8	after the end of the 1-year period beginning on
9	the date the debenture is issued; and
10	"(E) shall require semiannual interest pay-
11	ments after the period described in subparagraph
12	(C).
13	"(c) Full Faith and Credit of the United
14	States.—The full faith and credit of the United States is
15	pledged to pay all amounts that may be required to be paid
16	under any guarantee under this part.
17	"(d) Maximum Guarantee.—
18	"(1) In General.—Under this section, the Ad-
19	ministrator may guarantee the debentures issued by
20	a Renewable Fuel Capital Investment company only
21	to the extent that the total face amount of outstanding
22	guaranteed debentures of such company does not ex-
23	ceed 150 percent of the private capital of the com-
24	pany, as determined by the Administrator.

1	"(2) Treatment of certain federal
2	FUNDS.—For the purposes of paragraph (1), private
3	capital shall include capital that is considered to be
4	Federal funds, if such capital is contributed by an in-
5	vestor other than a department or agency of the Fed-
6	eral Government.
7	"SEC. 386. ISSUANCE AND GUARANTEE OF TRUST CERTIFI-
8	CATES.
9	"(a) Issuance.—The Administrator may issue trust
10	certificates representing ownership of all or a fractional
11	part of debentures issued by a Renewable Fuel Capital In-
12	vestment company and guaranteed by the Administrator
13	under this part, if such certificates are based on and backed
14	by a trust or pool approved by the Administrator and com-
15	posed solely of guaranteed debentures.
16	"(b) Guarantee.—
17	"(1) In General.—The Administrator may,
18	under such terms and conditions as it determines ap-
19	propriate, guarantee the timely payment of the prin-
20	cipal of and interest on trust certificates issued by the
21	Administrator or its agents for purposes of this sec-
22	tion.
23	"(2) Limitation.—Each guarantee under this
24	subsection shall be limited to the extent of principal

- and interest on the guaranteed debentures that compose the trust or pool.
- "(3) Prepayment or default.—If a debenture 3 in a trust or pool is prepaid, or in the event of de-4 fault of such a debenture, the guarantee of timely 5 6 payment of principal and interest on the trust certifi-7 cates shall be reduced in proportion to the amount of 8 principal and interest such prepaid debenture rep-9 resents in the trust or pool. Interest on prepaid or de-10 faulted debentures shall accrue and be guaranteed by 11 the Administrator only through the date of payment 12 of the guarantee. At any time during its term, a trust 13 certificate may be called for redemption due to pre-14 payment or default of all debentures.
- 15 "(c) Full Faith and Credit of the United States is
 16 States.—The full faith and credit of the United States is
 17 pledged to pay all amounts that may be required to be paid
 18 under any guarantee of a trust certificate issued by the Ad19 ministrator or its agents under this section.
- "(d) FEES.—The Administrator shall not collect a fee 21 for any guarantee of a trust certificate under this section, 22 but any agent of the Administrator may collect a fee ap-23 proved by the Administrator for the functions described in 24 subsection (f)(2).
- 25 "(e) Subrogation and Ownership Rights.—

1	"(1) Subrogation.—If the Administrator pays
2	a claim under a guarantee issued under this section,
3	it shall be subrogated fully to the rights satisfied by
4	such payment.
5	"(2) Ownership rights.—No Federal, State, or
6	local law shall preclude or limit the exercise by the
7	Administrator of its ownership rights in the deben-
8	tures residing in a trust or pool against which trust
9	certificates are issued under this section.
10	"(f) Management and Administration.—
11	"(1) Registration.—The Administrator may
12	provide for a central registration of all trust certifi-
13	cates issued under this section.
14	"(2) Contracting of functions.—
15	"(A) In General.—The Administrator
16	may contract with an agent or agents to carry
17	out on behalf of the Administrator the pooling
18	and the central registration functions provided
19	for in this section, including, not withstanding
20	any other provision of law—
21	"(i) maintenance, on behalf of and
22	under the direction of the Administrator, of
23	such commercial bank accounts or invest-
24	ments in obligations of the United States as
25	may be necessary to facilitate the creation

1	of trusts or pools backed by debentures guar-
2	anteed under this part; and
3	"(ii) the issuance of trust certificates to
4	facilitate the creation of such trusts or
5	pools.
6	"(B) Fidelity bond or insurance re-
7	QUIREMENT.—Any agent performing functions
8	on behalf of the Administrator under this para-
9	graph shall provide a fidelity bond or insurance
10	in such amounts as the Administrator deter-
11	mines to be necessary to fully protect the inter-
12	ests of the United States.
13	"(3) Regulation of brokers and dealers.—
14	The Administrator may regulate brokers and dealers
15	in trust certificates issued under this section.
16	"(4) Electronic registration.—Nothing in
17	this subsection may be construed to prohibit the use
18	of a book-entry or other electronic form of registration
19	for trust certificates issued under this section.
20	"SEC. 387. FEES.
21	"(a) In General.—Except as provided in section
22	386(d), the Administrator may charge such fees as it deter-
23	mines appropriate with respect to any guarantee or grant
24	issued under this part, in an amount established annually
25	by the Administrator, as necessary to reduce to zero the cost

- 1 (as defined in section 502 of the Federal Credit Reform Act
- 2 of 1990) to the Administration of purchasing and guaran-
- 3 teeing debentures under this part, which amounts shall be
- 4 paid to and retained by the Administration.
- 5 "(b) Offset.—The Administrator may, as provided
- 6 by section 388, offset fees charged and collected under sub-
- 7 section (a).
- 8 "SEC. 388. FEE CONTRIBUTION.
- 9 "(a) In General.—To the extent that amounts are
- 10 made available to the Administrator for the purpose of fee
- 11 contributions, the Administrator shall contribute to fees
- 12 paid by the Renewable Fuel Capital Investment companies
- 13 under section 387.
- 14 "(b) Annual Adjustment.—Each fee contribution
- 15 under subsection (a) shall be effective for 1 fiscal year and
- 16 shall be adjusted as necessary for each fiscal year thereafter
- 17 to ensure that amounts under subsection (a) are fully used.
- 18 The fee contribution for a fiscal year shall be based on the
- 19 outstanding commitments made and the guarantees and
- 20 grants that the Administrator projects will be made during
- 21 that fiscal year, given the program level authorized by law
- 22 for that fiscal year and any other factors that the Adminis-
- 23 trator determines appropriate.
- 24 "SEC. 389. OPERATIONAL ASSISTANCE GRANTS.
- 25 "(a) IN GENERAL.—

THORITY.—The Administrator may	1
to Renewable Fuel Capital Investment	2
provide operational assistance to small-	3
financed, or expected to be financed, by	4
s or other entities.	5
RMS.—A grant under this subsection	6
over a multiyear period not to exceed	7
r such other terms as the Administrator	8
	9
NT AMOUNT.—The amount of a grant	10
is subsection to a Renewable Fuel Cap-	11
t company shall be equal to the lesser	12
	13
10 percent of the resources (in cash or	14
raised by the company under section	15
; or	16
\$1,000,000.	17
RATA REDUCTIONS.—If the amount	18
e to carry out this section is insufficient	19
inistrator to provide grants in the	20
ded for in paragraph (3), the Adminis-	21
ake pro rata reductions in the amounts	22
able to each company and entity under	23

such paragraph.

1	"(5) Grants to conditionally approved com-
2	PANIES.—
3	"(A) In general.—Subject to subpara-
4	graphs (B) and (C), upon the request of a com-
5	pany conditionally approved under section
6	384(c), the Administrator shall make a grant to
7	the company under this subsection.
8	"(B) REPAYMENT BY COMPANIES NOT AP-
9	PROVED.—If a company receives a grant under
10	this paragraph and does not enter into a partici-
11	pation agreement for final approval, the com-
12	pany shall, subject to controlling Federal law,
13	repay the amount of the grant to the Adminis-
14	trator.
15	"(C) Deduction of grant to approved
16	COMPANY.—If a company receives a grant under
17	this paragraph and receives final approval
18	under section 384(e), the Administrator shall de-
19	duct the amount of the grant from the total
20	grant amount the company receives for oper-
21	$ational\ assistance.$
22	"(D) Amount of grant.—No company
23	may receive a grant of more than \$100,000
24	under this paragraph.
25	"(b) Supplemental Grants.—

- "(1) IN GENERAL.—The Administrator may
 make supplemental grants to Renewable Fuel Capital

 Investment companies and to other entities, as authorized by this part, under such terms as the Administrator may require, to provide additional operational assistance to smaller enterprises financed, or
 expected to be financed, by the companies.
- "(2) MATCHING REQUIREMENT.—The Administrator may require, as a condition of any supplemental grant made under this subsection, that the
 company or entity receiving the grant provide from
 resources (in a cash or in kind), other then those provided by the Administrator, a matching contribution
 equal to the amount of the supplemental grant.
- "(c) Limitation.—None of the assistance made available under this section may be used for any overhead or general and administrative expense of a Renewable Fuel Capital Investment company.

19 "SEC. 390. BANK PARTICIPATION.

"(a) IN GENERAL.—Except as provided in subsection
(b), any national bank, any member bank of the Federal
Reserve System, and (to the extent permitted under applicable State law) any insured bank that is not a member of
such system, may invest in any Renewable Fuel Capital

- 1 Investment company, or in any entity established to invest
- 2 solely in Renewable Fuel Capital Investment companies.
- 3 "(b) Limitation.—No bank described in subsection (a)
- 4 may make investments described in such subsection that are
- 5 greater than 5 percent of the capital and surplus of the
- 6 bank.

7 "SEC. 391. FEDERAL FINANCING BANK.

- 8 "Notwithstanding section 318, the Federal Financing
- 9 Bank may acquire a debenture issued by a Renewable Fuel
- 10 Capital Investment company under this part.
- 11 "SEC. 392. REPORTING REQUIREMENT.
- 12 "Each Renewable Fuel Capital Investment company
- 13 that participates in the program established under this part
- 14 shall provide to the Administrator such information as the
- 15 Administrator may require, including—
- "(1) information related to the measurement cri-
- 17 teria that the company proposed in its program ap-
- 18 plication; and
- 19 "(2) in each case in which the company makes,
- 20 under this part, an investment in, or a loan or a
- 21 grant to, a business that is not primarily engaged in
- 22 the research, development, manufacture, or bringing
- 23 to market or renewable energy sources, a report on the
- 24 nature, origin, and revenues of the business in which
- 25 investments are made.

1 "SEC. 393. EXAMINATIONS. 2 "(a) In General.—Each Renewable Fuel Capital Investment company that participates in the program estab-3 lished under this part shall be subject to examinations made 4 5 at the direction of the Investment Division of the Administration in accordance with this section. 6 7 "(b) Assistance of Private Sector Entities.— Examinations under this section may be conducted with the 9 assistance of a private sector entity that has both the qualifications and the expertise necessary to conduct such examinations. 11 "(c) Costs.— 12 13 "(1) Assessment.— "(A) In General.—The Administrator 14 15 may assess the cost of examinations under this 16 section, including compensation of the exam-17 iners, against the company examined. 18 "(B) PAYMENT.—Any company against 19 which the Administrator assesses costs under this 20 paragraph shall pay such costs. 21 "(2) Deposit of funds.—Funds collected under 22 this section shall be deposited in the account for sala-23 ries and expenses of the Administration. 24 "SEC. 394. MISCELLANEOUS. 25 "To the extent such procedures are not inconsistent

with the requirements of this part, the Administrator may

- 1 take such action as set forth in sections 309, 311, 312, and
- 2 314 and an officer, director, employee, agent, or other par-
- 3 ticipant in the management or conduct of the affairs of a
- 4 Renewable Fuel Capital Investment company shall be sub-
- 5 ject to the requirements of such sections.
- 6 "SEC. 395. REMOVAL OR SUSPENSION OF DIRECTORS OR
- 7 *OFFICERS*.
- 8 "Using the procedures for removing or suspending a
- 9 director or an officer of a licensee set forth in section 313
- 10 (to the extent such procedures are not inconsistent with the
- 11 requirements of this part), the Administrator may remove
- 12 or suspend any director or officer of any Renewable Fuel
- 13 Capital Investment company.
- 14 "SEC. 396. REGULATIONS.
- 15 "The Administrator may issue such regulations as the
- 16 Administrator determines necessary to carry out the provi-
- 17 sions of this part in accordance with its purposes.
- 18 "SEC. 397. AUTHORIZATIONS OF APPROPRIATIONS.
- 19 "(a) In General.—Subject to the availability of ap-
- 20 propriations, the Administrator is authorized to make
- 21 \$15,000,000 in operational assistance grants under section
- 22 389 for each of fiscal years 2008 and 2009.
- 23 "(b) Funds Collected for Examinations.—Funds
- 24 deposited under section 393(c)(2) are authorized to be ap-
- 25 propriated only for the costs of examinations under section

- 1 393 and for the costs of other oversight activities with re-
- 2 spect to the program established under this part.
- 3 "SEC. 398. TERMINATION.
- 4 "The program under this part shall terminate at the
- 5 end of the second full fiscal year after the date that the Ad-
- 6 ministrator establishes the program under this part.".
- 7 SEC. 1208. STUDY AND REPORT.
- 8 The Administrator of the Small Business Administra-
- 9 tion shall conduct a study of the Renewable Fuel Capital
- 10 Investment Program under part C of title III of the Small
- 11 Business Investment Act of 1958, as added by this Act. Not
- 12 later than 3 years after the date of enactment of this Act,
- 13 the Administrator shall complete the study under this sec-
- 14 tion and submit to Congress a report regarding the results
- 15 of the study.

16 TITLE XIII—SMART GRID

- 17 SEC. 1301. STATEMENT OF POLICY ON MODERNIZATION OF
- 18 ELECTRICITY GRID.
- 19 It is the policy of the United States to support the
- 20 modernization of the Nation's electricity transmission and
- 21 distribution system to maintain a reliable and secure elec-
- 22 tricity infrastructure that can meet future demand growth
- 23 and to achieve each of the following, which together charac-
- 24 terize a Smart Grid:

1	(1) Increased use of digital information and con-
2	trols technology to improve reliability, security, and
3	efficiency of the electric grid.
4	(2) Dynamic optimization of grid operations
5	and resources, with full cyber-security.
6	(3) Deployment and integration of distributed
7	resources and generation, including renewable re-
8	sources.
9	(4) Development and incorporation of demand
10	response, demand-side resources, and energy-efficiency
11	resources.
12	(5) Deployment of "smart" technologies (real-
13	time, automated, interactive technologies that opti-
14	mize the physical operation of appliances and con-
15	sumer devices) for metering, communications con-
16	cerning grid operations and status, and distribution
17	automation.
18	(6) Integration of "smart" appliances and con-
19	sumer devices.
20	(7) Deployment and integration of advanced
21	electricity storage and peak-shaving technologies, in-
22	cluding plug-in electric and hybrid electric vehicles,
23	and thermal-storage air conditioning.
24	(8) Provision to consumers of timely information

and control options.

1	(9) Development of standards for communicate				
2	and interoperability of appliances and equipment				
3	connected to the electric grid, including the infra-				
4	structure serving the grid.				

(10) Identification and lowering of unreasonable
 or unnecessary barriers to adoption of smart grid
 technologies, practices, and services.

8 SEC. 1302. SMART GRID SYSTEM REPORT.

9 The Secretary, acting through the Assistant Secretary 10 of the Office of Electricity Delivery and Energy Reliability (referred to in this section as the "OEDER") and through the Smart Grid Task Force established in section 1303, 12 shall, after consulting with any interested individual or entity as appropriate, no later than one year after enactment, 14 15 and every two years thereafter, report to Congress concerning the status of smart grid deployments nationwide 16 and any regulatory or government barriers to continued deployment. The report shall provide the current status and 18 prospects of smart grid development, including information on technology penetration, communications network capa-20 21 bilities, costs, and obstacles. It may include recommendations for State and Federal policies or actions helpful to facilitate the transition to a smart grid. To the extent appropriate, it should take a regional perspective. In preparing this report, the Secretary shall solicit advice and

1	contributions	from the	² Smart	Grid Ad	lvisory	Committee	cre-

- 2 ated in section 1303; from other involved Federal agencies
- 3 including but not limited to the Federal Energy Regulatory
- 4 Commission ("Commission"), the National Institute of
- 5 Standards and Technology ("Institute"), and the Depart-
- 6 ment of Homeland Security; and from other stakeholder
- 7 groups not already represented on the Smart Grid Advisory
- 8 Committee.

9 SEC. 1303. SMART GRID ADVISORY COMMITTEE AND SMART

- 10 GRID TASK FORCE.
- 11 (a) Smart Grid Advisory Committee.—
- 12 (1) Establishment.—The Secretary shall estab-13 lish, within 90 days of enactment of this Part, a 14 Smart Grid Advisory Committee (either as an inde-15 pendent entity or as a designated sub-part of a larger 16 advisory committee on electricity matters). The Smart 17 Grid Advisory Committee shall include eight or more 18 members appointed by the Secretary who have suffi-19 cient experience and expertise to represent the full 20 range of smart grid technologies and services, to rep-21 resent both private and non-Federal public sector 22 stakeholders. One member shall be appointed by the

Secretary to Chair the Smart Grid Advisory Com-

mittee.

23

- (2) Mission.—The mission of the Smart Grid Advisory Committee shall be to advise the Secretary, the Assistant Secretary, and other relevant Federal officials concerning the development of smart grid technologies, the progress of a national transition to the use of smart-grid technologies and services, the evolution of widely-accepted technical and practical standards and protocols to allow interoperability and inter-communication among smart-grid capable devices, and the optimum means of using Federal incentive authority to encourage such progress.
 - (3) Applicability of Federal Advisory Committee Act
 MITTEE ACT.—The Federal Advisory Committee Act
 (5 U.S.C. App.) shall apply to the Smart Grid Advisory Committee.

(b) Smart Grid Task Force.—

of the Office of Electricity Delivery and Energy Reliability shall establish, within 90 days of enactment of this Part, a Smart Grid Task Force composed of designated employees from the various divisions of that office who have responsibilities related to the transition to smart-grid technologies and practices. The Assistant Secretary or his designee shall be identified as the Director of the Smart Grid Task Force. The

Chairman of the Federal Energy Regulatory Commission and the Director of the National Institute of Standards and Technology shall each designate at least one employee to participate on the Smart Grid Task Force. Other members may come from other agencies at the invitation of the Assistant Secretary or the nomination of the head of such other agency. The Smart Grid Task Force shall, without disrupting the work of the Divisions or Offices from which its members are drawn, provide an identifiable Federal entity to embody the Federal role in the national transition toward development and use of smart grid technologies.

(2) Mission.—The mission of the Smart Grid Task Force shall be to insure awareness, coordination and integration of the diverse activities of the Office and elsewhere in the Federal government related to smart-grid technologies and practices, including but not limited to: smart grid research and development; development of widely accepted smart-grid standards and protocols; the relationship of smart-grid technologies and practices to electric utility regulation; the relationship of smart-grid technologies and practices to infrastructure development, system reliability and security; and the relationship of smart-grid technologies

1	nologies and practices to other facets of electricity	
2	supply, demand, transmission, distribution, and pol-	
3	icy. The Smart Grid Task Force shall collaborate	
4	with the Smart Grid Advisory Committee and other	
5	Federal agencies and offices. The Smart Grid Task	
6	Force shall meet at the call of its Director as nec-	
7	essary to accomplish its mission.	
8	(c) Authorization.—There are authorized to be ap-	
9	propriated for the purposes of this section such sums as are	
10	necessary to the Secretary to support the operations of the	
11	Smart Grid Advisory Committee and Smart Grid Task	
12	Force for each of fiscal years 2008 through 2020.	
13	SEC. 1304. SMART GRID TECHNOLOGY RESEARCH, DEVEL-	
14	OPMENT, AND DEMONSTRATION.	
15	(a) Power Grid Digital Information Tech-	
16	NOLOGY.—The Secretary, in consultation with the Federal	
17	Energy Regulatory Commission and other appropriate	
18	agencies, electric utilities, the States, and other stakeholders,	
19	shall carry out a program—	
20	(1) to develop advanced techniques for measuring	
21	peak load reductions and energy-efficiency savings	
22	from smart metering, demand response, distributed	
23	generation, and electricity storage systems;	

1	(2) to investigate means for demand response,
2	distributed generation, and storage to provide ancil-
3	lary services;
4	(3) to conduct research to advance the use of
5	wide-area measurement and control networks, includ-
6	ing data mining, visualization, advanced computing,
7	and secure and dependable communications in a
8	$highly\hbox{-}distributed\ environment;$
9	(4) to test new reliability technologies, including
10	those concerning communications network capabili-
11	ties, in a grid control room environment against a
12	representative set of local outage and wide area black-
13	out scenarios;
14	(5) to identify communications network capacity
15	needed to implement advanced technologies.
16	(6) to investigate the feasibility of a transition
17	to time-of-use and real-time electricity pricing;
18	(7) to develop algorithms for use in electric
19	transmission system software applications;
20	(8) to promote the use of underutilized electricity
21	generation capacity in any substitution of electricity
22	for liquid fuels in the transportation system of the
23	United States; and
24	(9) in consultation with the Federal Energy Reg-
25	ulatory Commission, to propose interconnection pro-

1	tocols to enable electric utilities to access electricity
2	stored in vehicles to help meet peak demand loads.
3	(b) Smart Grid Regional Demonstration Initia-
4	TIVE.—
5	(1) In general.—The Secretary shall establish
6	a smart grid regional demonstration initiative (re-
7	ferred to in this subsection as the "Initiative") com-
8	posed of demonstration projects specifically focused on
9	advanced technologies for use in power grid sensing,
10	communications, analysis, and power flow control.
11	The Secretary shall seek to leverage existing smart
12	grid deployments.
13	(2) Goals.—The goals of the Initiative shall
14	be—
15	(A) to demonstrate the potential benefits of
16	concentrated investments in advanced grid tech-
17	nologies on a regional grid;
18	(B) to facilitate the commercial transition
19	from the current power transmission and dis-
20	tribution system technologies to advanced tech-
21	nologies;
22	(C) to facilitate the integration of advanced
23	technologies in existing electric networks to im-
24	prove system performance, power flow control,
25	and reliability;

1	(D) to demonstrate protocols and standards
2	that allow for the measurement and validation of
3	the energy savings and fossil fuel emission reduc-
4	tions associated with the installation and use of
5	energy efficiency and demand response tech-
6	nologies and practices; and
7	(E) to investigate differences in each region
8	and regulatory environment regarding best prac-
9	tices in implementing smart grid technologies.
10	(3) Demonstration projects.—
11	(A) In general.—In carrying out the ini-
12	tiative, the Secretary shall carry out smart grid
13	demonstration projects in up to 5 electricity con-
14	trol areas, including rural areas and at least 1
15	area in which the majority of generation and
16	transmission assets are controlled by a tax-ex-
17	empt entity.
18	(B) Cooperation.—A demonstration
19	project under subparagraph (A) shall be carried
20	out in cooperation with the electric utility that
21	owns the grid facilities in the electricity control
22	area in which the demonstration project is car-
23	$ried\ out.$
24	(C) Federal share of cost of tech-
25	NOLOGY INVESTMENTS.—The Secretary shall pro-

1	vide to an electric utility described in subpara-
2	graph (B) financial assistance for use in paying
3	an amount equal to not more than 50 percent of
4	the cost of qualifying advanced grid technology
5	investments made by the electric utility to carry
6	out a demonstration project.
7	(D) Ineligibility for grants.—No per-
8	son or entity participating in any demonstra-
9	tion project conducted under this subsection shall
10	be eligible for grants under section 1306 for oth-
11	erwise qualifying investments made as part of
12	that demonstration project.
13	(c) Authorization of Appropriations.—There are
14	authorized to be appropriated—
15	(1) to carry out subsection (a), such sums as are
16	necessary for each of fiscal years 2008 through 2012;
17	and
18	(2) to carry out subsection (b), \$100,000,000 for
19	each of fiscal years 2008 through 2012.
20	SEC. 1305. SMART GRID INTEROPERABILITY FRAMEWORK.
21	(a) Interoperability Framework.—The Director of
22	the National Institute of Standards and Technology shall
23	have primary responsibility to coordinate the development

 $24\ \ \textit{of a framework that includes protocols and model standards}$

25 for information management to achieve interoperability of

1	smart grid devices and systems. Such protocols and stand-
2	ards shall further align policy, business, and technology ap-
3	proaches in a manner that would enable all electric re-
4	sources, including demand-side resources, to contribute to
5	an efficient, reliable electricity network. In developing such
6	protocols and standards—
7	(1) the Director shall seek input and cooperation
8	from the Commission, OEDER and its Smart Grid
9	Task Force, the Smart Grid Advisory Committee,
10	other relevant Federal and State agencies; and
11	(2) the Director shall also solicit input and co-
12	operation from private entities interested in such pro-
13	tocols and standards, including but not limited to the
14	Gridwise Architecture Council, the International
15	Electrical and Electronics Engineers, the National
16	Electric Reliability Organization recognized by the
17	Federal Energy Regulatory Commission, and Na-
18	$tional\ Electrical\ Manufacturer's\ Association.$
19	(b) Scope of Framework.—The framework devel-
20	oped under subsection (a) shall be flexible, uniform and
21	technology neutral, including but not limited to technologies
22	for managing smart grid information, and designed—
23	(1) to accommodate traditional, centralized gen-
24	eration and transmission resources and consumer dis-
25	tributed resources, including distributed generation,

1	renewable generation, energy storage, energy effi-
2	ciency, and demand response and enabling devices
3	and systems;
4	(2) to be flexible to incorporate—
5	(A) regional and organizational differences;
6	and
7	$(B)\ technological\ innovations;$
8	(3) to consider the use of voluntary uniform
9	standards for certain classes of mass-produced electric
10	appliances and equipment for homes and businesses
11	that enable customers, at their election and consistent
12	with applicable State and Federal laws, and are
13	manufactured with the ability to respond to electric
14	grid emergencies and demand response signals by cur-
15	tailing all, or a portion of, the electrical power con-
16	sumed by the appliances or equipment in response to
17	an emergency or demand response signal, including
18	through—
19	(A) load reduction to reduce total electrical
20	demand;
21	(B) adjustment of load to provide grid an-
22	cillary services; and
23	(C) in the event of a reliability crisis that
24	threatens an outage, short-term load shedding to
25	help preserve the stability of the arid: and

1	(4) such voluntary standards should incorporate
2	appropriate manufacturer lead time.
3	(c) Timing of Framework Development.—The In
4	stitute shall begin work pursuant to this section within 60
5	days of enactment. The Institute shall provide and publish
6	an initial report on progress toward recommended or con
7	sensus standards and protocols within one year after enact
8	ment, further reports at such times as developments war
9	rant in the judgment of the Institute, and a final report
10	when the Institute determines that the work is completed
11	or that a Federal role is no longer necessary.
12	(d) Standards for Interoperability in Federal
13	Jurisdiction.—At any time after the Institute's work ha
14	led to sufficient consensus in the Commission's judgment
15	the Commission shall institute a rulemaking proceeding to
16	adopt such standards and protocols as may be necessary
17	to insure smart-grid functionality and interoperability in
18	interstate transmission of electric power, and regional and
19	wholesale electricity markets.
20	(e) AUTHORIZATION.—There are authorized to be ap
21	propriated for the purposes of this section \$5,000,000 to the

22 Institute to support the activities required by this sub-

23 section for each of fiscal years 2008 through 2012.

1	SEC. 1306. FEDERAL MATCHING FUND FOR SMART GRID IN-
2	VESTMENT COSTS.
3	(a) Matching Fund.—The Secretary shall establish
4	a Smart Grid Investment Matching Grant Program to pro-
5	vide reimbursement of one-fifth (20 percent) of qualifying
6	Smart Grid investments.
7	(b) Qualifying Investments.—Qualifying Smart
8	Grid investments may include any of the following made
9	on or after the date of enactment of this Act:
10	(1) In the case of appliances covered for purposes
11	of establishing energy conservation standards under
12	part B of title III of the Energy Policy and Conserva-
13	tion Act of 1975 (42 U.S.C. 6291 et seq.), the docu-
14	mented expenditures incurred by a manufacturer of
15	such appliances associated with purchasing or design-
16	ing, creating the ability to manufacture, and manu-
17	facturing and installing for one calendar year, inter-
18	nal devices that allow the appliance to engage in
19	Smart Grid functions.
20	(2) In the case of specialized electricity-using
21	equipment, including motors and drivers, installed in
22	industrial or commercial applications, the docu-
23	mented expenditures incurred by its owner or its
24	manufacturer of installing devices or modifying that

equipment to engage in Smart Grid functions.

- 1 (3) In the case of transmission and distribution 2 equipment fitted with monitoring and communica-3 tions devices to enable smart grid functions, the docu-4 mented expenditures incurred by the electric utility to 5 purchase and install such monitoring and commu-6 nications devices.
 - (4) In the case of metering devices, sensors, control devices, and other devices integrated with and attached to an electric utility system or retail distributor or marketer of electricity that are capable of engaging in Smart Grid functions, the documented expenditures incurred by the electric utility, distributor, or marketer and its customers to purchase and install such devices.
 - (5) In the case of software that enables devices or computers to engage in Smart Grid functions, the documented purchase costs of the software.
 - (6) In the case of entities that operate or coordinate operations of regional electric grids, the documented expenditures for purchasing and installing such equipment that allows Smart Grid functions to operate and be combined or coordinated among multiple electric utilities and between that region and other regions.

- 1 (7) In the case of persons or entities other than
 2 electric utilities owning and operating a distributed
 3 electricity generator, the documented expenditures of
 4 enabling that generator to be monitored, controlled, or
 5 otherwise integrated into grid operations and elec6 tricity flows on the grid utilizing Smart Grid func7 tions.
 - (8) In the case of electric or hybrid-electric vehicles, the documented expenses for devices that allow the vehicle to engage in Smart Grid functions (but not the costs of electricity storage for the vehicle).
 - (9) The documented expenditures related to purchasing and implementing Smart Grid functions in such other cases as the Secretary shall identify. In making such grants, the Secretary shall seek to reward innovation and early adaptation, even if success is not complete, rather than deployment of proven and commercially viable technologies.
- (c) Investments Not Included.—Qualifying Smart
 Grid investments do not include any of the following:
- 21 (1) Investments or expenditures for Smart Grid 22 technologies, devices, or equipment that are eligible for 23 specific tax credits or deductions under the Internal 24 Revenue Code, as amended.

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1	(2) Expenditures for electricity generation
2	transmission, or distribution infrastructure or equip-
3	ment not directly related to enabling Smart Grid
4	functions.
5	(3) After the final date for State consideration o
6	the Smart Grid Information Standard under section
7	1307 (paragraph (17) of section 111(d) of the Public
8	Utility Regulatory Policies Act of 1978), an invest
9	ment that is not in compliance with such standard
10	(4) After the development and publication by the
11	Institute of protocols and model standards for inter-
12	operability of smart grid devices and technologies, ar
13	investment that fails to incorporate any of such pro-
14	tocols or model standards.
15	(5) Expenditures for physical interconnection of
16	generators or other devices to the grid except those
17	that are directly related to enabling Smart Grid func-
18	tions.
19	(6) Expenditures for ongoing salaries, benefits
20	or personnel costs not incurred in the initial installa
21	tion, training, or start up of smart grid functions.

(7) Expenditures for travel, lodging, meals or

other personal costs.

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1	(8) Ongoing or routine operation, billing, cus-
2	tomer relations, security, and maintenance expendi-
3	tures.
4	(9) Such other expenditures that the Secretary
5	determines not to be Qualifying Smart Grid Invest-
6	ments by reason of the lack of the ability to perform
7	Smart Grid functions or lack of direct relationship to
8	Smart Grid functions.
9	(d) Smart Grid Functions.—The term "smart grid
10	functions" means any of the following:
11	(1) The ability to develop, store, send and receive
12	digital information concerning electricity use, costs,
13	prices, time of use, nature of use, storage, or other in-
14	formation relevant to device, grid, or utility oper-
15	ations, to or from or by means of the electric utility
16	system, through one or a combination of devices and
17	technologies.
18	(2) The ability to develop, store, send and receive
19	digital information concerning electricity use, costs,
20	prices, time of use, nature of use, storage, or other in-
21	formation relevant to device, grid, or utility oper-
22	ations to or from a computer or other control device.
23	(3) The ability to measure or monitor electricity
24	use as a function of time of day, power quality char-

 $acteristics \ such \ as \ voltage \ level, \ current, \ cycles \ per$

- second, or source or type of generation and to store,
 synthesize or report that information by digital
 means.
 - (4) The ability to sense and localize disruptions or changes in power flows on the grid and communicate such information instantaneously and automatically for purposes of enabling automatic protective responses to sustain reliability and security of grid operations.
 - (5) The ability to detect, prevent, communicate with regard to, respond to, or recover from system security threats, including cyber-security threats and terrorism, using digital information, media, and devices.
 - (6) The ability of any appliance or machine to respond to such signals, measurements, or communications automatically or in a manner programmed by its owner or operator without independent human intervention.
 - (7) The ability to use digital information to operate functionalities on the electric utility grid that were previously electro-mechanical or manual.
 - (8) The ability to use digital controls to manage and modify electricity demand, enable congestion

- management, assist in voltage control, provide oper ating reserves, and provide frequency regulation.
 - (9) Such other functions as the Secretary may identify as being necessary or useful to the operation of a Smart Grid.

(e) The Secretary shall—

- (1) establish and publish in the Federal Register, within one year after the enactment of this Act procedures by which applicants who have made qualifying Smart Grid investments can seek and obtain reimbursement of one-fifth of their documented expenditures;
- (2) establish procedures to ensure that there is no duplication or multiple reimbursement for the same investment or costs, that the reimbursement goes to the party making the actual expenditures for Qualifying Smart Grid Investments, and that the grants made have significant effect in encouraging and facilitating the development of a smart grid;
- (3) maintain public records of reimbursements made, recipients, and qualifying Smart Grid investments which have received reimbursements;
- (4) establish procedures to provide, in cases deemed by the Secretary to be warranted, advance payment of moneys up to the full amount of the pro-

1	jected eventual reimbursement, to creditworthy appli-
2	cants whose ability to make Qualifying Smart Grid
3	Investments may be hindered by lack of initial cap-
4	ital, in lieu of any later reimbursement for which
5	that applicant qualifies, and subject to full return of
6	the advance payment in the event that the Qualifying
7	Smart Grid investment is not made; and
8	(5) have and exercise the discretion to deny
9	grants for investments that do not qualify in the rea-
10	sonable judgment of the Secretary.
11	(f) Authorization of Appropriations.—There are
12	authorized to be appropriated to the Secretary such sums
13	as are necessary for the administration of this section and
14	the grants to be made pursuant to this section for fiscal
15	years 2008 through 2012.
16	SEC. 1307. STATE CONSIDERATION OF SMART GRID.
17	(a) Section 111(d) of the Public Utility Regulatory
18	Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by
19	adding at the end the following:
20	"(16) Consideration of smart grid invest-
21	MENTS.—
22	"(A) In General.—Each State shall con-
23	sider requiring that, prior to undertaking invest-
24	ments in nonadvanced grid technologies, an elec-
25	tric utility of the State demonstrate to the State

1	that the electric utility considered an investment
2	in a qualified smart grid system based on appro-
3	priate factors, including—
4	"(i) total costs;
5	$``(ii)\ cost\-effectiveness;$
6	$``(iii)\ improved\ reliability;$
7	"(iv) security;
8	"(v) system performance; and
9	"(vi) societal benefit.
10	"(B) Rate recovery.—Each State shall
11	consider authorizing each electric utility of the
12	State to recover from ratepayers any capital, op-
13	erating expenditure, or other costs of the electric
14	utility relating to the deployment of a qualified
15	smart grid system, including a reasonable rate of
16	return on the capital expenditures of the electric
17	utility for the deployment of the qualified smart
18	grid system.
19	"(C) Obsolete equipment.—Each State
20	shall consider authorizing any electric utility or
21	other party of the State to deploy a qualified
22	smart grid system to recover in a timely manner
23	the remaining book-value costs of any equipment
24	rendered obsolete by the deployment of the quali-

fied smart grid system, based on the remaining
depreciable life of the obsolete equipment.
"(17) Smart grid information.—
"(A) Standard.—All electricity purchasers
shall be provided direct access, in written or elec-
tronic machine-readable form as appropriate, to
information from their electricity provider as
provided in subparagraph (B).
"(B) Information.—Information provided
under this section, to the extent practicable, shall
include:
"(i) Prices.—Purchasers and other
interested persons shall be provided with in-
formation on—
"(I) time-based electricity prices
in the wholesale electricity market; and
"(II) time-based electricity retail
prices or rates that are available to the
purchasers.
"(ii) Usage.—Purchasers shall be pro-
vided with the number of electricity units,
expressed in kwh, purchased by them.
"(iii) Intervals and projections.—
Updates of information on prices and usage
shall be offered on not less than a daily

1	basis, shall include hourly price and use in-
2	formation, where available, and shall in-
3	clude a day-ahead projection of such price
4	information to the extent available.
5	"(iv) Sources.—Purchasers and other
6	interested persons shall be provided annu-
7	ally with written information on the sources
8	of the power provided by the utility, to the
9	extent it can be determined, by type of gen-
10	eration, including greenhouse gas emissions
11	associated with each type of generation, for
12	intervals during which such information is
13	available on a cost-effective basis.
14	"(C) Access.—Purchasers shall be able to
15	access their own information at any time
16	through the internet and on other means of com-
17	munication elected by that utility for Smart
18	Grid applications. Other interested persons shall
19	be able to access information not specific to any
20	purchaser through the Internet. Information spe-
21	cific to any purchaser shall be provided solely to
22	that purchaser.".
23	(b) Compliance.—
24	(1) Time limitations.—Section 112(b) of the
25	Public Utility Regulatory Policies Act of 1978 (16

- U.S.C. 2622(b)) is amended by adding the following
 at the end thereof:
- "(6)(A) Not later than 1 year after the enact-3 4 ment of this paragraph, each State regulatory author-5 ity (with respect to each electric utility for which it 6 has ratemaking authority) and each nonregulated 7 utility shall commence the consideration referred to in 8 section 111, or set a hearing date for consideration, 9 with respect to the standards established by para-10 graphs (17) through (18) of section 111(d).
 - "(B) Not later than 2 years after the date of the enactment of the this paragraph, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority), and each nonregulated electric utility, shall complete the consideration, and shall make the determination, referred to in section 111 with respect to each standard established by paragraphs (17) through (18) of section 111(d)."
- 20 (2) FAILURE TO COMPLY.—Section 112(c) of the
 21 Public Utility Regulatory Policies Act of 1978 (16
 22 U.S.C. 2622(c)) is amended by adding the following
 23 at the end:
- 24 "In the case of the standards established by paragraphs 25 (16) through (19) of section 111(d), the reference contained

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1	in this subsection to the date of enactment of this Act shall
2	be deemed to be a reference to the date of enactment of such
3	paragraphs.".
4	(3) Prior state actions.—Section 112(d) of
5	the Public Utility Regulatory Policies Act of 1978 (16
6	U.S.C. 2622(d)) is amended by inserting "and para-
7	graphs (17) through (18)" before "of section 111(d)".
8	SEC. 1308. STUDY OF THE EFFECT OF PRIVATE WIRE LAWS
9	ON THE DEVELOPMENT OF COMBINED HEAT
10	AND POWER FACILITIES.
11	(a) Study.—
12	(1) In General.—The Secretary, in consultation
13	with the States and other appropriate entities, shall
14	conduct a study of the laws (including regulations)
15	affecting the siting of privately owned electric dis-
16	tribution wires on and across public rights-of-way.
17	(2) Requirements.—The study under para-
18	graph (1) shall include—
19	(A) an evaluation of—
20	(i) the purposes of the laws; and
21	(ii) the effect the laws have on the de-
22	velopment of combined heat and power fa-
23	cilities;
24	(B) a determination of whether a change in
25	the laws would have any operating reliability.

1	cost, or other impacts on electric utilities and the
2	customers of the electric utilities; and
3	(C) an assessment of—
4	(i) whether privately owned electric
5	distribution wires would result in duplica-
6	tive facilities; and
7	(ii) whether duplicative facilities are
8	necessary or desirable.
9	(b) Report.—Not later than 1 year after the date of
10	enactment of this Act, the Secretary shall submit to Con-
11	gress a report that describes the results of the study con-
12	ducted under subsection (a).
10	CEC 1900 DOE CELIDY OF CECHDIES ACCEPTION
13	SEC. 1309. DOE STUDY OF SECURITY ATTRIBUTES OF
13 14	SMART GRID SYSTEMS.
14 15	SMART GRID SYSTEMS.
14 15 16	SMART GRID SYSTEMS. (a) DOE STUDY.—The Secretary shall, within 18
14 15 16 17	SMART GRID SYSTEMS. (a) DOE STUDY.—The Secretary shall, within 18 months after the date of enactment of this Act, submit a
14 15 16 17	SMART GRID SYSTEMS. (a) DOE STUDY.—The Secretary shall, within 18 months after the date of enactment of this Act, submit a report to Congress that provides a quantitative assessment and determination of the existing and potential impacts of
14 15 16 17 18	SMART GRID SYSTEMS. (a) DOE STUDY.—The Secretary shall, within 18 months after the date of enactment of this Act, submit a report to Congress that provides a quantitative assessment and determination of the existing and potential impacts of the deployment of Smart Grid systems on improving the
14 15 16 17 18	SMART GRID SYSTEMS. (a) DOE STUDY.—The Secretary shall, within 18 months after the date of enactment of this Act, submit a report to Congress that provides a quantitative assessment and determination of the existing and potential impacts of the deployment of Smart Grid systems on improving the
14 15 16 17 18 19 20	SMART GRID SYSTEMS. (a) DOE STUDY.—The Secretary shall, within 18 months after the date of enactment of this Act, submit a report to Congress that provides a quantitative assessment and determination of the existing and potential impacts of the deployment of Smart Grid systems on improving the security of the Nation's electricity infrastructure and oper-
14 15 16 17 18 19 20 21	smart grid systems. (a) DOE Study.—The Secretary shall, within 18 months after the date of enactment of this Act, submit a report to Congress that provides a quantitative assessment and determination of the existing and potential impacts of the deployment of Smart Grid systems on improving the security of the Nation's electricity infrastructure and operating capability. The report shall include but not be limited
14 15 16 17 18 19 20 21	smart GRID Systems. (a) DOE STUDY.—The Secretary shall, within 18 months after the date of enactment of this Act, submit a report to Congress that provides a quantitative assessment and determination of the existing and potential impacts of the deployment of Smart Grid systems on improving the security of the Nation's electricity infrastructure and operating capability. The report shall include but not be limited to specific recommendations on each of the following:

1	(2) How smart grid systems can help in restor-
2	ing the integrity of the Nation's electricity system
3	subsequent to disruptions.

- (3) How smart grid systems can facilitate nationwide, interoperable emergency communications and control of the Nation's electricity system during times of localized, regional, or nationwide emergency.
- (4) What risks must be taken into account that smart grid systems may, if not carefully created and managed, create vulnerability to security threats of any sort, and how such risks may be mitigated.
- 12 (b) Consultation.—The Secretary shall consult with 13 other Federal agencies in the development of the report 14 under this section, including but not limited to the Sec-15 retary of Homeland Security, the Federal Energy Regu-16 latory Commission, and the Electric Reliability Organiza-17 tion certified by the Commission under section 215(c) of 18 the Federal Power Act (16 U.S.C. 8240) as added by section 19 1211 of the Energy Policy Act of 2005 (Public Law 109– 20 58; 119 Stat. 941).

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TITLE XIV—RENEWABLE

1 ELECTRICITY STANDARD 2 3 SEC. 1401. RENEWABLE ELECTRICITY STANDARD. (a) In General.—Title VI of the Public Utility Regu-4 latory Policies Act of 1978 is amended by adding at the 5 end the following: 6 7 "SEC. 610. RENEWABLE ELECTRICITY STANDARD. 8 "(a) DEFINITIONS.—For purposes of this section: 9 "(1) BIOMASS.— "(A) In General.—The term biomass' 10 11 means each of the following: 12 "(i) Cellulosic (plant fiber) organic 13 materials from a plant that is planted for 14 the purpose of being used to produce energy. 15 "(ii) Nonhazardous, plant or algal 16 matter that is derived from any of the fol-17 lowing: 18 "(I) An agricultural crop, crop 19 byproduct or residue resource. 20 "(II) Waste such as landscape or 21 right-of-way trimmings (but not in-22 cluding municipal solid waste, recycla-23 ble postconsumer waste paper, painted, 24 treated, or pressurized wood, wood con-25 taminated with plastic or metals).

1	"(iii) Animal waste or animal byprod-
2	ucts.
3	"(iv) Landfill methane.
4	"(B) National forest lands and cer-
5	TAIN OTHER PUBLIC LANDS.—With respect to or-
6	ganic material removed from National Forest
7	System lands or from public lands administered
8	by the Secretary of the Interior, the term bio-
9	mass' covers only organic material from (i) eco-
10	logical forest restoration; (ii) pre-commercial
11	thinnings; (iii) brush; (iv) mill residues; and (v)
12	slash.
13	"(C) Exclusion of certain federal
14	${\it LANDS.} \hbox{Notwith standing} subparagraph (B),$
15	material or matter that would otherwise qualify
16	as biomass are not included in the term biomass
17	if they are located on the following Federal
18	lands:
19	"(i) Federal land containing old
20	growth forest or late successional forest un-
21	less the Secretary of the Interior or the Sec-
22	retary of Agriculture determines that the re-
23	moval of organic material from such land is
24	appropriate for the applicable forest type
25	and maximizes the retention of late-succes-

1	sional and large and old growth trees, late-
2	successional and old growth forest structure,
3	and late-successional and old growth forest
4	composition.
5	"(ii) Federal land on which the re-
6	moval of vegetation is prohibited, including
7	components of the National Wilderness
8	Preservation System.
9	"(iii) Wilderness Study Areas.
10	"(iv) Inventoried roadless areas.
11	"(v) Components of the National Land-
12	scape Conservation System.
13	"(vi) National Monuments.
14	"(2) Eligible facility.—The term 'eligible fa-
15	cility' means—
16	"(A) a facility for the generation of electric
17	energy from a renewable energy resource that is
18	placed in service on or after January 1, 2001; or
19	"(B) a repowering or cofiring increment.
20	"(3) Existing facility.—The term 'existing fa-
21	cility' means a facility for the generation of electric
22	energy from a renewable energy resource that is not
23	an eligible facility.
24	"(4) Incremental hydropower.—The term
25	'incremental hudropower' means additional genera-

1	tion that is achieved from increased efficiency or ad-
2	ditions of capacity made on or after January 1, 2001,
3	or the effective date of an existing applicable State re-
4	newable portfolio standard program at a hydroelectric
5	facility that was placed in service before that date.
6	"(5) Indian Land.—The term 'Indian land'
7	means—
8	"(A) any land within the limits of any In-
9	dian reservation, pueblo, or rancheria;
10	"(B) any land not within the limits of any
11	Indian reservation, pueblo, or rancheria title to
12	which was on the date of enactment of this para-
13	graph either held by the United States for the
14	benefit of any Indian tribe or individual or held
15	by any Indian tribe or individual subject to re-
16	striction by the United States against alienation;
17	"(C) any dependent Indian community; or
18	"(D) any land conveyed to any Alaska Na-
19	tive corporation under the Alaska Native Claims
20	Settlement Act.
21	"(6) Indian tribe".—The term 'Indian tribe'
22	means any Indian tribe, band, nation, or other orga-
23	nized group or community, including any Alaskan
24	Native village or regional or village corporation as
25	defined in or established pursuant to the Alaska Na-

1	tive Claims Settlement Act (43 U.S.C. 1601 et seq.),
2	which is recognized as eligible for the special pro-
3	grams and services provided by the United States to
4	Indians because of their status as Indians.
5	"(7) Renewable energy.—The term 'renewable
6	energy' means electric energy generated by a renew-
7	able energy resource.
8	"(8) Renewable energy resource.—The
9	term 'renewable energy resource' means solar, wind,
10	ocean, tidal, geothermal energy, biomass, landfill gas,
11	incremental hydropower, or hydrokinetic energy.
12	"(9) Repowering or cofiring increment.—
13	The term 'repowering or cofiring increment' means—
14	"(A) the additional generation from a
15	modification that is placed in service on or after
16	January 1, 2001, to expand electricity produc-
17	tion at a facility used to generate electric energy
18	from a renewable energy resource;
19	"(B) the additional generation above the av-
20	erage generation in the 3 years preceding the
21	date of enactment of this section at a facility
22	used to generate electric energy from a renewable
23	energy resource or to cofire biomass that was
24	placed in service before the date of enactment of
25	this section: or

1 "(C) the portion of the electric generation 2 from a facility placed in service on or after Jan-3 uary 1, 2001, or a modification to a facility 4 placed in service before the date of enactment of 5 this section made on or after January 1, 2001, 6 associated with cofiring biomass.

> "(10) RETAIL ELECTRIC SUPPLIER.—(A) The term 'retail electric supplier' means a person that sells electric energy to electric consumers (other than consumers in Hawaii) that sold not less than 1,000,000 megawatt-hours of electric energy to electric consumers for purposes other than resale during the preceding calendar year. For purposes of this section, a person that sells electric energy to electric consumers that, in combination with the sales of any affiliate organized after the date of enactment of this section, sells not less that 1,000,000 megawatt hours of electric energy to consumers for purposes other than resale shall qualify as a retail electric supplier. For purposes of this paragraph, sales by any person to a parent company or to other affiliates of such person shall not be treated as sales to electric consumers.

> "(B) Such term does not include the United States, a State or any political subdivision of a State, or any agency, authority, or instrumentality of any

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one or more of the foregoing, or a rural electric cooperative, except that a political subdivision of a State, or an agency, authority or instrumentality of the United States, a State or a political subdivision of a State, or a rural electric cooperative that sells electric energy to electric consumers or any other entity that sells electric energy to electric consumers that would not otherwise qualify as a retail electric supplier shall be deemed a retail electric supplier if such entity notifies the Secretary that it voluntarily agrees to participate in the Federal renewable electricity standard program.

"(11) Retail electric supplier's base amount' means the total amount of electric energy sold by the retail electric supplier, expressed in terms of kilowatt hours, to electric customers for purposes other than resale during the most recent calendar year for which information is available, excluding—

"(A) electric energy that is not incremental hydropower generated by a hydroelectric facility; and

"(B) electricity generated through the incineration of municipal solid waste.

1	"(b) Compliance.—For each calendar year beginning
2	in calendar year 2010, each retail electric supplier shall
3	meet the requirements of subsection (c) by submitting to the
4	Secretary, not later than April 1 of the following calendar
5	year, one or more of the following:
6	"(1) Federal renewable energy credits issued
7	under subsection (e).
8	"(2) Federal energy efficiency credits issued
9	under subsection (i), except that Federal energy effi-
10	ciency credits may not be used to meet more than 27
11	percent of the requirements of subsection (c) in any
12	calendar year. Energy efficiency credits may only be
13	used for compliance in a State where the Governor
14	has petitioned the Secretary pursuant to subjection
15	(i)(2).
16	"(3) Certification of the renewable energy gen-
17	erated and electricity savings pursuant to the funds
18	associated with State compliance payments as speci-
19	fied in subsection $(e)(3)(G)$.
20	"(4) Alternative compliance payments pursuant
21	to subsection (j).
22	"(c) Required Annual Percentage.—For calendar
23	years 2010 through 2039, the required annual percentage
24	of the retail electric supplier's base amount that shall be

25 generated from renewable energy resources, or otherwise

- 1 credited towards such percentage requirement pursuant to
- 2 subsection (d), shall be the percentage specified in the fol-

Required annual

3 lowing table:

	Requirea annual
	"Calendar Years percentage
	2010
	2011
	2012
	2013
	2014
	2016
	2017
	2018
	2019
	2020 and thereafter through 2039
4	"(d) Renewable Energy and Energy Efficiency
5	CREDITS.—(1) A retail electric supplier may satisfy the re-
6	quirements of subsection (b)(1) through the submission of
7	Federal renewable energy credits—
8	"(A) issued to the retail electric supplier under
9	subsection (e);
10	"(B) obtained by purchase or exchange under
11	subsection (f) or (g); or
12	"(C) borrowed under subsection (h).
13	"(2) A retail electric supplier may satisfy the require-
14	$ments\ of\ subsection\ (b)(2)\ through\ the\ submission\ of\ Federal$
15	energy efficiency credits issued to the retail electric supplier
16	obtained by purchase or exchange pursuant to subsection
17	(i).

"(3) A Federal renewable energy credit may be counted

19 toward compliance with subsection (b)(1) only once. A Fed-

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1	eral energy efficiency credit may be counted toward compli-
2	ance with subsection $(b)(2)$ only once.
3	"(e) Issuance of Federal Renewable Energy
4	CREDITS.—(1) The Secretary shall establish by rule, not
5	later than 1 year after the date of enactment of this section,
6	a program to verify and issue Federal renewable energy
7	credits to generators of renewable energy, track their sale,
8	exchange and retirement and to enforce the requirements
9	of this section. To the extent possible, in establishing such
10	program, the Secretary shall rely upon existing and emerg-
11	ing State or regional tracking systems that issue and track
12	non-Federal renewable energy credits.
13	"(2) An entity that generates electric energy through
14	the use of a renewable energy resource may apply to the
15	Secretary for the issuance of renewable energy credits. The
16	applicant must demonstrate that the electric energy will be
17	transmitted onto the grid or, in the case of a generation
18	offset, that the electric energy offset would have otherwise
19	been consumed on site. The application shall indicate—
20	"(A) the type of renewable energy resource used
21	to produce the electricity;
22	"(B) the location where the electric energy was
23	produced; and
24	"(C) any other information the Secretary deter-
25	mines appropriate.

- 1 "(3)(A) Except as provided in subparagraphs (B), (C),
- 2 and (D), the Secretary shall issue to a generator of electric
- 3 energy one Federal renewable energy credit for each kilo-
- 4 watt hour of electric energy generated by the use of a renew-
- 5 able energy resource at an eligible facility.
- 6 "(B) For purpose of compliance with this section, Fed-
- 7 eral renewable energy credits for incremental hydropower
- 8 shall be based, on the increase in average annual generation
- 9 resulting from the efficiency improvements or capacity ad-
- 10 ditions. The incremental generation shall be calculated
- 11 using the same water flow information used to determine
- 12 a historic average annual generation baseline for the hydro-
- 13 electric facility and certified by the Secretary or the Federal
- 14 Energy Regulatory Commission. The calculation of the Fed-
- 15 eral renewable energy credits for incremental hydropower
- 16 shall not be based on any operational changes at the hydro-
- 17 electric facility not directly associated with the efficiency
- 18 improvements or capacity additions.
- 19 "(C) The Secretary shall issue 2 renewable energy cred-
- 20 its for each kilowatt hour of electric energy generated and
- 21 supplied to the grid in that calendar year through the use
- 22 of a renewable energy resource at an eligible facility located
- 23 on Indian land. For purposes of this paragraph, renewable
- 24 energy generated by biomass cofired with other fuels is eligi-

- 1 ble for two credits only if the biomass was grown on such
- 2 land.
- 3 "(D) For electric energy generated by a renewable en-
- 4 ergy resource at an on-site eligible facility no larger than
- 5 one megawatt in capacity and used to offset part or all
- 6 of the customer's requirements for electric energy, the Sec-
- 7 retary shall issue 3 renewable energy credits to such cus-
- 8 tomer for each kilowatt hour generated.
- 9 "(E) In the case of an on-site eligible facility on In-
- 10 dian land no more than 3 credits per kilowatt hour may
- 11 be issued.
- 12 "(F) If both a renewable energy resource and a non-
- 13 renewable energy resource are used to generate the electric
- 14 energy, the Secretary shall issue the Federal renewable en-
- 15 ergy credits based on the proportion of the renewable energy
- 16 resources used.
- 17 "(G) When a generator has sold electric energy gen-
- 18 erated through the use of a renewable energy resource to
- 19 a retail electric supplier under a contract for power from
- 20 an existing facility, and the contract has not determined
- 21 ownership of the Federal renewable energy credits associ-
- 22 ated with such generation, the Secretary shall issue such
- 23 Federal renewable energy credits to the retail electric sup-
- 24 plier for the duration of the contract.

- 1 "(H) Payments made by a retail electricity supplier,
- 2 directly or indirectly, to a State for compliance with a
- 3 State renewable portfolio standard program, or for an alter-
- 4 native compliance mechanism, shall be valued at one credit
- 5 per kilowatt hour for the purpose of subsection (b)(2) based
- 6 on the amount of electric energy generation from renewable
- 7 resources and electricity savings up to 27 percent of the util-
- 8 ity's requirement that results from those payments.
- 9 "(f) Existing Facilities.—The Secretary shall en-
- 10 sure that a retail electric supplier that acquires Federal re-
- 11 newable energy credits associated with the generation of re-
- 12 newable energy from an existing facility may use such cred-
- 13 its for purpose of its compliance with subsection (b)(1).
- 14 Such credits may not be sold, exchanged, or transferred for
- 15 the purpose of compliance by another retail electric sup-
- 16 plier.
- 17 "(g) Renewable Energy Credit Trading.—(1) A
- 18 Federal renewable energy credit, may be sold, transferred
- 19 or exchanged by the entity to whom issued or by any other
- 20 entity who acquires the Federal renewable energy credit, ex-
- 21 cept for those renewable energy credits from existing facili-
- 22 ties. A Federal renewable energy credit for any year that
- 23 is not submitted to satisfy the minimum renewable genera-
- 24 tion requirement of subsection (c) for that year may be car-

- 1 ried forward for use pursuant to subsection (b)(1) within
- 2 the next 3 years.
- 3 "(2) A Federally owned or cooperatively owned utility,
- 4 or a State or subdivision thereof, that is not a retail electric
- 5 supplier that generates electric energy by the use of a renew-
- 6 able energy resource at an eligible facility may only sell,
- 7 transfer or exchange a Federal renewable energy credit to
- 8 a cooperatively owned utility or an agency, authority or
- 9 instrumentality of a State or political subdivision of a
- 10 State that is a retail electric supplier that has acquired the
- 11 electric energy associated with the credit.
- 12 "(3) The Secretary may delegate to an appropriate
- 13 market-making entity the administration of a national
- 14 tradeable renewable energy credit market and a nation en-
- 15 ergy efficiency credit market for purposes of creating a
- 16 transparent national market for the sale or trade of renew-
- 17 able energy credits and a transparent national market for
- 18 the sale or trade of Federal energy efficiency credits.
- 19 "(h) Renewable Energy Credit Borrowing.—At
- 20 any time before the end of calendar year 2012, a retail elec-
- 21 tric supplier that has reason to believe it will not be able
- 22 to fully comply with subsection (b) may—
- "(1) submit a plan to the Secretary dem-
- onstrating that the retail electric supplier will earn
- 25 sufficient Federal renewable energy credits and Fed-

1	eral energy efficiency credits within the next 3 cal-
2	endar years which, when taken into account, will en-
3	able the retail electric supplier to meet the require-
4	ments of subsection (b) for calendar year 2012 and
5	the subsequent calendar years involved; and
6	"(2) upon the approval of the plan by the Sec-
7	retary, apply Federal renewable energy credits and
8	Federal energy efficiency credits that the plan dem-
9	onstrates will be earned within the next 3 calendar
10	years to meet the requirements of subsection (b) for
11	each calendar year involved.
12	The retail electric supplier must repay all of the borrowed
13	Federal renewable energy credits and Federal energy effi-
14	ciency credits by submitting an equivalent number of Fed-
15	eral renewable energy credits and Federal energy efficiency
16	credits, in addition to those otherwise required under sub-
17	section (b), by calendar year 2020 or any earlier deadlines
18	specified in the approved plan. Failure to repay the bor-
19	rowed Federal renewable energy credits and Federal energy
20	efficiency credits shall subject the retail electric supplier to
21	civil penalties under subsection (i) for violation of the re-
22	quirements of subsection (b) for each calendar year in-
23	volved.
24	"(i) Energy Efficiency Credits.—
25	"(1) Definitions.—In this subsection—

1	"(A) Customer facility savings.—The
2	term 'customer facility savings' means a reduc-
3	tion in end-use electricity at a facility of an end-
4	use consumer of electricity served by a retail
5	electric supplier, as compared to—
6	"(i) consumption at the facility during
7	a base year;
8	"(ii) in the case of new equipment (re-
9	gardless of whether the new equipment re-
10	places existing equipment at the end of the
11	useful life of the existing equipment), con-
12	sumption by the new equipment of average
13	efficiency; or
14	"(iii) in the case of a new facility, con-
15	sumption at a reference facility.
16	"(B) Electricity savings.—The term
17	'electricity savings' means—
18	"(i) customer facility savings of elec-
19	tricity consumption adjusted to reflect any
20	associated increase in fuel consumption at
21	$the\ facility;$
22	"(ii) reductions in distribution system
23	losses of electricity achieved by a retail elec-
24	tricity distributor, as compared to losses
25	during the base years;

1	"(iii) the output of new combined heat
2	and power systems, to the extent provided
3	under paragraph (5); and
4	"(iv) recycled energy savings.
5	"(C) Qualifying electricity savings.—
6	The term 'qualifying electricity savings' means
7	electricity saving that meet the measurement and
8	verification requirements of paragraph (4).
9	"(D) Recycled energy savings.—The
10	term 'recycled energy savings' means a reduction
11	in electricity consumption that is attributable to
12	electrical or mechanical power, or both, produced
13	by modifying an industrial or commercial sys-
14	tem that was in operation before July 1, 2007,
15	in order to recapture energy that would other-
16	wise be wasted.
17	"(2) Petition.—The Governor of a State may
18	petition the Secretary to allow up to 27 percent of the
19	requirements of a retail electric supplier under sub-
20	section (c) in the State to be met by submitting Fed-
21	eral energy efficiency credits issued pursuant to this
22	subsection.
23	"(3) Issuance of credits.—(A) Upon petition
24	by the Governor, the Secretary shall issue energy effi-
25	ciency credits for electricity savings described in sub-

1	paragraph (B) achieved in States described in para-
2	graph (2) in accordance with this subsection.
3	"(B) In accordance with regulations promul-
4	gated by the Secretary, the Secretary shall issue cred-
5	its for—
6	"(i) qualified electricity savings achieved by
7	a retail electric supplier in a calendar year; and
8	"(ii) qualified electricity savings achieved
9	by other entities if—
10	"(I) the measures used to achieve the
11	qualifying electricity savings were installed
12	or place in operation by the entity seeking
13	the credit or the designated agent of the en-
14	tity; and
15	"(II) no retail electric supplier paid a
16	substantial portion of the cost of achieving
17	the qualified electricity savings (unless the
18	retail electric supplier has waived any enti-
19	tlement to the credit).
20	"(4) Measurement and verification of
21	ELECTRICITY SAVINGS.—Not later than June 30,
22	2009, the Secretary shall promulgate regulations re-
23	garding the measurement and verification of elec-
24	tricity savings under this subsection, including regu-
25	lations covering—

1	"(A) procedures and standards for defining
2	and measuring electricity savings that will be el-
3	igible to receive credits under paragraph (3),
4	which shall—
5	"(i) specify the types of energy effi-
6	ciency and energy conservation that will be
7	eligible for the credits;
8	"(ii) require that energy consumption
9	for customer facilities or portions of facili-
10	ties in the applicable base and current
11	years be adjusted, as appropriate, to ac-
12	count for changes in weather, level of pro-
13	duction, and building area;
14	"(iii) account for the useful life of elec-
15	tricity savings measures;
16	"(iv) include specified electricity sav-
17	ings values for specific, commonly-used effi-
18	ciency measures;
19	"(v) specify the extent to which elec-
20	tricity savings attributable to measures car-
21	ried out before the date of enactment of this
22	section are eligible to receive credits under
23	this subsection; and
24	"(vi) exclude electricity savings that
25	(I) are not properly attributable to meas-

1	ures carried out by the entity seeking the
2	credit; or (II) have already been credited
3	under this section to another entity;
4	"(B) procedures and standards for third-
5	party verification of reported electricity savings;
6	and
7	"(C) such requirements for information, re-
8	ports, and access to facilities as may be nec-
9	essary to carry out this subsection.
10	"(5) Combined heat and power.—Under regu-
11	lations promulgated by the Secretary, the increment
12	of electricity output of a new combined heat and
13	power system that is attributable to the higher effi-
14	ciency of the combined system (as compared to the ef-
15	ficiency of separate production of the electric and
16	thermal outputs), shall be considered electricity sav-
17	ings under this subsection.
18	"(j) Enforcement.—A retail electric supplier that
19	does not comply with subsection (b) shall be liable for the
20	payment of a civil penalty. That penalty shall be calculated
21	on the basis of the number of kilowatt-hours represented by
22	the retail electric supplier's failure to comply with sub-
23	section (b), multiplied by the lesser of 4.5 cents (adjusted
24	for inflation for such calendar year, based on the Gross Do-
25	mestic Product Implicit Price Deflator) or 300 percent of

1	the average market value of Federal renewable energy cred-
2	its and energy efficiency credits for the compliance period.
3	Any such penalty shall be due and payable without demand
4	to the Secretary as provided in the regulations issued under
5	subsection (e).
6	"(k) Alternative Compliance Payments.—The
7	Secretary shall accept payment equal to the lesser of:
8	"(1) 200 percent of the average market value of
9	Federal renewable energy credits and Federal energy
10	efficiency credits for the applicable compliance period;
11	or
12	"(2) 2.5 cents per kilowatt hour adjusted on Jan-
13	uary 1 of each year following calendar year 2006
14	based on the Gross Domestic Product Implicit Price
15	Deflator,
16	as a means of compliance under subsection $(b)(4)$
17	"(l) Information Collection.—The Secretary may
18	collect the information necessary to verify and audit—
19	"(1) the annual renewable energy generation of
20	any retail electric supplier, Federal renewable energy
21	credits submitted by a retail electric supplier pursu-
22	ant to subsection (b)(1) and Federal energy efficiency
23	credits submitted by a retail electric supplier pursu-
24	ant to subsection $(b)(2)$;

1	"(2) annual electricity savings achieved pursu-
2	ant to subsection (i);
3	"(3) the validity of Federal renewable energy
4	credits submitted for compliance by a retail electric
5	supplier to the Secretary; and
6	"(4) the quantity of electricity sales of all retail
7	$electric\ suppliers.$
8	"(m) Environmental Savings Clause.—Incre-
9	mental hydropower shall be subject to all applicable envi-
10	ronmental laws and licensing and regulatory requirements.
11	"(n) State Programs.—(1) Nothing in this section
12	diminishes any authority of a State or political subdivision
13	of a State to—
14	"(A) adopt or enforce any law or regu-
15	lation respecting renewable energy or energy
16	efficiency, including but not limited to pro-
17	grams that exceed the required amount of
18	renewable energy or energy efficiency under
19	this section, or
20	"(B) regulate the acquisition and dis-
21	position of Federal renewable energy credits
22	and Federal energy efficiency credits by re-
23	tail electric suppliers.
24	No law or regulation referred to in subparagraph (A)
25	shall relieve any person of any requirement otherwise

- 1 applicable under this section. The Secretary, in con-
- 2 sultation with States having renewable energy pro-
- 3 grams and energy efficiency programs, shall preserve
- 4 the integrity of such State programs, including pro-
- 5 grams that exceed the required amount of renewable
- 6 energy and energy efficiency under this section, and
- 7 shall facilitate coordination between the Federal pro-
- 8 gram and State programs.
- 9 "(2) In the rule establishing the program under this
- 10 section, the Secretary shall incorporate common elements
- 11 of existing renewable energy and energy efficiency pro-
- 12 grams, including State programs, to ensure administrative
- 13 ease, market transparency and effective enforcement. The
- 14 Secretary shall work with the States to minimize adminis-
- 15 trative burdens and costs to retail electric suppliers.
- 16 "(o) Recovery of Costs.—An electric utility whose
- 17 sales of electric energy are subject to rate regulation, includ-
- 18 ing any utility whose rates are regulated by the Commis-
- 19 sion and any State regulated electric utility, shall not be
- 20 denied the opportunity to recover the full amount of the
- 21 prudently incurred incremental cost of renewable energy
- 22 and energy efficiency obtained to comply with the require-
- 23 ments of subsection (b). For purposes of this subsection, the
- 24 definitions in section 3 of this Act shall apply to the terms

1	electric utility, State regulated electric utility, State agen-
2	cy, Commission, and State regulatory authority.
3	"(p) Program Review.—The Secretary shall enter
4	into a contract with the National Academy of Sciences to
5	conduct a comprehensive evaluation of all aspects of the
6	program established under this section, within 8 years of
7	enactment of this section. The study shall include an eval-
8	uation of—
9	"(1) the effectiveness of the program in increas-
10	ing the market penetration and lowering the cost of
11	the eligible renewable energy and energy efficiency
12	technologies;
13	"(2) the opportunities for any additional tech-
14	nologies and sources of renewable energy and energy
15	efficiency emerging since enactment of this section;
16	"(3) the impact on the regional diversity and re-
17	liability of supply sources, including the power qual-
18	ity benefits of distributed generation;
19	"(4) the regional resource development relative to
20	renewable potential and reasons for any under invest-
21	ment in renewable resources; and
22	"(5) the net cost/benefit of the renewable elec-
23	tricity standard to the national and State economies,
24	including retail power costs, economic development
25	benefits of investment, avoided costs related to envi-

- 1 ronmental and congestion mitigation investments that
- 2 would otherwise have been required, impact on nat-
- 3 ural gas demand and price, effectiveness of green
- 4 marketing programs at reducing the cost of renewable
- 5 resources.
- 6 The Secretary shall transmit the results of the evaluation
- 7 and any recommendations for modifications and improve-
- 8 ments to the program to Congress not later than January
- 9 1, 2016.
- 10 "(q) State Renewable Energy and Energy Effi-
- 11 CIENCY ACCOUNT PROGRAM.—(1) There is established in
- 12 the Treasury a State renewable energy and energy efficiency
- 13 account program.
- "(2) All money collected by the Secretary from the al-
- 15 ternative compliance payments under subsection (k) shall
- 16 be deposited into the State renewable energy and energy ef-
- 17 ficiency account established pursuant to this subsection.
- 18 "(3) Proceeds deposited in the State renewable energy
- 19 and energy efficiency account shall be used by the Secretary,
- 20 subject to annual appropriations, for a program to provide
- 21 grants to the State agency responsible for administering a
- 22 fund to promote renewable energy generation and energy
- 23 efficiency for customers of the State, or an alternative agen-
- 24 cy designated by the State, or if no such agency exists, to
- 25 the State agency developing State energy conservation plans

- 1 under section 363 of the Energy Policy and Conservation
- 2 Act (42 U.S.C. 6322) for the purposes of promoting renew-
- 3 able energy production and providing energy assistance and
- 4 weatherization services to low-income consumers.
- 5 "(4) The Secretary may issue guidelines and criteria
- 6 for grants awarded under this subsection. At least 75 per-
- 7 cent of the funds provided to each State shall be used for
- 8 promoting renewable energy production and energy effi-
- 9 ciency through grants, production incentives or other state-
- 10 approved funding mechanisms. The funds shall be allocated
- 11 to the States on the basis of retail electric sales subject to
- 12 the Renewable electricity Standard under this section or
- 13 through voluntary participation. State agencies receiving
- 14 grants under this section shall maintain such records and
- 15 evidence of compliance as the Secretary may require.".
- 16 (b) Table of Contents.—The table of contents for
- 17 such title is amended by adding the following new item at
- 18 the end:

"Sec. 610. Federal renewable electricity standard".

- 19 (c) Sunset.—Section 610 of such title and the item
- 20 relating to such section 610 in the table of contents for such
- 21 title are each repealed as of December 31, 2039.

1	TITLE XV—CLEAN RENEWABLE
2	ENERGY AND CONSERVATION
3	TAX ACT OF 2007
4	SEC. 1500. SHORT TITLE; AMENDMENT OF 1986 CODE.
5	(a) Short Title.—This title may be cited as the
6	"Clean Renewable Energy and Conservation Tax Act of
7	2007".
8	(b) Amendment of 1986 Code.—Except as otherwise
9	expressly provided, whenever in this title an amendment
10	or repeal is expressed in terms of an amendment to, or re-
11	peal of, a section or other provision, the reference shall be
12	considered to be made to a section or other provision of the
13	Internal Revenue Code of 1986.
14	Subtitle A—Clean Renewable
15	Energy Production Incentives
16	PART I—PROVISIONS RELATING TO RENEWABLE
17	ENERGY
18	SEC. 1501. EXTENSION AND MODIFICATION OF RENEWABLE
19	ENERGY CREDIT.
20	(a) Extension of Credit.—Each of the following
21	provisions of section 45(d) (relating to qualified facilities)
22	is amended by striking "January 1, 2009" and inserting
23	"January 1, 2013":
24	(1) Paragraph (1).
25	(2) Clauses (i) and (ii) of paragraph $(2)(A)$

1	(3) Clauses (i)(I) and (ii) of paragraph (3)(A).
2	(4) Paragraph (4).
3	(5) Paragraph (5).
4	(6) Paragraph (6).
5	(7) Paragraph (7).
6	(8) Subparagraphs (A) and (B) of paragraph
7	(9).
8	(b) Modification of Credit Phaseout.—
9	(1) Repeal of phaseout.—Subsection (b) of
10	section 45 is amended—
11	(A) by striking paragraph (1), and
12	(B) by striking "the 8 cent amount in para-
13	graph (1)," in paragraph (2) thereof.
14	(2) Limitation based on investment in fa-
15	CILITY.—Subsection (b) of section 45 is amended by
16	inserting before paragraph (2) the following new
17	paragraph:
18	"(1) Limitation based on investment in fa-
19	CILITY.—
20	"(A) In General.—In the case of any
21	qualified facility originally placed in service
22	after December 31, 2008, the amount of the cred-
23	it determined under subsection (a) for any tax-
24	able year with respect to electricity produced at
25	such facility shall not exceed the product of—

1	"(i) the applicable percentage with re-
2	spect to such facility, multiplied by
3	"(ii) the eligible basis of such facility.
4	"(B) Carryforward of unused limita-
5	TION AND EXCESS CREDIT.—
6	"(i) Unused limitation.—If the limi-
7	tation imposed under subparagraph (A)
8	with respect to any facility for any taxable
9	year exceeds the prelimitation credit for
10	such facility for such taxable year, the limi-
11	tation imposed under subparagraph (A)
12	with respect to such facility for the suc-
13	ceeding taxable year shall be increased by
14	the amount of such excess.
15	"(ii) Excess credit.—If the
16	prelimitation credit with respect to any fa-
17	cility for any taxable year exceeds the limi-
18	tation imposed under subparagraph (A)
19	with respect to such facility for such taxable
20	year, the credit determined under subsection
21	(a) with respect to such facility for the suc-
22	ceeding taxable year (determined before the
23	application of subparagraph (A) for such
24	succeeding taxable year) shall be increased
25	by the amount of such excess. With respect

1	to any facility, no amount may carried for-
2	ward under this clause to any taxable year
3	beginning after the 10-year period described
4	in subsection $(a)(2)(A)(ii)$ with respect to
5	such facility.
6	"(iii) Prelimitation credit.—The
7	term 'prelimitation credit' with respect to
8	any facility for a taxable year means the
9	credit determined under subsection (a) with
10	respect to such facility for such taxable
11	year, determined without regard to sub-
12	paragraph (A) and after taking into ac-
13	count any increase for such taxable year
14	under clause (ii).
15	"(C) Applicable percentage.—For pur-
16	poses of this paragraph—
17	"(i) In general.—The term 'applica-
18	ble percentage' means, with respect to any
19	facility, the appropriate percentage pre-
20	scribed by the Secretary for the month in
21	which such facility is originally placed in
22	service.
23	"(ii) Method of prescribing appli-
24	Cable Percentages.—The applicable per-
25	centages prescribed by the Secretary for any

1	month under clause (i) shall be percentages
2	which yield over a 10-year period amounts
3	of limitation under subparagraph (A) which
4	have a present value equal to 35 percent of
5	the eligible basis of the facility.
6	"(iii) Method of discounting.—The
7	present value under clause (ii) shall be de-
8	termined—
9	"(I) as of the last day of the 1st
10	year of the 10-year period referred to
11	in clause (ii),
12	"(II) by using a discount rate
13	equal to the greater of 110 percent of
14	the Federal long-term rate as in effect
15	under section 1274(d) for the month
16	preceding the month for which the ap-
17	plicable percentage is being prescribed,
18	or 4.5 percent, and
19	"(III) by taking into account the
20	limitation under subparagraph (A) for
21	any year on the last day of such year.
22	"(D) Eligible Basis.—For purposes of
23	this paragraph—

1	"(i) In General.—The term 'eligible
2	basis' means, with respect to any facility,
3	the sum of—
4	"(I) the basis of such facility de-
5	termined as of the time that such facil-
6	ity is originally placed in service, and
7	"(II) the portion of the basis of
8	any shared qualified property which is
9	properly allocable to such facility
10	under clause (ii).
11	"(ii) Rules for allocation.—For
12	purposes of subclause (II) of clause (i), the
13	basis of shared qualified property shall be
14	allocated among all qualified facilities
15	which are projected to be placed in service
16	and which require utilization of such prop-
17	erty in proportion to projected generation
18	from such facilities.
19	"(iii) Shared qualified prop-
20	ERTY.—For purposes of this paragraph, the
21	term 'shared qualified property' means,
22	with respect to any facility, any property
23	described in section 168(e)(3)(B)(vi)—

1	"(I) which a qualified facility will
2	require for utilization of such facility,
3	and
4	"(II) which is not a qualified fa-
5	cility.
6	"(iv) Special rule relating to
7	GEOTHERMAL FACILITIES.—In the case of
8	any qualified facility using geothermal en-
9	ergy to produce electricity, the basis of such
10	facility for purposes of this paragraph shall
11	be determined as though intangible drilling
12	and development costs described in section
13	263(c) were capitalized rather than ex-
14	pensed.
15	"(E) Special rule for first and last
16	YEAR OF CREDIT PERIOD.—In the case of any
17	taxable year any portion of which is not within
18	the 10-year period described in subsection
19	(a)(2)(A)(ii) with respect to any facility, the
20	amount of the limitation under subparagraph
21	(A) with respect to such facility shall be reduced
22	by an amount which bears the same ratio to the
23	amount of such limitation (determined without
24	regard to this subparagraph) as such portion of

1	the taxable year which is not within such period
2	bears to the entire taxable year.
3	"(F) Election to treat all facilities
4	PLACED IN SERVICE IN A YEAR AS 1 FACILITY.—
5	At the election of the taxpayer, all qualified fa-
6	cilities which are part of the same project and
7	which are placed in service during the same cal-
8	endar year shall be treated for purposes of this
9	section as 1 facility which is placed in service at
10	the mid-point of such year or the first day of the
11	following calendar year.".
12	(c) Effective Date.—
13	(1) In general.—Except as provided in para-
14	graph (2), the amendments made by this section shall
15	apply to property originally placed in service after
16	December 31, 2008.
17	(2) Repeal of credit phaseout.—The
18	amendments made by subsection (b)(1) shall apply to
19	taxable years ending after December 31, 2008.
20	SEC. 1502. PRODUCTION CREDIT FOR ELECTRICITY PRO-
21	DUCED FROM MARINE RENEWABLES.
22	(a) In General.—Paragraph (1) of section 45(c) (re-
23	lating to resources) is amended by striking "and" at the
24	end of subparagraph (G), by striking the period at the end

1	of subparagraph (H) and inserting ", and", and by adding
2	at the end the following new subparagraph:
3	"(I) marine and hydrokinetic renewable en-
4	ergy.".
5	(b) Marine Renewables.—Subsection (c) of section
6	45 is amended by adding at the end the following new para-
7	graph:
8	"(10) Marine and hydrokinetic renewable
9	ENERGY.—
10	"(A) In General.—The term 'marine and
11	hydrokinetic renewable energy' means energy de-
12	rived from—
13	"(i) waves, tides, and currents in
14	oceans, estuaries, and tidal areas,
15	"(ii) free flowing water in rivers, lakes,
16	$and\ streams,$
17	"(iii) free flowing water in an irriga-
18	tion system, canal, or other man-made
19	channel, including projects that utilize non-
20	mechanical structures to accelerate the flow
21	of water for electric power production pur-
22	poses, or
23	"(iv) differentials in ocean temperature
24	(ocean thermal energy conversion).

1	"(B) Exceptions.—Such term shall not in-
2	clude any energy which is derived from any
3	source which utilizes a dam, diversionary struc-
4	ture (except as provided in subparagraph
5	(A)(iii)), or impoundment for electric power pro-
6	duction purposes.".
7	(c) Definition of Facility.—Subsection (d) of sec-
8	tion 45 is amended by adding at the end the following new
9	paragraph:
10	"(11) Marine and hydrokinetic renewable
11	ENERGY FACILITIES.—In the case of a facility pro-
12	ducing electricity from marine and hydrokinetic re-
13	newable energy, the term 'qualified facility' means
14	any facility owned by the taxpayer—
15	"(A) which has a nameplate capacity rat-
16	ing of at least 150 kilowatts, and
17	"(B) which is originally placed in service
18	on or after the date of the enactment of this
19	paragraph and before January 1, 2013.".
20	(d) Credit Rate.—Subparagraph (A) of section
21	45(b)(4) is amended by striking "or (9)" and inserting "(9),
22	or (11)".
23	(e) Coordination With Small Irrigation
24	Power.—Paragraph (5) of section 45(d), as amended by

1	this Act, is amended by striking "January 1, 2013" and
2	inserting "the date of the enactment of paragraph (11)".
3	(f) Effective Date.—The amendments made by this
4	section shall apply to electricity produced and sold after
5	the date of the enactment of this Act, in taxable years end-
6	ing after such date.
7	SEC. 1503. EXTENSION AND MODIFICATION OF ENERGY
8	CREDIT.
9	(a) Extension of Credit.—
10	(1) Solar energy property.—Paragraphs
11	(2)(A)(i)(II) and $(3)(A)(ii)$ of section 48(a) (relating
12	to energy credit) are each amended by striking "Jan-
13	uary 1, 2009" and inserting "January 1, 2017".
14	(2) Fuel cell property.—Subparagraph (E)
15	of section 48(c)(1) (relating to qualified fuel cell prop-
16	erty) is amended by striking "December 31, 2008"
17	and inserting "December 31, 2016".
18	(3) Microturbine property.—Subparagraph
19	(E) of section $48(c)(2)$ (relating to qualified microtur-
20	bine property) is amended by striking "December 31,
21	2008" and inserting "December 31, 2016".
22	(b) Allowance of Energy Credit Against Alter-
23	NATIVE MINIMUM TAX.—Subparagraph (B) of section
24	38(c)(4) (relating to specified credits) is amended by strik-
25	ing "and" at the end of clause (iii), by striking the period

1	at the end of clause (iv) and inserting ", and", and by add-
2	ing at the end the following new clause:
3	"(v) the credit determined under sec-
4	tion 46 to the extent that such credit is at-
5	tributable to the energy credit determined
6	under section 48.".
7	(c) Energy Credit for Combined Heat and
8	Power System Property.—
9	(1) In General.—Section 48(a)(3)(A) (defining
10	energy property) is amended by striking "or" at the
11	end of clause (iii), by inserting "or" at the end of
12	clause (iv), and by adding at the end the following
13	new clause:
14	"(v) combined heat and power system
15	property,".
16	(2) Combined Heat and Power system prop-
17	ERTY.—Section 48 (relating to energy credit; reforest-
18	ation credit) is amended by adding at the end the fol-
19	lowing new subsection:
20	"(d) Combined Heat and Power System Prop-
21	ERTY.—For purposes of subsection $(a)(3)(A)(v)$ —
22	"(1) Combined heat and power system prop-
23	ERTY.—The term 'combined heat and power system
24	property' means property comprising a system—

1	"(A) which uses the same energy source for
2	the simultaneous or sequential generation of elec-
3	trical power, mechanical shaft power, or both, in
4	combination with the generation of steam or
5	other forms of useful thermal energy (including
6	heating and cooling applications),
7	"(B) which produces—
8	"(i) at least 20 percent of its total use-
9	ful energy in the form of thermal energy
10	which is not used to produce electrical or
11	mechanical power (or combination thereof),
12	and
13	"(ii) at least 20 percent of its total
14	useful energy in the form of electrical or me-
15	chanical power (or combination thereof),
16	"(C) the energy efficiency percentage of
17	which exceeds 60 percent, and
18	"(D) which is placed in service before Janu-
19	ary 1, 2017.
20	"(2) Limitation.—
21	"(A) In general.—In the case of combined
22	heat and power system property with an elec-
23	trical capacity in excess of the applicable capac-
24	ity placed in service during the taxable year, the
25	credit under subsection (a)(1) (determined with-

1	out regard to this paragraph) for such year shall
2	be equal to the amount which bears the same
3	ratio to such credit as the applicable capacity
4	bears to the capacity of such property.
5	"(B) Applicable capacity.—For purposes
6	of subparagraph (A), the term 'applicable capac-
7	ity' means 15 megawatts or a mechanical energy
8	capacity of more than 20,000 horsepower or an
9	equivalent combination of electrical and mechan-
10	ical energy capacities.
11	"(C) Maximum capacity.—The term 'com-
12	bined heat and power system property' shall not
13	include any property comprising a system if
14	such system has a capacity in excess of 50
15	megawatts or a mechanical energy capacity in
16	excess of 67,000 horsepower or an equivalent
17	combination of electrical and mechanical energy
18	capacities.
19	"(3) Special rules.—
20	"(A) Energy efficiency percentage.—
21	For purposes of this subsection, the energy effi-
22	ciency percentage of a system is the fraction—
23	"(i) the numerator of which is the total
24	useful electrical, thermal, and mechanical
25	nower produced by the system at normal

1	operating rates, and expected to be con-
2	sumed in its normal application, and
3	"(ii) the denominator of which is the
4	lower heating value of the fuel sources for
5	the system.
6	"(B) Determinations made on btu
7	BASIS.—The energy efficiency percentage and the
8	percentages under paragraph (1)(B) shall be de-
9	termined on a Btu basis.
10	"(C) Input and output property not in-
11	CLUDED.—The term 'combined heat and power
12	system property' does not include property used
13	to transport the energy source to the facility or
14	to distribute energy produced by the facility.
15	"(4) Systems using biomass.—If a system is
16	designed to use biomass (within the meaning of para-
17	graphs (2) and (3) of section 45(c) without regard to
18	the last sentence of paragraph (3)(A)) for at least 90
19	percent of the energy source—
20	"(A) paragraph (1)(C) shall not apply, but
21	"(B) the amount of credit determined under
22	subsection (a) with respect to such system shall
23	not exceed the amount which bears the same
24	ratio to such amount of credit (determined with-
25	out regard to this paragraph) as the energy effi-

1	ciency percentage of such system bears to 60 per-
2	cent.".
3	(d) Increase of Credit Limitation for Fuel Cell
4	Property.—Subparagraph (B) of section $48(c)(1)$ is
5	amended by striking "\$500" and inserting "\$1,500".
6	(e) Public Electric Utility Property Taken
7	Into Account.—
8	(1) In General.—Paragraph (3) of section
9	48(a) is amended by striking the second sentence
10	thereof.
11	(2) Conforming amendments.—
12	(A) Paragraph (1) of section 48(c) is
13	amended by striking subparagraph (D) and re-
14	designating subparagraph (E) as subparagraph
15	(D).
16	(B) $Paragraph$ (2) of section $48(c)$ is
17	amended by striking subparagraph (D) and re-
18	$designating \ subparagraph \ (E) \ as \ subparagraph$
19	(D).
20	(f) Clerical Amendments.—Paragraphs (1)(B) and
21	(2)(B) of section 48(c) are each amended by striking "para-
22	graph (1)" and inserting "subsection (a)".
23	(g) Effective Date.—
24	(1) In general.—Except as otherwise provided
25	in this subsection, the amendments made by this sec-

- tion shall take effect on the date of the enactment of
 this Act.
 - (2) Allowance against alternative minimum tax.—The amendments made by subsection (b) shall apply to credits determined under section 46 of the Internal Revenue Code of 1986 in taxable years beginning after the date of the enactment of this Act and to carrybacks of such credits.
 - (3) COMBINED HEAT AND POWER AND FUEL CELL PROPERTY.—The amendments made by subsections (c) and (d) shall apply to periods after the date of the enactment of this Act, in taxable years ending after such date, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990).
 - (4) PUBLIC ELECTRIC UTILITY PROPERTY.—The amendments made by subsection (e) shall apply to periods after June 20, 2007, in taxable years ending after such date, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990).

1	SEC. 1504. EXTENSION AND MODIFICATION OF CREDIT FOR
2	RESIDENTIAL ENERGY EFFICIENT PROPERTY.
3	(a) Extension.—Section 25D(g) (relating to termi-
4	nation) is amended by striking "December 31, 2008" and
5	inserting "December 31, 2014".
6	(b) Maximum Credit for Solar Electric Prop-
7	ERTY.—
8	(1) In General.—Section $25D(b)(1)(A)$ (relat-
9	ing to maximum credit) is amended by striking
10	"\$2,000" and inserting "\$4,000".
11	(2) Conforming amendment.—Section
12	25D(e)(4)(A)(i) is amended by striking "\$6,667" and
13	inserting "\$13,334".
14	(c) Credit for Residential Wind Property.—
15	(1) In general.—Section $25D(a)$ (relating to
16	allowance of credit) is amended by striking "and" at
17	the end of paragraph (2), by striking the period at the
18	end of paragraph (3) and inserting ", and", and by
19	adding at the end the following new paragraph:
20	"(4) 30 percent of the qualified small wind en-
21	ergy property expenditures made by the taxpayer
22	during such year.".
23	(2) Limitation.—Section $25D(b)(1)$ (relating to
24	maximum credit) is amended by striking "and" at
25	the end of subparagraph (B), by striking the period
26	at the end of subparagraph (C) and inserting ".

1	and", and by adding at the end the following new
2	subparagraph:
3	"(D) \$500 with respect to each half kilowatt
4	of capacity (not to exceed \$4,000) of wind tur-
5	bines for which qualified small wind energy
6	property expenditures are made.".
7	(3) Qualified small wind energy property
8	EXPENDITURES.—
9	(A) In general.—Section 25D(d) (relating
10	to definitions) is amended by adding at the end
11	the following new paragraph:
12	"(4) Qualified small wind energy property
13	EXPENDITURE.—The term 'qualified small wind en-
14	ergy property expenditure' means an expenditure for
15	property which uses a wind turbine to generate elec-
16	tricity for use in connection with a dwelling unit lo-
17	cated in the United States and used as a residence by
18	the taxpayer.".
19	(B) NO DOUBLE BENEFIT.—Section
20	45(d)(1) (relating to wind facility) is amended
21	by adding at the end the following new sentence:
22	"Such term shall not include any facility with
23	respect to which any qualified small wind energy
24	property expenditure (as defined in subsection

1	(d)(4) of section 25D) is taken into account in
2	determining the credit under such section.".
3	(4) Maximum expenditures in case of joint
4	OCCUPANCY.—Section 25D(e)(4)(A) (relating to max-
5	imum expenditures) is amended by striking "and" at
6	the end of clause (ii), by striking the period at the
7	end of clause (iii) and inserting ", and", and by add-
8	ing at the end the following new clause:
9	"(iv) \$1,667 in the case of each half
10	kilowatt of capacity of wind turbines for
11	which qualified small wind energy property
12	expenditures are made.".
13	(d) Credit Allowed Against Alternative Min-
14	IMUM TAX.—
15	(1) In general.—Subsection (c) of section 25D
16	is amended to read as follows:
17	"(c) Limitation Based on Amount of Tax;
18	Carryforward of Unused Credit.—
19	"(1) Limitation based on amount of tax.—
20	In the case of a taxable year to which section $26(a)(2)$
21	does not apply, the credit allowed under subsection
22	(a) for the taxable year shall not exceed the excess
23	of—

1	"(A) the sum of the regular tax liability (as
2	defined in section 26(b)) plus the tax imposed by
3	section 55, over
4	"(B) the sum of the credits allowable under
5	this subpart (other than this section) and section
6	27 for the taxable year.
7	"(2) Carryforward of unused credit.—
8	"(A) Rule for years in which all per-
9	SONAL CREDITS ALLOWED AGAINST REGULAR
10	AND ALTERNATIVE MINIMUM TAX.—In the case of
11	a taxable year to which section 26(a)(2) applies,
12	if the credit allowable under subsection (a) ex-
13	ceeds the limitation imposed by section $26(a)(2)$
14	for such taxable year reduced by the sum of the
15	credits allowable under this subpart (other than
16	this section), such excess shall be carried to the
17	succeeding taxable year and added to the credit
18	allowable under subsection (a) for such suc-
19	ceeding taxable year.
20	"(B) Rule for other years.—In the case
21	of a taxable year to which section 26(a)(2) does
22	not apply, if the credit allowable under sub-
23	section (a) exceeds the limitation imposed by
24	paragraph (1) for such taxable year, such excess

shall be carried to the succeeding taxable year

1	and added to the credit allowable under sub-
2	section (a) for such succeeding taxable year.".
3	(2) Conforming amendments.—
4	(A) Section $23(b)(4)(B)$ is amended by in-
5	serting "and section 25D" after "this section".
6	(B) Section $24(b)(3)(B)$ is amended by
7	striking "and 25B" and inserting ", 25B, and
8	25D".
9	(C) Section $25B(g)(2)$ is amended by strik-
10	ing "section 23" and inserting "sections 23 and
11	25D".
12	(D) Section 26(a)(1) is amended by striking
13	"and 25B" and inserting "25B, and 25D".
14	(e) Effective Dates.—
15	(1) In general.—Except as otherwise provided
16	in this subsection, the amendments made by this sec-
17	tion shall apply to expenditures after December 31,
18	2007.
19	(2) Allowance against alternative minimum
20	TAX.—
21	(A) In General.—The amendments made
22	by subsection (d) shall apply to taxable years be-
23	ginning after the date of the enactment of this
24	Act.

1	(B) Application of Egtrra sunset.—The
2	amendments made by subparagraphs (A) and
3	(B) of subsection $(d)(2)$ shall be subject to title
4	IX of the Economic Growth and Tax Relief Rec-
5	onciliation Act of 2001 in the same manner as
6	the provisions of such Act to which such amend-
7	ments relate.
8	SEC. 1505. EXTENSION AND MODIFICATION OF SPECIAL
9	RULE TO IMPLEMENT FERC AND STATE ELEC-
10	TRIC RESTRUCTURING POLICY.
11	(a) Extension for Qualified Electric Utili-
12	TIES.—
13	(1) In General.—Paragraph (3) of section
14	451(i) (relating to special rule for sales or disposi-
15	tions to implement Federal Energy Regulatory Com-
16	mission or State electric restructuring policy) is
17	amended by inserting "(before January 1, 2010, in
18	the case of a qualified electric utility)" after "Janu-
19	ary 1, 2008".
20	(2) Qualified electric utility.—Subsection
21	(i) of section 451 is amended by redesignating para-
22	graphs (6) through (10) as paragraphs (7) through
23	(11), respectively, and by inserting after paragraph
24	(5) the following new paragraph:

1	"(6) Qualified electric utility.—For pur-
2	poses of this subsection, the term 'qualified electric
3	utility' means a person that, as of the date of the
4	qualifying electric transmission transaction, is
5	vertically integrated, in that it is both—
6	"(A) a transmitting utility (as defined in
7	section 3(23) of the Federal Power Act (16
8	U.S.C. 796(23)) with respect to the transmission
9	facilities to which the election under this sub-
10	section applies, and
11	"(B) an electric utility (as defined in sec-
12	tion 3(22) of the Federal Power Act (16 U.S.C.
13	796(22)).".
14	(b) Extension of Period for Transfer of Oper-
15	ATIONAL CONTROL AUTHORIZED BY FERC.—Clause (ii) of
16	section 451(i)(4)(B) is amended by striking "December 31,
17	2007" and inserting "the date which is 4 years after the
18	close of the taxable year in which the transaction occurs".
19	(c) Property Located Outside the United
20	States Not Treated as Exempt Utility Property.—
21	Paragraph (5) of section 451(i) is amended by adding at
22	the end the following new subparagraph:
23	"(C) Exception for property located
24	OUTSIDE THE UNITED STATES.—The term 'ex-
25	empt utility property' shall not include any

1	property which is located outside the United
2	States.".
3	(d) Effective Dates.—
4	(1) Extension.—The amendments made by sub-
5	section (a) shall apply to transactions after December
6	31, 2007.
7	(2) Transfers of operational control.—
8	The amendment made by subsection (b) shall take ef-
9	fect as if included in section 909 of the American Jobs
10	Creation Act of 2004.
11	(3) Exception for property located out-
12	SIDE THE UNITED STATES.—The amendment made by
13	subsection (c) shall apply to transactions after the
14	date of the enactment of this Act.
15	SEC. 1506. NEW CLEAN RENEWABLE ENERGY BONDS.
16	(a) In General.—Part IV of subchapter A of chapter
17	1 (relating to credits against tax) is amended by adding
18	at the end the following new subpart:
19	"Subpart I—Qualified Tax Credit Bonds
	"Sec. 54A. Credit to holders of qualified tax credit bonds. "Sec. 54B. New clean renewable energy bonds.
20	"SEC. 54A. CREDIT TO HOLDERS OF QUALIFIED TAX CREDIT
21	BONDS.
22	"(a) Allowance of Credit.—If a taxpayer holds a
23	qualified tax credit bond on one or more credit allowance
24	dates of the bond during any taxable year, there shall be

1	allowed as a credit against the tax imposed by this chapter
2	for the taxable year an amount equal to the sum of the cred-
3	its determined under subsection (b) with respect to such
4	dates.
5	"(b) Amount of Credit.—
6	"(1) In general.—The amount of the credit de-
7	termined under this subsection with respect to any
8	credit allowance date for a qualified tax credit bond
9	is 25 percent of the annual credit determined with re-
10	spect to such bond.
11	"(2) Annual credit deter-
12	mined with respect to any qualified tax credit bond
13	is the product of—
14	"(A) the applicable credit rate, multiplied
15	by
16	"(B) the outstanding face amount of the
17	bond.
18	"(3) Applicable credit rate.—For purposes
19	of paragraph (2), the applicable credit rate is 70 per-
20	cent of the rate which the Secretary estimates will
21	permit the issuance of qualified tax credit bonds with
22	a specified maturity or redemption date without dis-
23	count and without interest cost to the qualified issuer.
24	The applicable credit rate with respect to any quali-
25	fied tax credit bond shall be determined as of the first

1	day on which there is a binding, written contract for
2	the sale or exchange of the bond.
3	"(4) Special rule for issuance and redemp-
4	TION.—In the case of a bond which is issued during
5	the 3-month period ending on a credit allowance date,
6	the amount of the credit determined under this sub-
7	section with respect to such credit allowance date
8	shall be a ratable portion of the credit otherwise deter-
9	mined based on the portion of the 3-month period
10	during which the bond is outstanding. A similar rule
11	shall apply when the bond is redeemed or matures.
12	"(c) Limitation Based on Amount of Tax.—
13	"(1) In General.—The credit allowed under
14	subsection (a) for any taxable year shall not exceed
15	the excess of—
16	"(A) the sum of the regular tax liability (as
17	defined in section 26(b)) plus the tax imposed by
18	section 55, over
19	"(B) the sum of the credits allowable under
20	this part (other than subpart C and this sub-
21	part).
22	"(2) Carryover of unused credit.—If the
23	credit allowable under subsection (a) exceeds the limi-
24	tation imposed by paragraph (1) for such taxable
25	year, such excess shall be carried to the succeeding

1	taxable year and added to the credit allowable under
2	subsection (a) for such taxable year (determined be-
3	fore the application of paragraph (1) for such suc-
4	ceeding taxable year).
5	"(d) Qualified Tax Credit Bond.—For purposes of
6	this section—
7	"(1) Qualified tax credit bond.—The term
8	'qualified tax credit bond' means a new clean renew-
9	able energy bond which is part of an issue that meets
10	the requirements of paragraphs (2), (3), (4), (5), and
11	(6).
12	"(2) Special rules relating to expendi-
13	TURES.—
14	"(A) In General.—An issue shall be treat-
15	ed as meeting the requirements of this paragraph
16	if, as of the date of issuance, the issuer reason-
17	ably expects—
18	"(i) 100 percent or more of the avail-
19	able project proceeds to be spent for 1 or
20	more qualified purposes within the 3-year
21	period beginning on such date of issuance,
22	and
23	"(ii) a binding commitment with a
24	third party to spend at least 10 percent of
25	such available project proceeds will be in-

1	curred within the 6-month period beginning
2	on such date of issuance.
3	"(B) Failure to spend required
4	AMOUNT OF BOND PROCEEDS WITHIN 3 YEARS.—
5	"(i) In general.—To the extent that
6	less than 100 percent of the available project
7	proceeds of the issue are expended by the
8	close of the expenditure period for 1 or more
9	qualified purposes, the issuer shall redeem
10	all of the nonqualified bonds within 90 days
11	after the end of such period. For purposes of
12	this paragraph, the amount of the non-
13	qualified bonds required to be redeemed
14	shall be determined in the same manner as
15	under section 142.
16	"(ii) Expenditure period.—For
17	purposes of this subpart, the term 'expendi-
18	ture period' means, with respect to any
19	issue, the 3-year period beginning on the
20	date of issuance. Such term shall include
21	any extension of such period under clause
22	(iii).
23	"(iii) Extension of period.—Upon
24	submission of a request prior to the expira-
25	tion of the expenditure period (determined

1	without regard to any extension under this
2	clause), the Secretary may extend such pe-
3	riod if the issuer establishes that the failure
4	to expend the proceeds within the original
5	expenditure period is due to reasonable
6	cause and the expenditures for qualified
7	purposes will continue to proceed with due
8	diligence.
9	"(C) Qualified purposes.—For purposes
10	of this paragraph, the term 'qualified purpose'
11	means a purpose specified in section $54B(a)(1)$.
12	"(D) Reimbursement.—For purposes of
13	this subtitle, available project proceeds of an
14	issue shall be treated as spent for a qualified
15	purpose if such proceeds are used to reimburse
16	the issuer for amounts paid for a qualified pur-
17	pose after the date that the Secretary makes an
18	allocation of bond limitation with respect to such
19	issue, but only if—
20	"(i) prior to the payment of the origi-
21	nal expenditure, the issuer declared its in-
22	tent to reimburse such expenditure with the
23	proceeds of a qualified tax credit bond,
24	"(ii) not later than 60 days after pay-
25	ment of the original expenditure, the issuer

1	adopts an official intent to reimburse the
2	original expenditure with such proceeds,
3	and
4	"(iii) the reimbursement is made not
5	later than 18 months after the date the
6	original expenditure is paid.
7	"(3) Reporting.—An issue shall be treated as
8	meeting the requirements of this paragraph if the
9	issuer of qualified tax credit bonds submits reports
10	similar to the reports required under section 149(e).
11	"(4) Special rules relating to arbi-
12	TRAGE.—
13	"(A) In general.—An issue shall be treat-
14	ed as meeting the requirements of this paragraph
15	if the issuer satisfies the requirements of section
16	148 with respect to the proceeds of the issue.
17	"(B) Special rule for investments
18	DURING EXPENDITURE PERIOD.—An issue shall
19	not be treated as failing to meet the requirements
20	of subparagraph (A) by reason of any investment
21	of available project proceeds during the expendi-
22	$ture\ period.$
23	"(C) Special rule for reserve
24	FUNDS.—An issue shall not be treated as failing
25	to meet the requirements of subparagraph (A) by

1	reason of any fund which is expected to be used
2	to repay such issue if—
3	"(i) such fund is funded at a rate not
4	more rapid than equal annual installments,
5	"(ii) such fund is funded in a manner
6	reasonably expected to result in an amount
7	not greater than an amount necessary to
8	repay the issue, and
9	"(iii) the yield on such fund is not
10	greater than the discount rate determined
11	under paragraph (5)(B) with respect to the
12	issue.
13	"(5) Maturity limitation.—
14	"(A) In general.—An issue shall be treat-
15	ed as meeting the requirements of this paragraph
16	if the maturity of any bond which is part of
17	such issue does not exceed the maximum term de-
18	termined by the Secretary under subparagraph
19	(B).
20	"(B) Maximum term.—During each cal-
21	endar month, the Secretary shall determine the
22	maximum term permitted under this paragraph
23	for bonds issued during the following calendar
24	month. Such maximum term shall be the term
25	which the Secretary estimates will result in the

1	present value of the obligation to repay the prin-
2	cipal on the bond being equal to 50 percent of the
3	face amount of such bond. Such present value
4	shall be determined using as a discount rate the
5	average annual interest rate of tax-exempt obli-
6	gations having a term of 10 years or more which
7	are issued during the month. If the term as so
8	determined is not a multiple of a whole year,
9	such term shall be rounded to the next highest
10	whole year.
11	"(6) Prohibition on financial conflicts of
12	INTEREST.—An issue shall be treated as meeting the
13	requirements of this paragraph if the issuer certifies
14	that—
15	"(A) applicable State and local law require-
16	ments governing conflicts of interest are satisfied
17	with respect to such issue, and
18	"(B) if the Secretary prescribes additional
19	conflicts of interest rules governing the appro-
20	priate Members of Congress, Federal, State, and
21	local officials, and their spouses, such additional
22	rules are satisfied with respect to such issue.
23	"(e) Other Definitions.—For purposes of this sub-
24	chapter—

1	"(1) Credit allowance date.—The term
2	'credit allowance date' means—
3	"(A) March 15,
4	"(B) June 15,
5	"(C) September 15, and
6	"(D) December 15.
7	Such term includes the last day on which the bond is
8	out standing.
9	"(2) BOND.—The term 'bond' includes any obli-
10	gation.
11	"(3) State.—The term 'State' includes the Dis-
12	trict of Columbia and any possession of the United
13	States.
14	"(4) Available project proceeds.—The term
15	'available project proceeds' means—
16	"(A) the excess of—
17	"(i) the proceeds from the sale of an
18	$issue,\ over$
19	"(ii) the issuance costs financed by the
20	issue (to the extent that such costs do not
21	exceed 2 percent of such proceeds), and
22	"(B) the proceeds from any investment of
23	the excess described in subparagraph (A).
24	"(f) Credit Treated as Interest.—For purposes of
25	this subtitle, the credit determined under subsection (a)

- 1 shall be treated as interest which is includible in gross in-
- 2 come.
- 3 "(g) S Corporations and Partnerships.—In the
- 4 case of a tax credit bond held by an S corporation or part-
- 5 nership, the allocation of the credit allowed by this section
- 6 to the shareholders of such corporation or partners of such
- 7 partnership shall be treated as a distribution.
- 8 "(h) Bonds Held by Regulated Investment Com-
- 9 Panies and Real Estate Investment Trusts.—If any
- 10 qualified tax credit bond is held by a regulated investment
- 11 company or a real estate investment trust, the credit deter-
- 12 mined under subsection (a) shall be allowed to shareholders
- 13 of such company or beneficiaries of such trust (and any
- 14 gross income included under subsection (f) with respect to
- 15 such credit shall be treated as distributed to such share-
- 16 holders or beneficiaries) under procedures prescribed by the
- 17 Secretary.
- 18 "(i) Credits May Be Stripped.—Under regulations
- 19 prescribed by the Secretary—
- 20 "(1) In General.—There may be a separation
- 21 (including at issuance) of the ownership of a qualified
- 22 tax credit bond and the entitlement to the credit
- 23 under this section with respect to such bond. In case
- of any such separation, the credit under this section
- 25 shall be allowed to the person who on the credit allow-

1	ance date holds the instrument evidencing the entitle-
2	ment to the credit and not to the holder of the bond.
3	"(2) CERTAIN RULES TO APPLY.—In the case of
4	a separation described in paragraph (1), the rules of
5	section 1286 shall apply to the qualified tax credit
6	bond as if it were a stripped bond and to the credit
7	under this section as if it were a stripped coupon.
8	"SEC. 54B. NEW CLEAN RENEWABLE ENERGY BONDS.
9	"(a) New Clean Renewable Energy Bond.—For
10	purposes of this subpart, the term 'new clean renewable en-
11	ergy bond' means any bond issued as part of an issue if—
12	"(1) 100 percent of the available project proceeds
13	of such issue are to be used for capital expenditures
14	incurred by public power providers, governmental
15	bodies, or cooperative electric companies for one or
16	more qualified renewable energy facilities,
17	"(2) the bond is issued by a qualified issuer, and
18	"(3) the issuer designates such bond for purposes
19	of this section.
20	"(b) Limitation on Amount of Bonds Des-
21	IGNATED.—
22	"(1) In General.—The maximum aggregate
23	face amount of bonds which may be designated under
24	subsection (a) by any issuer shall not exceed the limi-

1	tation amount allocated under this subsection to such
2	issuer.
3	"(2) National limitation on amount of
4	BONDS DESIGNATED.—There is a national new clean
5	renewable energy bond limitation of \$2,000,000,000
6	which shall be allocated by the Secretary as provided
7	in paragraph (3), except that—
8	"(A) not more than 33 ½ percent thereof
9	may be allocated to qualified projects of public
10	power providers,
11	"(B) not more than 33 1 /3 percent thereof
12	may be allocated to qualified projects of govern-
13	mental bodies, and
14	"(C) not more than 33 $^{1}/_{3}$ percent thereof
15	may be allocated to qualified projects of coopera-
16	tive electric companies.
17	"(3) Method of Allocation.—
18	"(A) Allocation among public power
19	PROVIDERS.—After the Secretary determines the
20	qualified projects of public power providers
21	which are appropriate for receiving an alloca-
22	tion of the national new clean renewable energy
23	bond limitation, the Secretary shall, to the max-
24	imum extent practicable, make allocations
25	among such projects in such manner that the

amount allocated to each such project bears the
same ratio to the cost of such project as the limitation under paragraph (2)(A) bears to the cost
of all such projects.

"(B) Allocation among governmental Bodies and cooperative electric companies, respectively, in such manner as the Secretary determines appropriate.

"(c) Definitions.—For purposes of this section—

- "(1) QUALIFIED RENEWABLE ENERGY FACIL-ITY.—The term 'qualified renewable energy facility' means a qualified facility (as determined under section 45(d) without regard to paragraphs (8) and (10) thereof and to any placed in service date) owned by a public power provider, a governmental body, or a cooperative electric company.
- "(2) Public power provider' means a State utility with a service obligation, as such terms are defined in section

- 217 of the Federal Power Act (as in effect on the date
 of the enactment of this paragraph).
- 3 "(3) GOVERNMENTAL BODY.—The term 'govern-4 mental body' means any State or Indian tribal gov-5 ernment, or any political subdivision thereof.
 - "(4) Cooperative electric company' means a mutual or cooperative electric company described in section 501(c)(12) or section 1381(a)(2)(C).
 - "(5) CLEAN RENEWABLE ENERGY BOND LEND-ER.—The term 'clean renewable energy bond lender' means a lender which is a cooperative which is owned by, or has outstanding loans to, 100 or more cooperative electric companies and is in existence on February 1, 2002, and shall include any affiliated entity which is controlled by such lender.
 - "(6) QUALIFIED ISSUER.—The term 'qualified issuer' means a public power provider, a governmental body, a cooperative electric company, a clean renewable energy bond lender, or a not-for-profit electric utility which has received a loan or loan guarantee under the Rural Electrification Act.".
- 23 (b) Reporting.—Subsection (d) of section 6049 (relating to returns regarding payments of interest) is amended 25 by adding at the end the following new paragraph:

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1	"(9) Reporting of credit on qualified tax
2	CREDIT BONDS.—
3	"(A) In General.—For purposes of sub-
4	section (a), the term 'interest' includes amounts
5	includible in gross income under section 54A
6	and such amounts shall be treated as paid on the
7	credit allowance date (as defined in section
8	54A(e)(1)).
9	"(B) Reporting to corporations, etc.—
10	Except as otherwise provided in regulations, in
11	the case of any interest described in subpara-
12	graph (A) of this paragraph, subsection (b)(4) of
13	this section shall be applied without regard to
14	subparagraphs (A), (H), (I), (J), (K), and
15	(L)(i).
16	"(C) Regulatory Authority.—The Sec-
17	retary may prescribe such regulations as are nec-
18	essary or appropriate to carry out the purposes
19	of this paragraph, including regulations which
20	require more frequent or more detailed report-
21	ing.".
22	(c) Conforming Amendments.—
23	(1) Sections $54(c)(2)$ and $1400N(l)(3)(B)$ are
24	each amended by striking "subpart C" and inserting
25	"subparts C and I".

1	(2) Section $1397E(c)(2)$ is amended by striking
2	"subpart H" and inserting "subparts H and I".
3	(3) Section 6401(b)(1) is amended by striking
4	"and H" and inserting "H, and I".
5	(4) The heading of subpart H of part IV of sub-
6	chapter A of chapter 1 is amended by striking " \boldsymbol{Cer} -
7	tain Bonds" and inserting "Clean Renewable
8	Energy Bonds".
9	(5) The table of subparts for part IV of sub-
10	chapter A of chapter 1 is amended by striking the
11	item relating to subpart H and inserting the fol-
12	lowing new items:
	"SUBPART H. NONREFUNDABLE CREDIT TO HOLDERS OF CLEAN RENEWABLE ENERGY BONDS.
	"SUBPART I. QUALIFIED TAX CREDIT BONDS.".
13	(d) Application of Certain Labor Standards on
14	Projects Financed Under Tax Credit Bonds.—Sub-
15	chapter IV of chapter 31 of title 40, United States Code,
16	shall apply to projects financed with the proceeds of any
17	tax credit bond (as defined in section 54A of the Internal
18	Revenue Code of 1986).
19	(e) Effective Dates.—The amendments made by
20	this section shall apply to obligations issued after the date
21	of the enactment of this Act.

1	PART II—PROVISIONS RELATING TO CARBON
2	MITIGATION AND COAL
3	SEC. 1507. EXPANSION AND MODIFICATION OF ADVANCED
4	COAL PROJECT INVESTMENT CREDIT.
5	(a) Modification of Credit Amount.—Section
6	48A(a) (relating to qualifying advanced coal project credit)
7	is amended by striking "and" at the end of paragraph (1),
8	by striking the period at the end of paragraph (2) and in-
9	serting ", and", and by adding at the end the following
10	the paragraph:
11	"(3) 30 percent of the qualified investment for
12	such taxable year in the case of projects described in
13	clauses (iii) or (iv) of subsection $(d)(3)(B)$.".
14	(b) Expansion of Aggregate Credits.—Section
15	48A(d)(3)(A) (relating to aggregate credits) is amended by
16	striking "\$1,300,000,000" and inserting "\$2,800,000,000".
17	(c) Authorization of Additional Projects.—
18	(1) In General.—Subparagraph (B) of section
19	48A(d)(3) (relating to aggregate credits) is amended
20	to read as follows:
21	"(B) Particular projects.—Of the dollar
22	amount in subparagraph (A), the Secretary is
23	authorized to certify—
24	"(i) \$800,000,000 for integrated gasifi-
25	cation combined cucle projects the applica-

1	tion for which is submitted during the pe-
2	$riod\ described\ in\ paragraph\ (2)(A)(i),$
3	"(ii) \$500,000,000 for projects which
4	use other advanced coal-based generation
5	technologies the application for which is
6	submitted during the period described in
7	paragraph (2)(A)(i),
8	"(iii) \$1,000,000,000 for integrated
9	gasification combined cycle projects the ap-
10	plication for which is submitted during the
11	$period\ described\ in\ paragraph\ (2)(A)(ii),$
12	and
13	"(iv) \$500,000,000 for other advanced
14	coal-based generation technology projects the
15	application for which is submitted during
16	the period described in paragraph
17	(2)(A)(ii).".
18	(2) Application period for additional
19	PROJECTS.—Subparagraph (A) of section $48A(d)(2)$
20	(relating to certification) is amended to read as fol-
21	lows:
22	"(A) Application period.—Each appli-
23	cant for certification under this paragraph shall
24	submit an application meeting the requirements

1	of subparagraph (B). An applicant may only
2	submit an application—
3	"(i) for an allocation from the dollar
4	amount specified in clause (i) or (ii) of
5	paragraph (3)(A) during the 3-year period
6	beginning on the date the Secretary estab-
7	lishes the program under paragraph (1),
8	and
9	"(ii) for an allocation from the dollar
10	amount specified in clause (iii) or (iv) of
11	paragraph (3)(A) during the 3-year period
12	beginning at the earlier of the termination
13	of the period described in clause (i) or the
14	date prescribed by the Secretary.".
15	(3) Capture and sequestration of carbon
16	DIOXIDE EMISSIONS REQUIREMENT.—
17	(A) In General.—Section 48A(e)(1) (relat-
18	ing to requirements) is amended by striking
19	"and" at the end of subparagraph (E), by strik-
20	ing the period at the end of subparagraph (F)
21	and inserting "; and", and by adding at the end
22	the following new subparagraph:
23	"(G) in the case of any project the applica-
24	tion for which is submitted during the period de-
25	scribed in subsection $(d)(2)(A)(ii)$, the project in-

1	cludes equipment which separates and sequesters
2	at least 65 percent (70 percent in the case of an
3	application for reallocated credits under sub-
4	section (d)(4)) of such project's total carbon diox-
5	ide emissions.".
6	(B) Highest priority for projects

- (B) HIGHEST PRIORITY FOR PROJECTS
 WHICH SEQUESTER CARBON DIOXIDE EMISSIONS.—Section 48A(e)(3) is amended by striking "and" at the end of subparagraph (A)(iii),
 by striking the period at the end of subparagraph (B)(3) and inserting ", and", and by adding at the end the following new subparagraph:
- "(C) give highest priority to projects with the greatest separation and sequestration percentage of total carbon dioxide emissions.".
- (C) RECAPTURE OF CREDIT FOR FAILURE

 TO SEQUESTER.—Section 48A (relating to qualifying advanced coal project credit) is amended
 by adding at the end the following new subsection:
- "(h) RECAPTURE OF CREDIT FOR FAILURE TO SE-QUESTER.—The Secretary shall provide for recapturing the benefit of any credit allowable under subsection (a) with respect to any project which fails to attain or maintain

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1	the separation and sequestration requirements of subsection
2	(e)(1)(G).".
3	(4) Additional priority for research part-
4	NERSHIPS.—Section $48A(e)(3)(B)$, as amended by
5	paragraph (3)(B), is amended—
6	(A) by striking "and" at the end of clause
7	(ii),
8	(B) by redesignating clause (iii) as clause
9	(iv), and
10	(C) by inserting after clause (ii) the fol-
11	lowing new clause:
12	"(iii) applicant participants who have
13	a research partnership with an eligible edu-
14	cational institution (as defined in section
15	529(e)(5)), and".
16	(5) CLERICAL AMENDMENT.—Section 48A(e)(3)
17	is amended by striking "INTEGRATED GASIFICATION
18	COMBINED CYCLE" in the heading and inserting
19	"CERTAIN".
20	(d) Competitive Certification Awards Modifica-
21	TION AUTHORITY.—Section 48A (relating to qualifying ad-
22	vanced coal project credit), as amended by subsection $(c)(3)$,
23	is amended by adding at the end the following new sub-
24	section:

1	"(i) Competitive Certification Awards Modifica-
2	TION AUTHORITY.—In implementing this section or section
3	48B, the Secretary is directed to modify the terms of any
4	competitive certification award and any associated closing
5	agreement where such modification—
6	"(1) is consistent with the objectives of such sec-
7	tion,
8	"(2) is requested by the recipient of the competi-
9	tive certification award, and
10	"(3) involves moving the project site to improve
11	the potential to capture and sequester carbon dioxide
12	emissions, reduce costs of transporting feedstock, and
13	serve a broader customer base,
14	unless the Secretary determines that the dollar amount of
15	tax credits available to the taxpayer under such section
16	would increase as a result of the modification or such modi-
17	fication would result in such project not being originally
18	certified. In considering any such modification, the Sec-
19	retary shall consult with other relevant Federal agencies,
20	including the Department of Energy.".
21	(e) Effective Dates.—
22	(1) In general.—Except as otherwise provided
23	in this subsection, the amendments made by this sec-
24	tion shall apply to credits the application for which
25	is submitted during the period described in section

1	48A(d)(2)(A)(ii) of the Internal Revenue Code of 1986
2	and which are allocated or reallocated after the date
3	of the enactment of this Act.

- (2) Competitive Certification Awards modification Authority.—The amendment made by subsection (d) shall take effect on the date of the enactment of this Act and is applicable to all competitive certification awards entered into under section 48A or 48B of the Internal Revenue Code of 1986, whether such awards were issued before, on, or after such date of enactment.
- 12 (3) TECHNICAL AMENDMENT.—The amendment 13 made by subsection (c)(5) shall take effect as if in-14 cluded in the amendment made by section 1307(b) of 15 the Energy Tax Incentives Act of 2005.
- 16 SEC. 1508. EXPANSION AND MODIFICATION OF COAL GAS-
- 17 IFICATION INVESTMENT CREDIT.
- 18 (a) CREDIT RATE.—Section 48B(a) (relating to quali-19 fying gasification project credit) is amended by inserting 20 "(30 percent in the case of credits allocated under subsection
- 21 (d)(1)(B))" after "20 percent".
- 22 (b) Expansion of Aggregate Credits.—Section
- 23 48B(d)(1) (relating to qualifying gasification project pro-
- 24 gram) is amended by striking "shall not exceed

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1	\$350,000,000" and all that follows and inserting "shall not
2	exceed—
3	"(A) \$350,000,000, plus
4	"(B) $$500,000,000$ for qualifying gasifi-
5	cation projects that include equipment which
6	separates and sequesters at least 75 percent of
7	such a project's total carbon dioxide emissions,
8	under rules similar to the rules of section $48A(d)(4)$.".
9	(c) Recapture of Credit for Failure to Seques-
10	TER.—Section 48B (relating to qualifying gasification
11	project credit) is amended by adding at the end the fol-
12	lowing new subsection:
13	"(f) Recapture of Credit for Failure to Se-
14	QUESTER.—The Secretary shall provide for recapturing the
15	benefit of any credit allowable under subsection (a) with
16	respect to any project which fails to attain or maintain
17	the separation and sequestration requirements for such
18	$project\ under\ subsection\ (d)(1).$ ".
19	(d) Selection Priorities.—Section 48B(d) (relat-
20	ing to qualifying gasification project program) is amended
21	by adding at the end the following new paragraph:
22	"(4) Selection priorities.—In determining
23	which qualifying gasification projects to certify under
24	this section, the Secretary shall—

1	"(A) give highest priority to projects with
2	the greatest separation and sequestration per-
3	centage of total carbon dioxide emissions, and
4	"(B) give high priority to applicant par-
5	ticipants who have a research partnership with
6	an eligible educational institution (as defined in
7	section $529(e)(5)$).".
8	(e) Effective Date.—The amendments made by this
9	section shall apply to credits described in section
10	48B(d)(1)(B) of the Internal Revenue Code of 1986 which
11	are allocated or reallocated after the date of the enactment
12	of this Act.
13	SEC. 1509. SEVEN-YEAR APPLICABLE RECOVERY PERIOD
13 14	SEC. 1509. SEVEN-YEAR APPLICABLE RECOVERY PERIOD FOR DEPRECIATION OF QUALIFIED CARBON
14	FOR DEPRECIATION OF QUALIFIED CARBON
14 15	FOR DEPRECIATION OF QUALIFIED CARBON DIOXIDE PIPELINE PROPERTY.
14 15 16 17	FOR DEPRECIATION OF QUALIFIED CARBON DIOXIDE PIPELINE PROPERTY. (a) IN GENERAL.—Section 168(e)(3)(C) (defining 7-
14 15 16 17	FOR DEPRECIATION OF QUALIFIED CARBON DIOXIDE PIPELINE PROPERTY. (a) IN GENERAL.—Section 168(e)(3)(C) (defining 7- year property) is amended by striking "and" at the end
14 15 16 17 18	FOR DEPRECIATION OF QUALIFIED CARBON DIOXIDE PIPELINE PROPERTY. (a) IN GENERAL.—Section 168(e)(3)(C) (defining 7- year property) is amended by striking "and" at the end of clause (iv), by redesignating clause (v) as clause (vi),
14 15 16 17 18	FOR DEPRECIATION OF QUALIFIED CARBON DIOXIDE PIPELINE PROPERTY. (a) IN GENERAL.—Section 168(e)(3)(C) (defining 7- year property) is amended by striking "and" at the end of clause (iv), by redesignating clause (v) as clause (vi), and by inserting after clause (iv) the following new clause:
14 15 16 17 18 19 20	FOR DEPRECIATION OF QUALIFIED CARBON DIOXIDE PIPELINE PROPERTY. (a) IN GENERAL.—Section 168(e)(3)(C) (defining 7- year property) is amended by striking "and" at the end of clause (iv), by redesignating clause (v) as clause (vi), and by inserting after clause (iv) the following new clause: "(v) any qualified carbon dioxide pipe-
14 15 16 17 18 19 20 21	FOR DEPRECIATION OF QUALIFIED CARBON DIOXIDE PIPELINE PROPERTY. (a) IN GENERAL.—Section 168(e)(3)(C) (defining 7- year property) is amended by striking "and" at the end of clause (iv), by redesignating clause (v) as clause (vi), and by inserting after clause (iv) the following new clause: "(v) any qualified carbon dioxide pipe- line property—

1	``(II) the original purpose of
2	which is to transport carbon dioxide,
3	and
4	"(III) which is placed in service
5	before January 1, 2011, and".
6	(b) Definition of Qualified Carbon Dioxide
7	Pipeline Property.—Section 168(e) (relating to classi-
8	fication of property) is amended by inserting at the end
9	the following new paragraph:
10	"(8) Qualified carbon dioxide pipeline
11	PROPERTY.—
12	"(A) In GENERAL.—The term 'qualified
13	carbon dioxide pipeline property' means prop-
14	erty which is used in the United States solely to
15	transmit qualified carbon dioxide from the point
16	of capture to a secure geological storage or the
17	point at which such qualified carbon dioxide is
18	used as a tertiary injectant.
19	"(B) Definitions and special rules.—
20	For purposes of this paragraph—
21	"(i) Qualified carbon dioxide.—
22	The term 'qualified carbon dioxide' means
23	carbon dioxide captured from an industrial
24	source which—

1	``(I) would otherwise be released
2	into the atmosphere as industrial emis-
3	sion of greenhouse gas, and
4	"(II) is measured at the source of
5	capture and verified at the point of
6	disposal or injection.
7	"(ii) Secure geological storage.—
8	The Secretary, in consultation with the Ad-
9	ministrator of the Environmental Protec-
10	tion Agency, shall establish regulations for
11	determining adequate security measures for
12	the geological storage of carbon dioxide
13	under subparagraph (A) such that the car-
14	bon dioxide does not escape into the atmos-
15	phere. Such term shall include storage at
16	deep saline formations and unminable coal
17	seems under such conditions as the Sec-
18	retary may determine under such regula-
19	tions.
20	"(iii) Tertiary injectant.—The
21	term 'tertiary injectant' has the same mean-
22	ing as when used within section $193(b)(1)$.".
23	(c) Effective Date.—The amendments made by this
24	section shall apply to property placed in service after the
25	date of the enactment of this Act.

1	SEC. 1510. SPECIAL RULES FOR REFUND OF THE COAL EX-
2	CISE TAX TO CERTAIN COAL PRODUCERS AND
3	EXPORTERS.
4	(a) Refund.—
5	(1) Coal producers.—
6	(A) In General.—Notwithstanding sub-
7	sections (a)(1) and (c) of section 6416 and sec-
8	tion 6511 of the Internal Revenue Code of 1986,
9	if—
10	(i) a coal producer establishes that
11	such coal producer, or a party related to
12	such coal producer, exported coal produced
13	by such coal producer to a foreign country
14	or shipped coal produced by such coal pro-
15	ducer to a possession of the United States,
16	the export or shipment of which was other
17	than through an exporter who has filed a
18	claim for a refund under paragraph (2),
19	(ii) such coal producer filed a return
20	on or after October 1, 1990, and on or be-
21	fore the date of the enactment of this Act,
22	and
23	(iii) such coal producer files a claim
24	for refund not later than the close of the 30-
25	day period beginning on the date of the en-
26	actment of this Act,

1	then the Secretary of the Treasury shall pay to
2	such coal producer an amount equal to the tax
3	paid under section 4121 of such Code on such
4	coal exported by the coal producer or a party re-
5	lated to such coal producer.
6	(B) Special rules for certain tax-
7	PAYERS.—For purposes of this section—
8	(i) Establishment of export.—If a
9	coal producer or a party related to a coal
10	producer has received a judgment described
11	in clause (iii), such coal producer shall be
12	deemed to have established the export of coal
13	to a foreign country or shipment of coal to
14	a possession of the United States under sub-
15	paragraph (A)(i).
16	(ii) Amount of payment.—If a tax-
17	payer described in clause (i) is entitled to
18	a payment under subparagraph (A), the
19	amount of such payment shall be reduced by
20	any amount awarded under the judgment
21	described in clause (iii).
22	(iii) Judgment described.—A judg-
23	ment is described in this subparagraph if
24	such judament—

1	(I) is made by a court of com-
2	petent jurisdiction within the United
3	States,
4	(II) relates to the constitutionality
5	of any tax paid on exported coal under
6	section 4121 of the Internal Revenue
7	Code of 1986, and
8	(III) is in favor of the coal pro-
9	ducer or the party related to the coal
10	producer.
11	(iv) Recapture.—In the case any
12	judgment described in clause (iii) is over-
13	turned, the coal producer shall pay to the
14	Secretary the amount of any payment re-
15	ceived under subparagraph (A) unless the
16	coal producer establishes the export of the
17	coal to a foreign country or shipment of
18	coal to a possession of the United States.
19	(2) Exporters.—Notwithstanding subsections
20	(a)(1) and (c) of section 6416 and section 6511 of the
21	Internal Revenue Code of 1986, and a judgment de-
22	scribed in paragraph $(1)(B)(iii)$ of this subsection,
23	if—
24	(A) an exporter establishes that such ex-
25	porter exported coal to a foreign country or

1	shipped coal to a possession of the United States,
2	or caused such coal to be so exported or shipped,
3	(B) such exporter filed a return on or after
4	October 1, 1990, and on or before the date of the
5	enactment of this Act, and
6	(C) such exporter files a claim for refund
7	not later than the close of the 30-day period be-
8	ginning on the date of the enactment of this Act,
9	then the Secretary of the Treasury shall pay to such
10	exporter an amount equal to \$0.825 per ton of such
11	coal exported by the exporter or caused to be exported
12	by the exporter.
13	(b) Limitations.—Subsection (a) shall not apply with
14	respect to exported coal if a credit or refund of tax imposed
15	by section 4121 of such Code on such coal has been allowed
16	or made to, or if a settlement with the Federal Government
17	has been made with and accepted by, the coal producer, a
18	party related to such coal producer, or the exporter, of such
19	coal, as of the date that the claim is filed under this section
20	with respect to such exported coal. For purposes of this sub-
21	section, the term "settlement with the Federal Government"
22	shall not include any settlement or stipulation entered into
23	as of the date of the enactment of this Act, the terms of
24	which contemplate a judament concerning which any party

- 1 has reserved the right to file an appeal, or has filed an ap-2 peal.
- 3 (c) Subsequent Refund Prohibited.—No refund
- shall be made under this section to the extent that a credit
- or refund of such tax on such exported coal has been paid
- 6 to any person.
- 7 (d) Definitions.—For purposes of this section—
- 8 (1) COAL PRODUCER.—The term "coal producer" 9 means the person in whom is vested ownership of the 10 coal immediately after the coal is severed from the 11 ground, without regard to the existence of any con-12 tractual arrangement for the sale or other disposition 13 of the coal or the payment of any royalties between 14 the producer and third parties. The term includes any 15 person who extracts coal from coal waste refuse piles 16 or from the silt waste product which results from the 17

wet washing (or similar processing) of coal.

(2) Exporter.—The term "exporter" means a person, other than a coal producer, who does not have a contract, fee arrangement, or any other agreement with a producer or seller of such coal to sell or export such coal to a third party on behalf of the producer or seller of such coal and—

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1	(A) is indicated in the shipper's export dec-
2	laration or other documentation as the exporter
3	of record, or
4	(B) actually exported such coal to a foreign
5	country or shipped such coal to a possession of
6	the United States, or caused such coal to be so
7	exported or shipped.
8	(3) Related party.—The term "a party related
9	to such coal producer" means a person who—
10	(A) is related to such coal producer through
11	any degree of common management, stock owner-
12	ship, or voting control,
13	(B) is related (within the meaning of sec-
14	tion 144(a)(3) of such Code) to such coal pro-
15	ducer, or
16	(C) has a contract, fee arrangement, or any
17	other agreement with such coal producer to sell
18	such coal to a third party on behalf of such coal
19	producer.
20	(e) Timing of Refund.—With respect to any claim
21	for refund filed pursuant to this section, the Secretary of
22	the Treasury shall determine whether the requirements of
23	this section are met not later than 180 days after such claim
24	is filed. If the Secretary determines that the requirements
25	of this section are met, the claim for refund shall be paid

1	not later than 180 days after the Secretary makes such de-
2	termination.
3	(f) Interest.—Any refund paid pursuant to this sec-
4	tion shall be paid by the Secretary of the Treasury with
5	interest from the date of overpayment determined by using
6	the overpayment rate and method under section 6621 of
7	such Code.
8	(g) Denial of Double Benefit.—The payment
9	under subsection (a) with respect to any coal shall not ex-
10	ceed—
11	(1) in the case of a payment to a coal producer,
12	the amount of tax paid under section 4121 of the In-
13	ternal Revenue Code of 1986 with respect to such coal
14	by such coal producer or a party related to such coal
15	producer, and
16	(2) in the case of a payment to an exporter, an
17	amount equal to \$0.825 per ton with respect to such
18	coal exported by the exporter or caused to be exported
19	by the exporter.
20	(h) Application of Section.—This section applies
21	only to claims on coal exported on or after October 1, 1990,
22	through the date of the enactment of this Act.
23	(i) Standing Not Conferred.—
24	(1) Exporters.—With respect to exporters, this
25	section shall not confer standing upon an exporter to

1	commence, or intervene in, any judicial or adminis-
2	trative proceeding concerning a claim for refund by
3	a coal producer of any Federal or State tax, fee, or
4	royalty paid by the coal producer.
5	(2) Coal producers.—With respect to coal pro-
6	ducers, this section shall not confer standing upon a
7	coal producer to commence, or intervene in, any judi-
8	cial or administrative proceeding concerning a claim
9	for refund by an exporter of any Federal or State tax,
10	fee, or royalty paid by the producer and alleged to
11	have been passed on to an exporter.
12	SEC. 1511. EXTENSION OF TEMPORARY INCREASE IN COAL
13	EXCISE TAX.
14	Paragraph (2) of section 4121(e) (relating to tem-
1415	Paragraph (2) of section 4121(e) (relating to temporary increase termination date) is amended—
15	porary increase termination date) is amended—
15 16	porary increase termination date) is amended— (1) by striking "January 1, 2014" in clause (i)
15 16 17	porary increase termination date) is amended— (1) by striking "January 1, 2014" in clause (i) and inserting "December 31, 2017", and
15 16 17 18	porary increase termination date) is amended— (1) by striking "January 1, 2014" in clause (i) and inserting "December 31, 2017", and (2) by striking "January 1 after 1981" in clause
15 16 17 18 19	porary increase termination date) is amended— (1) by striking "January 1, 2014" in clause (i) and inserting "December 31, 2017", and (2) by striking "January 1 after 1981" in clause (ii) and inserting "December 31 after 2007".
15 16 17 18 19 20	porary increase termination date) is amended— (1) by striking "January 1, 2014" in clause (i) and inserting "December 31, 2017", and (2) by striking "January 1 after 1981" in clause (ii) and inserting "December 31 after 2007". SEC. 1512. CARBON AUDIT OF THE TAX CODE.
15 16 17 18 19 20 21	porary increase termination date) is amended— (1) by striking "January 1, 2014" in clause (i) and inserting "December 31, 2017", and (2) by striking "January 1 after 1981" in clause (ii) and inserting "December 31 after 2007". SEC. 1512. CARBON AUDIT OF THE TAX CODE. (a) STUDY.—The Secretary of the Treasury shall enter
15 16 17 18 19 20 21 22 23	porary increase termination date) is amended— (1) by striking "January 1, 2014" in clause (i) and inserting "December 31, 2017", and (2) by striking "January 1 after 1981" in clause (ii) and inserting "December 31 after 2007". SEC. 1512. CARBON AUDIT OF THE TAX CODE. (a) STUDY.—The Secretary of the Treasury shall enter into an agreement with the National Academy of Sciences

1	greenhouse gas emissions and to estimate the magnitude of
2	those effects.
3	(b) Report.—Not later than 2 years after the date
4	of enactment of this Act, the National Academy of Sciences
5	shall submit to Congress a report containing the results of
6	study authorized under this section.
7	(c) Authorization of Appropriations.—There is
8	authorized to be appropriated to carry out this section
9	\$1,500,000 for the period of fiscal years 2008 and 2009.
10	$Subtitle\ B-Transportation\ and$
11	Domestic Fuel Security
12	PART I—BIOFUELS
13	SEC. 1521. CREDIT FOR PRODUCTION OF CELLULOSIC BIO-
14	MASS ALCOHOL.
15	(a) In General.—Subsection (a) of section 40 (relat-
16	ing to alcohol used as fuel) is amended by striking "plus"
17	at the end of paragraph (2), by striking the period at the
18	end of paragraph (3) and inserting ", plus", and by adding
19	at the end the following new paragraph:
20	"(4) the cellulosic alcohol producer credit.".
21	(b) Cellulosic Alcohol Producer Credit.—
22	(1) In general.—Subsection (b) of section 40 is
23	amended by redesignating paragraph (5) as para-
24	graph (6) and by inserting after paragraph (4) the
25	following new paragraph:

1	"(5) Cellulosic alcohol producer cred-
2	IT.—
3	"(A) In general.—The cellulosic alcohol
4	producer credit for the taxable year is an
5	amount equal to the applicable amount for each
6	gallon of qualified cellulosic alcohol production.
7	"(B) Applicable amount.—For purposes
8	of subparagraph (A), the applicable amount
9	means the excess of—
10	"(i) \$1.01, over
11	"(ii) the amount of the credit in effect
12	for alcohol which is ethanol under sub-
13	section (b)(1) (without regard to subsection
14	(b)(3)) at the time of the qualified cellulosic
15	$alcohol\ production.$
16	"(C) Limitation.—
17	"(i) In general.—No credit shall be
18	allowed to any taxpayer under subpara-
19	graph (A) with respect to any qualified cel-
20	lulosic alcohol production during the tax-
21	able year in excess of 60,000,000 gallons.
22	"(ii) Aggregation rule.—For pur-
23	poses of clause (i), all members of the same
24	controlled group of corporations (within the
25	meaning of section 267(f)) and all persons

1	under common control (within the meaning
2	of section 52(b) but determined by treating
3	an interest of more than 50 percent as a
4	controlling interest) shall be treated as 1
5	person.
6	"(iii) Partnership, 8 corporations,
7	AND OTHER PASS-THRU ENTITIES.—In the
8	case of a partnership, trust, S corporation,
9	or other pass-thru entity, the limitation
10	contained in clause (i) shall be applied at
11	the entity level and at the partner or simi-
12	lar level.
13	"(D) Qualified cellulosic alcohol
14	PRODUCTION.—For purposes of this section, the
15	term 'qualified cellulosic alcohol production'
16	means any cellulosic biomass alcohol which is
17	produced by the taxpayer and which during the
18	taxable year—
19	"(i) is sold by the taxpayer to another
20	person—
21	"(I) for use by such other person
22	in the production of a qualified alcohol
23	mixture in such other person's trade or
24	business (other than casual off-farm
25	production),

1	"(II) for use by such other person
2	as a fuel in a trade or business, or
3	"(III) who sells such cellulosic bio-
4	mass alcohol at retail to another per-
5	son and places such cellulosic biomass
6	alcohol in the fuel tank of such other
7	person, or
8	"(ii) is used or sold by the taxpayer for
9	any purpose described in clause (i).
10	The qualified cellulosic alcohol production of any
11	taxpayer for any taxable year shall not include
12	any alcohol which is purchased by the taxpayer
13	and with respect to which such producer in-
14	creases the proof of the alcohol by additional dis-
15	tillation.
16	"(E) Cellulosic biomass alcohol.—
17	"(i) In General.—The term 'cellulosic
18	biomass alcohol' has the meaning given such
19	term under section 168(l)(3), but does not
20	include any alcohol with a proof of less
21	than 150.
22	"(ii) Determination of proof.—The
23	determination of the proof of any alcohol
24	shall be made without regard to any added
25	denaturants.

1	"(F) Coordination with small ethanol
2	PRODUCER CREDIT.—No small ethanol producer
3	credit shall be allowed with respect to any quali-
4	fied cellulosic alcohol production if credit is de-
5	termined with respect to such production under
6	this paragraph.
7	"(G) Allocation of cellulosic pro-
8	DUCER CREDIT TO PATRONS OF COOPERATIVE.—
9	Rules similar to the rules under subsection $(g)(6)$
10	shall apply for purposes of this paragraph.
11	"(H) Application of Paragraph.—This
12	paragraph shall apply with respect to qualified
13	cellulosic alcohol production after December 31,
14	2007, and before January 1, 2014.".
15	(2) Termination date not to apply.—Sub-
16	section (e) of section 40 (relating to termination) is
17	amended—
18	(A) by inserting "or subsection $(b)(5)(H)$ "
19	after "by reason of paragraph (1)" in paragraph
20	(2), and
21	(B) by adding at the end the following new
22	paragraph:
23	"(3) Exception for cellulosic alcohol pro-
24	DUCER CREDIT.—Paragraph (1) shall not apply to

1	the portion of the credit allowed under this section by
2	reason of subsection $(a)(4)$.".
3	(c) Alcohol Not Used as a Fuel, etc.—
4	(1) In General.—Paragraph (3) of section
5	40(d) is amended by redesignating subparagraph (D)
6	as subparagraph (E) and by inserting after subpara-
7	graph (C) the following new subparagraph:
8	"(D) CELLULOSIC ALCOHOL PRODUCER
9	CREDIT.—If—
10	"(i) any credit is determined under
11	subsection (a)(4), and
12	"(ii) any person does not use such fuel
13	for a purpose described in subsection
14	(b)(5)(D),
15	then there is hereby imposed on such person a
16	tax equal to the applicable amount for each gal-
17	lon of such cellulosic biomass alcohol.".
18	(2) Conforming amendments.—
19	(A) Subparagraph (C) of section 40(d)(3) is
20	amended by striking "PRODUCER" in the head-
21	ing and inserting "SMALL ETHANOL PRODUCER".
22	(B) Subparagraph (E) of section $40(d)(3)$,
23	as redesignated by paragraph (1), is amended by
24	striking "or (C)" and inserting "(C), or (D)".

1	(d) Limitation to Cellulosic Alcohol With Con-
2	NECTION TO THE UNITED STATES.—Subsection (d) of sec-
3	tion 40, as amended by this Act, is amended by adding
4	at the end the following new paragraph:
5	"(7) Limitation to cellulosic alcohol with
6	Connection to the united states.—No cellulosic
7	alcohol producer credit shall be determined under sub-
8	section (a) with respect to any alcohol unless such al-
9	cohol is produced in the United States.".
10	(e) Effective Date.—The amendments made by this
11	section shall apply to fuel produced after December 31,
12	2007.
13	SEC. 1522. EXPANSION OF SPECIAL ALLOWANCE TO CEL-
13 14	SEC. 1522. EXPANSION OF SPECIAL ALLOWANCE TO CEL- LULOSIC BIOMASS ALCOHOL FUEL PLANT
14	LULOSIC BIOMASS ALCOHOL FUEL PLANT
14 15	LULOSIC BIOMASS ALCOHOL FUEL PLANT PROPERTY. (a) IN GENERAL.—Paragraph (3) of section 168(l) (re-
14151617	LULOSIC BIOMASS ALCOHOL FUEL PLANT PROPERTY. (a) IN GENERAL.—Paragraph (3) of section 168(l) (re-
14151617	LULOSIC BIOMASS ALCOHOL FUEL PLANT PROPERTY. (a) IN GENERAL.—Paragraph (3) of section 168(l) (relating to special allowance for cellulosic biomass ethanol
14 15 16 17 18	LULOSIC BIOMASS ALCOHOL FUEL PLANT PROPERTY. (a) IN GENERAL.—Paragraph (3) of section 168(l) (relating to special allowance for cellulosic biomass ethanological plant property) is amended to read as follows:
141516171819	LULOSIC BIOMASS ALCOHOL FUEL PLANT PROPERTY. (a) In General.—Paragraph (3) of section 168(l) (relating to special allowance for cellulosic biomass ethanol plant property) is amended to read as follows: "(3) Cellulosic biomass Alcohol.—For pur-
14 15 16 17 18 19 20	LULOSIC BIOMASS ALCOHOL FUEL PLANT PROPERTY. (a) IN GENERAL.—Paragraph (3) of section 168(l) (relating to special allowance for cellulosic biomass ethanologiant property) is amended to read as follows: "(3) CELLULOSIC BIOMASS ALCOHOL.—For purposes of this subsection, the term 'cellulosic biomass'
14 15 16 17 18 19 20 21	LULOSIC BIOMASS ALCOHOL FUEL PLANT PROPERTY. (a) In General.—Paragraph (3) of section 168(l) (relating to special allowance for cellulosic biomass ethanological plant property) is amended to read as follows: "(3) Cellulosic Biomass Alcohol.—For purposes of this subsection, the term 'cellulosic biomass alcohol' means any alcohol produced from any

1	(1) Subsection (1) of section 168 is amended by
2	striking "cellulosic biomass ethanol" each place it ap-
3	pears and inserting "cellulosic biomass alcohol".
4	(2) The heading of section 168(l) is amended by
5	striking "Cellulosic Biomass Ethanol" and in-
6	serting "Cellulosic Biomass Alcohol".
7	(3) The heading of paragraph (2) of section
8	168(l) is amended by striking "CELLULOSIC BIOMASS
9	ETHANOL" and inserting "CELLULOSIC BIOMASS AL-
10	COHOL".
11	(c) Effective Date.—The amendments made by this
12	section shall apply to property placed in service after the
13	date of the enactment of this Act, in taxable years ending
14	after such date.
15	SEC. 1523. MODIFICATION OF ALCOHOL CREDIT.
16	(a) Income Tax Credit.—Subsection (h) of section
17	40 (relating to reduced credit for ethanol blenders) is
18	amended by adding at the end the following new paragraph:
19	"(3) Reduced amount after sale of
20	7,500,000,000 GALLONS.—
21	"(A) In GENERAL.—In the case of any cal-
22	endar year beginning after the calendar year de-
23	scribed in subparagraph (B), the last row in the
24	table in paragraph (2) shall be applied by sub-
25	stituting '46 cents' for '51 cents'.

1 "(B) Calendar year described.—The 2 calendar year described in this subparagraph is 3 the first calendar year beginning after 2007 dur-4 ing which 7,500,000,000 gallons of ethanol (in-5 cluding cellulosic ethanol) have been produced in 6 or imported into the United States, as certified 7 by the Secretary, in consultation with the Ad-8 ministrator of the Environmental Protection 9 Agency.". 10 (b) Excise Tax Credit.— 11 (1) In General.—Paragraph (2) of section 12 6426(b) (relating to alcohol fuel mixture credit) is 13 amended by adding at the end the following new sub-14 paragraph: 15 "(C) Reduced amount after sale of 16 7,500,000,000 GALLONS.—In the case of any alco-17 hol fuel mixture produced in a calendar year be-18 ginning after the calendar year described in sec-19 tion 40(h)(3)(B), subparagraph (A) shall be ap-20 plied by substituting '46 cents' for '51 cents'.". 21 (2) Conforming amendment.—Subparagraph 22 (A) of section 6426(b)(2) is amended by striking "sub-

paragraph (B)" and inserting "subparagraphs (B)

and (C)".

23

1	(c) Effective Date.—The amendments made by this
2	section shall take effect on the date of the enactment of this
3	Act.
4	SEC. 1524. EXTENSION AND MODIFICATION OF CREDITS
5	FOR BIODIESEL AND RENEWABLE DIESEL.
6	(a) In General.—Sections $40A(g)$, $6426(c)(6)$, and
7	6427(e)(5)(B) are each amended by striking "December 31,
8	2008" and inserting "December 31, 2010".
9	(b) Uniform Treatment of Diesel Produced
10	From Biomass.—Paragraph (3) of section 40A(f) is
11	amended—
12	(1) by striking "using a thermal
13	depolymerization process", and
14	(2) by striking "or D396" in subparagraph (B)
15	and inserting "or other equivalent standard approved
16	by the Secretary for fuels to be used in diesel-powered
17	highway vehicles".
18	(c) Eligibility of Certain Aviation Fuel.—Para-
19	graph (3) of section 40A(f) (defining renewable diesel) is
20	amended by adding at the end the following new flush sen-
21	tence:
22	"The term 'renewable diesel' also means fuel derived
23	from biomass which meets the requirements of a De-
24	partment of Defense specification for military jet fuel

1	or an American Society of Testing and Materials
2	specification for aviation turbine fuel.".
3	(d) Effective Date.—
4	(1) In general.—Except as provided in para-
5	graph (2), the amendments made by this section shall
6	apply to fuel produced, and sold or used, after the
7	date of the enactment of this Act.
8	(2) Uniform treatment of diesel produced
9	FROM BIOMASS.—The amendments made by sub-
10	section (b) shall apply to fuel produced, and sold or
11	used, after the date which is 30 days after the date
10	of the angetment of this Act
12	of the enactment of this Act.
13	SEC. 1525. CLARIFICATION OF ELIGIBILITY FOR RENEW-
13	SEC. 1525. CLARIFICATION OF ELIGIBILITY FOR RENEW
13 14	SEC. 1525. CLARIFICATION OF ELIGIBILITY FOR RENEWABLE DIESEL CREDIT.
13 14 15	SEC. 1525. CLARIFICATION OF ELIGIBILITY FOR RENEWABLE DIESEL CREDIT. (a) COPRODUCTION WITH PETROLEUM FEEDSTOCK.—
13 14 15 16	SEC. 1525. CLARIFICATION OF ELIGIBILITY FOR RENEW. ABLE DIESEL CREDIT. (a) COPRODUCTION WITH PETROLEUM FEEDSTOCK.— (1) IN GENERAL.—Paragraph (3) of section
13 14 15 16 17	SEC. 1525. CLARIFICATION OF ELIGIBILITY FOR RENEW. ABLE DIESEL CREDIT. (a) COPRODUCTION WITH PETROLEUM FEEDSTOCK.— (1) IN GENERAL.—Paragraph (3) of section 40A(f) (defining renewable diesel), as amended by this
13 14 15 16 17	SEC. 1525. CLARIFICATION OF ELIGIBILITY FOR RENEW. ABLE DIESEL CREDIT. (a) COPRODUCTION WITH PETROLEUM FEEDSTOCK.— (1) IN GENERAL.—Paragraph (3) of section 40A(f) (defining renewable diesel), as amended by this Act, is amended by adding at the end the following
13 14 15 16 17 18	SEC. 1525. CLARIFICATION OF ELIGIBILITY FOR RENEW. ABLE DIESEL CREDIT. (a) COPRODUCTION WITH PETROLEUM FEEDSTOCK.— (1) IN GENERAL.—Paragraph (3) of section 40A(f) (defining renewable diesel), as amended by this Act, is amended by adding at the end the following sentence: "Such term does not include any fuel de-
13 14 15 16 17 18 19 20	SEC. 1525. CLARIFICATION OF ELIGIBILITY FOR RENEWABLE DIESEL CREDIT. (a) COPRODUCTION WITH PETROLEUM FEEDSTOCK.— (1) IN GENERAL.—Paragraph (3) of section 40A(f) (defining renewable diesel), as amended by this Act, is amended by adding at the end the following sentence: "Such term does not include any fuel derived from coprocessing biomass with a feedstock

1	(2) Conforming amendment.—Paragraph (3)
2	of section 40A(f) is amended by striking "(as defined
3	in section $45K(c)(3)$ ".
4	(b) Clarification of Eligibility for Alternative
5	Fuel Credit.—
6	(1) In General.—Subparagraph (F) of section
7	6426(d)(2) is amended by striking "hydrocarbons"
8	and inserting "fuel".
9	(2) Conforming amendment.—Section 6426 is
10	amended by adding at the end the following new sub-
11	section:
12	"(h) Denial of Double Benefit.—No credit shall
13	be determined under subsection (d) or (e) with respect to
14	any fuel with respect to which credit may be determined
15	under subsection (b) or (c) or under section 40 or 40A.".
16	(c) Effective Date.—
17	(1) In general.—Except as provided in para-
18	graph (2), the amendments made by this section shall
19	apply to fuel produced, and sold or used, after Decem-
20	ber 31, 2007.
21	(2) Clarification of eligibility for alter-
22	NATIVE FUEL CREDIT.—The amendment made by sub-
23	section (b) shall take effect as if included in section
24	11113 of the Safe, Accountable, Flexible, Efficient
25	Transportation Equity Act: A Legacy for Users.

1	SEC. 1526. PROVISIONS CLARIFYING TREATMENT OF FUELS
2	WITH NO NEXUS TO THE UNITED STATES.
3	(a) Alcohol Fuels Credit.—Subsection (d) of sec-
4	tion 40 is amended by adding at the end the following new
5	paragraph:
6	"(6) Limitation to alcohol with connection
7	to the united states.—No credit shall be deter-
8	mined under this section with respect to any alcohol
9	which is produced outside the United States for use
10	as a fuel outside the United States. For purposes of
11	this paragraph, the term 'United States' includes any
12	possession of the United States.".
13	(b) Biodiesel Fuels Credit.—Subsection (d) of sec-
14	tion 40A is amended by adding at the end the following
15	new paragraph:
16	"(5) Limitation to biodiesel with connec-
17	tion to the united states.—No credit shall be de-
18	termined under this section with respect to any bio-
19	diesel which is produced outside the United States for
20	use as a fuel outside the United States. For purposes
21	of this paragraph, the term 'United States' includes
22	any possession of the United States.".
23	(c) Excise Tax Credit.—
24	(1) In General.—Section 6426, as amended by
25	this Act, is amended by adding at the end the fol-
26	lowing new subsection:

1	"(i) Limitation to Fuels With Connection to
2	THE UNITED STATES.—
3	"(1) Alcohol.—No credit shall be determined
4	under this section with respect to any alcohol which
5	is produced outside the United States for use as a fuel
6	outside the United States.
7	"(2) Biodiesel and alternative fuels.—No
8	credit shall be determined under this section with re-
9	spect to any biodiesel or alternative fuel which is pro-
10	duced outside the United States for use as a fuel out-
11	side the United States.
12	For purposes of this subsection, the term 'United States' in-
13	cludes any possession of the United States.".
14	(2) Conforming amendment.—Subsection (e)
15	of section 6427 is amended by redesignating para-
16	graph (5) as paragraph (6) and by inserting after
17	paragraph (4) the following new paragraph:
18	"(5) Limitation to fuels with connection
19	to the united states.—No amount shall be pay-
20	able under paragraph (1) or (2) with respect to any
21	mixture or alternative fuel if credit is not allowed
22	with respect to such mixture or alternative fuel by
23	reason of section $6426(i)$.".
24	(d) Effective Date.—

1	(1) In general.—Except as otherwise provided
2	in this subsection, the amendments made by this sec-
3	tion shall take effect as if included in section 301 of
4	the American Jobs Creation Act of 2004.
5	(2) Alternative fuel credits.—So much of
6	the amendments made by this section as relate to the
7	alternative fuel credit or the alternative fuel mixture
8	credit shall take effect as if included in section 11113
9	of the Safe, Accountable, Flexible, Efficient Transpor-
10	tation Equity Act: A Legacy for Users.
11	(3) Renewable diesel.—So much of the
12	amendments made by this section as relate to renew-
13	able diesel shall take effect as if included in section
14	1346 of the Energy Policy Act of 2005.
15	SEC. 1527. COMPREHENSIVE STUDY OF BIOFUELS.
16	(a) Study.—The Secretary of the Treasury, in con-
17	sultation with the Secretary of Agriculture, the Secretary
18	of Energy, and the Administrator of the Environmental
19	Protection Agency, shall enter into an agreement with the
20	National Academy of Sciences to produce an analysis of
21	current scientific findings to determine—
22	(1) current biofuels production, as well as projec-
23	tions for future production,
24	(2) the maximum amount of biofuels production
25	capable on United States farmland,

1	(3) the domestic effects of a dramatic increase in
2	biofuels production on, for example—
3	(A) the price of fuel,
4	(B) the price of land in rural and suburban
5	communities,
6	(C) crop acreage and other land use,
7	(D) the environment, due to changes in crop
8	acreage, fertilizer use, runoff, water use, emis-
9	sions from vehicles utilizing biofuels, and other
10	factors,
11	(E) the price of feed,
12	(F) the selling price of grain crops,
13	(G) exports and imports of grains,
14	(H) taxpayers, through cost or savings to
15	commodity crop payments, and
16	(I) the expansion of refinery capacity,
17	(4) the ability to convert corn ethanol plants for
18	other uses, such as cellulosic ethanol or biodiesel,
19	(5) a comparative analysis of corn ethanol
20	versus other biofuels and renewable energy sources,
21	considering cost, energy output, and ease of imple-
22	mentation, and
23	(6) the need for additional scientific inquiry,
24	and specific areas of interest for future research.

1	(b) Report.—The National Academy of Sciences shall
2	submit an initial report of the findings of the report re-
3	quired under subsection (a) to the Congress not later than
4	3 months after the date of the enactment of this Act, and
5	a final report not later than 6 months after such date of
6	enactment.
7	PART II—ADVANCED TECHNOLOGY MOTOR
8	VEHICLES
9	SEC. 1528. CREDIT FOR NEW QUALIFIED PLUG-IN ELECTRIC
10	DRIVE MOTOR VEHICLES.
11	(a) In General.—Subpart B of part IV of subchapter
12	A of chapter 1 (relating to other credits) is amended by
13	adding at the end the following new section:
14	"SEC. 30D. NEW QUALIFIED PLUG-IN ELECTRIC DRIVE
15	MOTOR VEHICLES.
16	"(a) Allowance of Credit.—There shall be allowed
17	as a credit against the tax imposed by this chapter for the
18	taxable year an amount equal to the sum of the credit
19	amounts determined under subsection (b) with respect to
20	each new qualified plug-in electric drive motor vehicle
21	placed in service by the taxpayer during the taxable year.
22	"(b) Per Vehicle Dollar Limitation.—
23	"(1) In General.—The amount determined
24	under this subsection with respect to any new quali-
25	fied plug-in electric drive motor vehicle is the sum of

1	the amounts determined under paragraphs (2) and
2	(3) with respect to such vehicle.
3	"(2) Base amount.—The amount determined
4	under this paragraph is \$3,000.
5	"(3) Battery capacity.—In the case of a vehi-
6	cle which draws propulsion energy from a battery
7	with not less than 5 kilowatt hours of capacity, the
8	amount determined under this paragraph is \$200,
9	plus \$200 for each kilowatt hour of capacity in excess
10	of 5 kilowatt hours. The amount determined under
11	this paragraph shall not exceed \$2,000.
12	"(c) Application With Other Credits.—
13	"(1) Business credit treated as part of
14	GENERAL BUSINESS CREDIT.—So much of the credit
15	which would be allowed under subsection (a) for any
16	taxable year (determined without regard to this sub-
17	section) that is attributable to property of a character
18	subject to an allowance for depreciation shall be treat-
19	ed as a credit listed in section 38(b) for such taxable
20	year (and not allowed under subsection (a)).
21	"(2) Personal credit.—
22	"(A) In general.—For purposes of this
23	title, the credit allowed under subsection (a) for
24	any taxable year (determined after application

1	of paragraph (1)) shall be treated as a credit al-
2	lowable under subpart A for such taxable year.
3	"(B) Limitation based on amount of
4	TAX.—In the case of a taxable year to which sec-
5	tion 26(a)(2) does not apply, the credit allowed
6	under subsection (a) for any taxable year (deter-
7	mined after application of paragraph (1)) shall
8	not exceed the excess of—
9	"(i) the sum of the regular tax liability
10	(as defined in section 26(b)) plus the tax
11	imposed by section 55, over
12	"(ii) the sum of the credits allowable
13	under subpart A (other than this section
14	and sections 23 and 25D) and section 27
15	for the taxable year.
16	"(d) New Qualified Plug-in Electric Drive
17	Motor Vehicle.—For purposes of this section—
18	"(1) In GENERAL.—The term 'new qualified
19	plug-in electric drive motor vehicle' means a motor
20	vehicle (as defined in section $30(c)(2)$)—
21	"(A) the original use of which commences
22	with the taxpayer,
23	"(B) which is acquired for use or lease by
24	the taxpayer and not for resale,
25	"(C) which is made by a manufacturer,

1	"(D) which has a gross vehicle weight rat-
2	ing of less than 14,000 pounds,
3	"(E) which has received a certificate of con-
4	formity under the Clean Air Act and meets or
5	exceeds the Bin 5 Tier II emission standard es-
6	tablished in regulations prescribed by the Ad-
7	ministrator of the Environmental Protection
8	Agency under section 202(i) of the Clean Air Act
9	for that make and model year vehicle, and
10	"(F) which is propelled to a significant ex-
11	tent by an electric motor which draws electricity
12	from a battery which—
13	"(i) has a capacity of not less than 4
14	kilowatt hours, and
15	"(ii) is capable of being recharged from
16	an external source of electricity.
17	"(2) Exception.—The term 'new qualified plug-
18	in electric drive motor vehicle' shall not include any
19	vehicle which is not a passenger automobile or light
20	truck if such vehicle has a gross vehicle weight rating
21	of less than 8,500 pounds.
22	"(3) Other terms.—The terms 'passenger auto-
23	mobile', 'light truck', and 'manufacturer' have the
24	meanings given such terms in regulations prescribed
25	by the Administrator of the Environmental Protection

- 1 Agency for purposes of the administration of title II 2 of the Clean Air Act (42 U.S.C. 7521 et seq.).
- "(4) Battery capacity.—The term 'capacity'
 means, with respect to any battery, the quantity of
 electricity which the battery is capable of storing, expressed in kilowatt hours, as measured from a 100
 percent state of charge to a 0 percent state of charge.
- 8 "(e) Limitation on Number of New Qualified
 9 Plug-in Electric Drive Motor Vehicles Eligible
 10 for Credit.—
- 11 "(1) IN GENERAL.—In the case of a new quali-12 fied plug-in electric drive motor vehicle sold during 13 the phaseout period, only the applicable percentage of 14 the credit otherwise allowable under subsection (a) 15 shall be allowed.
 - "(2) Phaseout period is the period beginning with the second calendar quarter following the calendar quarter which includes the first date on which the number of new qualified plug-in electric drive motor vehicles manufactured by the manufacturer of the vehicle referred to in paragraph (1) sold for use in the United States after the date of the enactment of this section, is at least 60,000.

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1	"(3) Applicable percentage.—For purposes
2	of paragraph (1), the applicable percentage is—
3	"(A) 50 percent for the first 2 calendar
4	quarters of the phaseout period,
5	"(B) 25 percent for the 3d and 4th calendar
6	quarters of the phaseout period, and
7	"(C) 0 percent for each calendar quarter
8	the reafter.
9	"(4) Controlled Groups.—Rules similar to
10	the rules of section $30B(f)(4)$ shall apply for purposes
11	of this subsection.
12	"(f) Special Rules.—
13	"(1) Basis reduction.—The basis of any prop-
14	erty for which a credit is allowable under subsection
15	(a) shall be reduced by the amount of such credit (de-
16	termined without regard to subsection (c)).
17	"(2) Recapture.—The Secretary shall, by regu-
18	lations, provide for recapturing the benefit of any
19	credit allowable under subsection (a) with respect to
20	any property which ceases to be property eligible for
21	such credit.
22	"(3) Property used outside united states,
23	ETC., NOT QUALIFIED.—No credit shall be allowed
24	under subsection (a) with respect to any property re-
25	ferred to in section 50(b)(1) or with respect to the

1	portion of the cost of any property taken into account
2	under section 179.
3	"(4) Election not to take credit.—No credit
4	shall be allowed under subsection (a) for any vehicle
5	if the taxpayer elects to not have this section apply
6	to such vehicle.
7	"(5) Property used by tax-exempt entity;
8	INTERACTION WITH AIR QUALITY AND MOTOR VEHICLE
9	SAFETY STANDARDS.—Rules similar to the rules of
10	paragraphs (6) and (10) of section 30B(h) shall apply
11	for purposes of this section.".
12	(b) Coordination With Alternative Motor Vehi-
13	CLE CREDIT.—Section $30B(d)(3)$ is amended by adding at
14	the end the following new subparagraph:
15	"(D) Exclusion of plug-in vehicles.—
16	Any vehicle with respect to which a credit is al-
17	lowable under section 30D (determined without
18	regard to subsection (c) thereof) shall not be
19	taken into account under this section.".
20	(c) Credit Made Part of General Business
21	CREDIT.—Section 38(b), as amended by this Act, is amend-
22	ed—
23	(1) by striking "and" each place it appears at
24	the end of any paragraph,

1	(2) by striking "plus" each place it appears at
2	the end of any paragraph,
3	(3) by striking the period at the end of para-
4	graph (31) and inserting ", plus", and
5	(4) by adding at the end the following new para-
6	graph:
7	"(32) the portion of the new qualified plug-in
8	electric drive motor vehicle credit to which section
9	30D(c)(1) applies.".
10	(d) Conforming Amendments.—
11	(1)(A) Section $24(b)(3)(B)$, as amended by this
12	Act, is amended by striking "and 25D" and inserting
13	"25D, and 30D".
14	(B) Section 25(e)(1)(C)(ii) is amended by insert-
15	ing "30D," after "25D,".
16	(C) Section $25B(g)(2)$, as amended by this Act,
17	is amended by striking "and 25D" and inserting ",
18	25D, and 30D".
19	(D) Section 26(a)(1), as amended by this Act, is
20	amended by striking "and 25D" and inserting "25D,
21	and 30D".
22	(E) Section $1400C(d)(2)$ is amended by striking
23	"and 25D" and inserting "25D, and 30D".
24	(2) Section 1016(a) is amended by striking
25	"and" at the end of paragraph (36), by striking the

1	period at the end of paragraph (37) and inserting ",
2	and", and by adding at the end the following new
3	paragraph:
4	"(38) to the extent provided in section
5	30D(f)(1).".
6	(3) Section 6501(m) is amended by inserting
7	"30D(f)(4)," after "30C(e)(5),".
8	(4) The table of sections for subpart B of part IV
9	of subchapter A of chapter 1 is amended by adding
10	at the end the following new item:
	"Sec. 30D. New qualified plug-in electric drive motor vehicles.".
11	(e) Treatment of Alternative Motor Vehicle
12	Credit as a Personal Credit.—
13	(1) In General.—Paragraph (2) of section
14	30B(g) is amended to read as follows:
15	"(2) Personal credit.—The credit allowed
16	under subsection (a) for any taxable year (after ap-
17	plication of paragraph (1)) shall be treated as a cred-
18	it allowable under subpart A for such taxable year.".
19	(2) Conforming amendments.—
20	(A) Subparagraph (A) of section $30C(d)(2)$
21	is amended by striking "sections 27, 30, and
22	30B" and inserting "sections 27 and 30".
23	(B) Paragraph (3) of section 55(c) is
24	amended by striking " $30B(g)(2)$,".
25	(f) Effective Date.—

1	(1) In general.—Except as otherwise provided
2	in this subsection, the amendments made by this sec-
3	tion shall apply to taxable years beginning after De-
4	cember 31, 2007.
5	(2) Treatment of alternative motor vehi-
6	CLE CREDIT AS PERSONAL CREDIT.—The amendments
7	made by subsection (e) shall apply to taxable years
8	beginning after December 31, 2006.
9	(g) Application of EGTRRA Sunset.—The amend-
10	ment made by subsection (d)(1)(A) shall be subject to title
11	IX of the Economic Growth and Tax Relief Reconciliation
12	Act of 2001 in the same manner as the provision of such
1 2	Act to which such amendment relates.
13	Act to which such amenament retates,
	SEC. 1529. EXCLUSION FROM HEAVY TRUCK TAX FOR
14	SEC. 1529. EXCLUSION FROM HEAVY TRUCK TAX FOR
14 15	SEC. 1529. EXCLUSION FROM HEAVY TRUCK TAX FOR IDLING REDUCTION UNITS AND ADVANCED
14 15 16 17	SEC. 1529. EXCLUSION FROM HEAVY TRUCK TAX FOR IDLING REDUCTION UNITS AND ADVANCED INSULATION.
14 15 16 17	SEC. 1529. EXCLUSION FROM HEAVY TRUCK TAX FOR IDLING REDUCTION UNITS AND ADVANCED INSULATION. (a) IN GENERAL.—Section 4053 (relating to exemp-
14 15 16 17 18	SEC. 1529. EXCLUSION FROM HEAVY TRUCK TAX FOR IDLING REDUCTION UNITS AND ADVANCED INSULATION. (a) IN GENERAL.—Section 4053 (relating to exemptions) is amended by adding at the end the following new
14 15 16 17 18	SEC. 1529. EXCLUSION FROM HEAVY TRUCK TAX FOR IDLING REDUCTION UNITS AND ADVANCED INSULATION. (a) IN GENERAL.—Section 4053 (relating to exemptions) is amended by adding at the end the following new paragraphs:
14 15 16 17 18 19 20	SEC. 1529. EXCLUSION FROM HEAVY TRUCK TAX FOR IDLING REDUCTION UNITS AND ADVANCED INSULATION. (a) IN GENERAL.—Section 4053 (relating to exemptions) is amended by adding at the end the following new paragraphs: "(9) IDLING REDUCTION DEVICE.—Any device or
14 15 16 17 18 19 20 21	SEC. 1529. EXCLUSION FROM HEAVY TRUCK TAX FOR IDLING REDUCTION UNITS AND ADVANCED INSULATION. (a) In General.—Section 4053 (relating to exemptions) is amended by adding at the end the following new paragraphs: "(9) Idling reduction device.—Any device or system of devices which—
14 15 16 17 18 19 20 21	SEC. 1529. EXCLUSION FROM HEAVY TRUCK TAX FOR IDLING REDUCTION UNITS AND ADVANCED INSULATION. (a) In General.—Section 4053 (relating to exemptions) is amended by adding at the end the following new paragraphs: "(9) IDLING REDUCTION DEVICE.—Any device or system of devices which— "(A) is designed to provide to a vehicle

1	is temporarily parked or remains stationary
2	using either—
3	"(i) an all electric unit, such as a bat-
4	tery powered unit or from grid-supplied
5	electricity, or
6	"(ii) a dual fuel unit powered by diesel
7	or other fuels, and capable of providing such
8	services from grid-supplied electricity or on-
9	truck batteries alone, and
10	"(B) is certified by the Secretary of Energy,
11	in consultation with the Administrator of the
12	Environmental Protection Agency and the Sec-
13	retary of Transportation, to reduce long-dura-
14	tion idling of such vehicle at a motor vehicle rest
15	stop or other location where such vehicles are
16	temporarily parked or remain stationary.
17	For purposes of subparagraph (B), the term long-du-
18	ration idling' means the operation of a main drive
19	engine, for a period greater than 15 consecutive min-
20	utes, where the main drive engine is not engaged in
21	gear. Such term does not apply to routine stoppages
22	associated with traffic movement or congestion.
23	"(10) Advanced insulation.—Any insulation
24	that has an R value of not less than R35 per inch.".

1	(b) Effective Date.—The amendment made by this
2	section shall apply to sales or installations after December
3	31, 2007.
4	PART III—OTHER TRANSPORTATION PROVISIONS
5	SEC. 1530. RESTRUCTURING OF NEW YORK LIBERTY ZONE
6	TAX CREDITS.
7	(a) In General.—Part I of subchapter Y of chapter
8	1 is amended by redesignating section 1400L as section
9	1400K and by adding at the end the following new section.
10	"SEC. 1400L. NEW YORK LIBERTY ZONE TAX CREDITS.
11	"(a) In General.—In the case of a New York Liberty
12	Zone governmental unit, there shall be allowed as a credit
13	against any taxes imposed for any payroll period by section
14	3402 for which such governmental unit is liable under sec-
15	tion 3403 an amount equal to so much of the portion of
16	the qualifying project expenditure amount allocated under
17	subsection (b)(3) to such governmental unit for the calendar
18	year as is allocated by such governmental unit to such pe-
19	$riod\ under\ subsection\ (b)(4).$
20	"(b) Qualifying Project Expenditure Amount.—
21	For purposes of this section—
22	"(1) In GENERAL.—The term 'qualifying project
23	expenditure amount' means, with respect to any cal-
24	endar year, the sum of—

1	"(A) the total expenditures paid or incurred
2	during such calendar year by all New York Lib-
3	erty Zone governmental units and the Port Au-
4	thority of New York and New Jersey for any
5	portion of qualifying projects located wholly
6	within the City of New York, New York, and
7	"(B) any such expenditures—
8	"(i) paid or incurred in any preceding
9	calendar year which begins after the date of
10	enactment of this section, and
11	"(ii) not previously allocated under
12	paragraph (3).
13	"(2) Qualifying project.—The term 'quali-
14	fying project' means any transportation infrastruc-
15	ture project, including highways, mass transit sys-
16	tems, railroads, airports, ports, and waterways, in or
17	connecting with the New York Liberty Zone (as de-
18	fined in section 1400 $K(h)$), which is designated as a
19	qualifying project under this section jointly by the
20	Governor of the State of New York and the Mayor of
21	the City of New York, New York.
22	"(3) General allocation.—
23	"(A) In General.—The Governor of the
24	State of New York and the Mayor of the City of
25	New York, New York, shall jointly allocate to

1	each New York Liberty Zone governmental unit
2	the portion of the qualifying project expenditure
3	amount which may be taken into account by
4	such governmental unit under subsection (a) for
5	any calendar year in the credit period.
6	"(B) AGGREGATE LIMIT.—The aggregate
7	amount which may be allocated under subpara-
8	graph (A) for all calendar years in the credit pe-
9	riod shall not exceed \$2,000,000,000.
10	"(C) Annual limit.—The aggregate
11	amount which may be allocated under subpara-
12	graph (A) for any calendar year in the credit pe-
13	riod shall not exceed the sum of—
14	"(i) \$115,000,000 (\$425,000,000 in the
15	case of the last 2 years in the credit period),
16	plus
17	"(ii) the aggregate amount authorized
18	to be allocated under this paragraph for all
19	preceding calendar years in the credit pe-
20	riod which was not so allocated.
21	"(D) Unallocated amounts at end of
22	CREDIT PERIOD.—If, as of the close of the credit
23	period, the amount under subparagraph (B) ex-
24	ceeds the aggregate amount allocated under sub-
25	paragraph (A) for all calendar years in the cred-

1	it period, the Governor of the State of New York
2	and the Mayor of the City of New York, New
3	York, may jointly allocate to New York Liberty
4	Zone governmental units for any calendar year
5	in the 5-year period following the credit period
6	an amount equal to—
7	"(i) the lesser of—
8	"(I) such excess, or
9	"(II) the qualifying project ex-
10	penditure amount for such calendar
11	year, reduced by
12	"(ii) the aggregate amount allocated
13	under this subparagraph for all preceding
14	calendar years.
15	"(4) Allocation to payroll periods.—Each
16	New York Liberty Zone governmental unit which has
17	been allocated a portion of the qualifying project ex-
18	penditure amount under paragraph (3) for a cal-
19	endar year may allocate such portion to payroll peri-
20	ods beginning in such calendar year as such govern-
21	mental unit determines appropriate.
22	"(c) Carryover of Unused Allocations.—
23	"(1) In general.—Except as provided in para-
24	graph (2), if the amount allocated under subsection
25	(b)(3) to a New York Liberty Zone governmental unit

1	for any calendar year exceeds the aggregate taxes im-
2	posed by section 3402 for which such governmental
3	unit is liable under section 3403 for periods begin-
4	ning in such year, such excess shall be carried to the
5	succeeding calendar year and added to the allocation
6	of such governmental unit for such succeeding cal-
7	endar year.
8	"(2) Reallocation.—If a New York Liberty
9	Zone governmental unit does not use an amount allo-
10	cated to it under subsection (b)(3) within the time
11	prescribed by the Governor of the State of New York
12	and the Mayor of the City of New York, New York,
13	then such amount shall after such time be treated for
14	purposes of subsection $(b)(3)$ in the same manner as
15	if it had never been allocated.
16	"(d) Definitions and Special Rules.—For pur-
17	poses of this section—
18	"(1) Credit period.—The term 'credit period'
19	means the 12-year period beginning on January 1,
20	2008.
21	"(2) New york liberty zone governmental
22	UNIT.—The term 'New York Liberty Zone govern-
23	mental unit' means—
24	"(A) the State of New York,
25	"(B) the City of New York, New York, and

1	"(C) any agency or instrumentality of such
2	State or City.
3	"(3) Treatment of funds.—Any expenditure
4	for a qualifying project taken into account for pur-
5	poses of the credit under this section shall be consid-
6	ered State and local funds for the purpose of any Fed-
7	eral program.
8	"(4) Treatment of credit amounts for pur-
9	POSES OF WITHHOLDING TAXES.—For purposes of
10	this title, a New York Liberty Zone governmental
11	unit shall be treated as having paid to the Secretary,
12	on the day on which wages are paid to employees, an
13	amount equal to the amount of the credit allowed to
14	such entity under subsection (a) with respect to such
15	wages, but only if such governmental unit deducts
16	and withholds wages for such payroll period under
17	section 3401 (relating to wage withholding).
18	"(e) Reporting.—The Governor of the State of New
19	York and the Mayor of the City of New York, New York,
20	shall jointly submit to the Secretary an annual report—
21	"(1) which certifies—
22	"(A) the qualifying project expenditure
23	amount for the calendar year, and

1	"(B) the amount allocated to each New York
2	Liberty Zone governmental unit under sub-
3	section (b)(3) for the calendar year, and
4	"(2) includes such other information as the Sec-
5	retary may require to carry out this section.
6	"(f) GUIDANCE.—The Secretary may prescribe such
7	guidance as may be necessary or appropriate to ensure com-
8	pliance with the purposes of this section.".
9	(b) Termination of Special Allowance and Ex-
10	PENSING.—Subparagraph (A) of section 1400K(b)(2), as re-
11	designated by subsection (a), is amended by striking the
12	parenthetical therein and inserting "(in the case of nonresi-
13	dential real property and residential rental property, the
14	date of the enactment of the Clean Renewable Energy and
15	Conservation Tax Act of 2007 or, if acquired pursuant to
16	a binding contract in effect on such enactment date, Decem-
17	ber 31, 2009)".
18	(c) Conforming Amendments.—
19	(1) Section $38(c)(3)(B)$ is amended by striking
20	"section 1400L(a)" and inserting "section 1400K(a)".
21	(2) Section $168(k)(2)(D)(ii)$ is amended by strik-
22	ing "section 1400 $L(c)(2)$ " and inserting "section
23	1400K(c)(2)".
24	(3) The table of sections for part I of subchapter
25	V of chanter 1 is amended by redesignating the item

1	relating to section 1400L as an item relating to sec-
2	tion 1400K and by inserting after such item the fol-
3	lowing new item:
	"Sec. 1400L. New York Liberty Zone tax credits.".
4	(d) Effective Date.—The amendments made by this
5	section shall take effect on the date of the enactment of this
6	Act.
7	SEC. 1531. EXTENSION OF TRANSPORTATION FRINGE BEN-
8	EFIT TO BICYCLE COMMUTERS.
9	(a) In General.—Paragraph (1) of section 132(f) of
10	the Internal Revenue Code of 1986 (relating to general rule
11	for qualified transportation fringe) is amended by adding
12	at the end the following:
13	"(D) Any qualified bicycle commuting re-
14	imbursement.".
15	(b) Limitation on Exclusion.—Paragraph (2) of
16	section 132(f) of such Code is amended by striking "and"
17	at the end of subparagraph (A), by striking the period at
18	the end of subparagraph (B) and inserting ", and", and
19	by adding at the end the following new subparagraph:
20	"(C) the applicable annual limitation in
21	the case of any qualified bicycle commuting re-
22	imbursement.".
23	(c) Definitions.—Paragraph (5) of section 132(f) of
24	such Code (relating to definitions) is amended by adding
25	at the end the following:

1	"(F) Definitions related to bicycle
2	COMMUTING REIMBURSEMENT.—
3	"(i) Qualified bicycle commuting
4	REIMBURSEMENT.—The term 'qualified bi-
5	cycle commuting reimbursement' means,
6	with respect to any calendar year, any em-
7	ployer reimbursement during the 15-month
8	period beginning with the first day of such
9	calendar year for reasonable expenses in-
10	curred by the employee during such cal-
11	endar year for the purchase of a bicycle and
12	bicycle improvements, repair, and storage,
13	if such bicycle is regularly used for travel
14	between the employee's residence and place
15	$of\ employment.$
16	"(ii) Applicable annual limita-
17	TION.—The term 'applicable annual limita-
18	tion' means, with respect to any employee
19	for any calendar year, the product of \$20
20	multiplied by the number of qualified bicy-
21	cle commuting months during such year.
22	"(iii) Qualified bicycle commuting
23	MONTH.—The term 'qualified bicycle com-
24	muting month' means, with respect to any

1	employee, any month during which such
2	employee—
3	"(I) regularly uses the bicycle for
4	a substantial portion of the travel be-
5	tween the employee's residence and
6	place of employment, and
7	"(II) does not receive any benefit
8	described in subparagraph (A), (B), or
9	(C) of paragraph (1).".
10	(d) Constructive Receipt of Benefit.—Para-
11	graph (4) of section 132(f) is amended by inserting "(other
12	than a qualified bicycle commuting reimbursement)" after
13	"qualified transportation fringe".
14	(e) Effective Date.—The amendments made by this
15	section shall apply to taxable years beginning after Decem-
16	ber 31, 2007.
17	Subtitle C—Energy Conservation
18	and Efficiency
19	PART I—CONSERVATION TAX CREDIT BONDS
20	SEC. 1541. QUALIFIED ENERGY CONSERVATION BONDS.
21	(a) In General.—Subpart I of part IV of subchapter
22	A of chapter 1, as added by this title, is amended by adding
23	at the end the following new section:

1	"SEC. 54C. QUALIFIED ENERGY CONSERVATION BONDS.
2	"(a) Qualified Energy Conservation Bond.—For
3	purposes of this subchapter, the term 'qualified energy con-
4	servation bond' means any bond issued as part of an issue
5	if—
6	"(1) 100 percent of the available project proceeds
7	of such issue are to be used for one or more qualified
8	conservation purposes,
9	"(2) the bond is issued by a State or local gov-
10	ernment, and
11	"(3) the issuer designates such bond for purposes
12	of this section.
13	"(b) Limitation on Amount of Bonds Des-
14	IGNATED.—The maximum aggregate face amount of bonds
15	which may be designated under subsection (a) by any issuer
16	shall not exceed the limitation amount allocated to such
17	issuer under subsection (d).
18	"(c) National Limitation on Amount of Bonds
19	Designated.—There is a national qualified energy con-
20	$servation\ bond\ limitation\ of\ \$3,000,000,000.$
21	"(d) Allocations.—
22	"(1) In General.—The limitation applicable
23	under subsection (c) shall be allocated by the Sec-
24	retary among the States in proportion to the popu-

25

lation of the States.

1	"(2) Allocations to largest local govern-
2	MENTS.—
3	"(A) In GENERAL.—In the case of any
4	State in which there is a large local government,
5	each such local government shall be allocated a
6	portion of such State's allocation which bears the
7	same ratio to the State's allocation (determined
8	without regard to this subparagraph) as the pop-
9	ulation of such large local government bears to
10	the population of such State.
11	"(B) Allocation of unused limitation
12	TO STATE.—The amount allocated under this
13	subsection to a large local government may be re-
14	allocated by such local government to the State
15	in which such local government is located.
16	"(C) Large local government.—For
17	purposes of this section, the term 'large local gov-
18	ernment' means any municipality or county if
19	such municipality or county has a population of
20	100,000 or more.
21	"(3) Allocation to issuers; restriction on
22	PRIVATE ACTIVITY BONDS.—Any allocation under this
23	subsection to a State or large local government shall
24	be allocated by such State or large local government
25	to issuers within the State in a manner that results

1	in not less than 70 percent of the allocation to such
2	State or large local government being used to des-
3	ignate bonds which are not private activity bonds.
4	"(e) Qualified Conservation Purpose.—For pur-
5	poses of this section—
6	"(1) In general.—The term 'qualified conserva-
7	tion purpose' means any of the following:
8	"(A) Capital expenditures incurred for pur-
9	poses of—
10	"(i) reducing energy consumption in
11	publicly-owned buildings by at least 20 per-
12	cent,
13	"(ii) implementing green community
14	programs, or
15	"(iii) rural development involving the
16	production of electricity from renewable en-
17	ergy resources.
18	"(B) Expenditures with respect to research
19	facilities, and research grants, to support re-
20	search in—
21	"(i) development of cellulosic ethanol
22	or other nonfossil fuels,
23	"(ii) technologies for the capture and
24	sequestration of carbon dioxide produced
25	through the use of fossil fuels,

1	"(iii) increasing the efficiency of exist-
2	ing technologies for producing nonfossil
3	fuels,
4	"(iv) automobile battery technologies
5	and other technologies to reduce fossil fuel
6	consumption in transportation, or
7	"(v) technologies to reduce energy use
8	$in\ buildings.$
9	"(C) Mass commuting facilities and related
10	facilities that reduce the consumption of energy,
11	including expenditures to reduce pollution from
12	vehicles used for mass commuting.
13	"(D) Demonstration projects designed to
14	promote the commercialization of—
15	"(i) green building technology,
16	"(ii) conversion of agricultural waste
17	for use in the production of fuel or other-
18	wise,
19	"(iii) advanced battery manufacturing
20	technologies,
21	"(iv) technologies to reduce peak use of
22	$electricity,\ or$
23	"(v) technologies for the capture and
24	sequestration of carbon dioxide emitted from

1	combusting fossil fuels in order to produce
2	electricity.
3	"(E) Public education campaigns to pro-
4	mote energy efficiency.
5	"(2) Special rules for private activity
6	BONDS.—For purposes of this section, in the case of
7	any private activity bond, the term 'qualified con-
8	servation purposes' shall not include any expenditure
9	which is not a capital expenditure.
10	"(f) Population.—
11	"(1) In general.—The population of any State
12	or local government shall be determined for purposes
13	of this section as provided in section 146(j) for the
14	calendar year which includes the date of the enact-
15	ment of this section.
16	"(2) Special rule for counties.—In deter-
17	mining the population of any county for purposes of
18	this section, any population of such county which is
19	taken into account in determining the population of
20	any municipality which is a large local government
21	shall not be taken into account in determining the
22	population of such county.
23	"(g) Application to Indian Tribal Govern-
24	MENTS.—An Indian tribal government shall be treated for

1	purposes of this section in the same manner as a large local
2	government, except that—
3	"(1) an Indian tribal government shall be treat-
4	ed for purposes of subsection (d) as located within a
5	State to the extent of so much of the population of
6	such government as resides within such State, and
7	"(2) any bond issued by an Indian tribal gov-
8	ernment shall be treated as a qualified energy con-
9	servation bond only if issued as part of an issue the
10	available project proceeds of which are used for pur-
11	poses for which such Indian tribal government could
12	issue bonds to which section 103(a) applies.".
13	(b) Conforming Amendments.—
14	(1) Paragraph (1) of section 54A(d), as added by
15	this title, is amended to read as follows:
16	"(1) Qualified tax credit bond.—The term
17	'qualified tax credit bond' means—
18	"(A) a new clean renewable energy bond, or
19	"(B) a qualified energy conservation bond,
20	which is part of an issue that meets requirements of
21	paragraphs (2), (3), (4), and (5).".
22	(2) Subparagraph (C) of section $54A(d)(2)$, as
23	added by this title, is amended to read as follows:

1	"(C) Qualified purposes.—For purposes
2	of this paragraph, the term 'qualified purpose'
3	means—
4	"(i) in the case of a new clean renew-
5	able energy bond, a purpose specified in sec-
6	$tion \ 54B(a)(1), \ and$
7	"(ii) in the case of a qualified energy
8	conservation bond, a purpose specified in
9	section $54C(a)(1)$.".
10	(3) The table of sections for subpart I of part IV
11	of subchapter A of chapter 1, as amended by this title,
12	is amended by adding at the end the following new
13	item:
	"Sec. 54C. Qualified energy conservation bonds.".
14	(c) Effective Date.—The amendments made by this
15	section shall apply to obligations issued after the date of
16	the enactment of this Act.
17	SEC. 1542. QUALIFIED FORESTRY CONSERVATION BONDS.
18	(a) In General.—Subpart I of part IV of subchapter
19	A of chapter 1, as added by this title, is amended by adding
20	at the end the following new section:
21	"SEC. 54D. QUALIFIED FORESTRY CONSERVATION BONDS.
22	"(a) Qualified Forestry Conservation Bond.—
23	For purposes of this subchapter, the term 'qualified forestry
24	conservation bond' means any bond issued as part of an
25	issue if—

1	"(1) 100 percent of the available proceeds of such
2	issue are to be used for one or more qualified forestry
3	$conservation\ projects,$
4	"(2) the bond is issued by a qualified issuer, and
5	"(3) the issuer designates such bond for purposes
6	of this section.
7	"(b) Limitation on Amount of Bonds Des-
8	IGNATED.—The maximum aggregate face amount of bonds
9	which may be designated under subsection (a) by any issuer
10	shall not exceed the limitation amount allocated to such
11	issuer under subsection (d).
12	"(c) National Limitation on Amount of Bonds
13	Designated.—There is a national qualified forestry con-
14	$servation\ bond\ limitation\ of\ \$500,000,000.$
15	"(d) Allocations.—
16	"(1) In general.—The Secretary shall make al-
17	locations of the amount of the national qualified for-
18	estry conservation bond limitation described in sub-
19	section (c) among qualified forestry conservation
20	projects in such manner as the Secretary determines
21	appropriate so as to ensure that all of such limitation
22	is allocated before the date which is 24 months after
23	the date of the enactment of this section.
24	"(2) Solicitation of Applications.—The Sec-
25	retary shall solicit applications for allocations of the

1	national qualified forestry conservation bond limita-
2	tion described in subsection (c) not later than 90 days
3	after the date of the enactment of this section.
4	"(e) Qualified Forestry Conservation
5	Project.—For purposes of this section, the term 'qualified
6	forestry conservation project' means the acquisition by a
7	State or $501(c)(3)$ organization (as defined in section
8	150(a)(4)) from an unrelated person of forest and forest
9	land that meets the following qualifications:
10	"(1) Some portion of the land acquired must be
11	adjacent to United States Forest Service Land.
12	"(2) At least half of the land acquired must be
13	transferred to the United States Forest Service at no
14	net cost to the United States and not more than half
15	of the land acquired may either remain with or be do-
16	nated to a State.
17	"(3) All of the land must be subject to a native
18	fish habitat conservation plan approved by the United
19	States Fish and Wildlife Service.
20	"(4) The amount of acreage acquired must be at
21	least 40,000 acres.
22	"(f) QUALIFIED ISSUER.—For purposes of this section,
23	the term 'qualified issuer' means a State or 501(c)(3) orga-
24	nization (as defined in section $150(a)(4)$).

1	"(g) Special Arbitrage Rule.—In the case of any
2	qualified forestry conservation bond issued as part of an
3	issue, section $54A(d)(4)(C)$ shall be applied to such issue
4	without regard to clause (i).".
5	(b) Conforming Amendments.—
6	(1) Paragraph (1) of section 54A(d), as added by
7	this title, is amended to read as follows:
8	"(1) Qualified tax credit bond.—The term
9	'qualified tax credit bond' means—
10	"(A) a new clean renewable energy bond,
11	"(B) a qualified energy conservation bond,
12	or
13	"(C) a qualified forestry conservation bond,
14	which is part of an issue that meets requirements of
15	paragraphs (2), (3), (4), and (5).".
16	(2) Subparagraph (C) of section $54A(d)(2)$, as
17	added by this title, is amended to read as follows:
18	"(C) Qualified purposes.—For purposes
19	of this paragraph, the term 'qualified purpose'
20	means—
21	"(i) in the case of a new clean renew-
22	able energy bond, a purpose specified in sec-
23	$tion \ 54B(a)(1),$

1	"(ii) in the case of a qualified energy
2	conservation bond, a purpose specified in
3	section $54C(a)(1)$, and
4	"(iii) in the case of a qualified forestry
5	conservation bond, a purpose specified in
6	section $54D(a)(1)$.".
7	(3) The table of sections for subpart I of part IV
8	of subchapter A of chapter 1, as amended by this title,
9	is amended by adding at the end the following new
10	item:
	"Sec. 54C. Qualified forestry conservation bonds.".
11	(c) Effective Date.—The amendments made by this
12	section shall apply to obligations issued after the date of
13	the enactment of this Act.
14	PART II—EFFICIENCY
15	SEC. 1543. EXTENSION AND MODIFICATION OF ENERGY EF-
16	FICIENT EXISTING HOMES CREDIT.
17	(a) Extension of Credit.—Section 25C(g) (relating
18	to termination) is amended by striking "December 31,
19	2007" and inserting "December 31, 2008".
20	(b) Qualified Biomass Fuel Property.—
21	(1) In general.—Section 25C(d)(3) is amend-
22	ed—
23	(A) by striking "and" at the end of sub-
24	paragraph (D),

1	(B) by striking the period at the end of sub-
2	paragraph (E) and inserting ", and", and
3	(C) by adding at the end the following new
4	subparagraph:
5	"(F) a stove which uses the burning of bio-
6	mass fuel to heat a dwelling unit located in the
7	United States and used as a residence by the
8	taxpayer, or to heat water for use in such a
9	dwelling unit, and which has a thermal effi-
10	ciency rating of at least 75 percent.".
11	(2) Biomass fuel.—Section 25C(d) (relating to
12	residential energy property expenditures) is amended
13	by adding at the end the following new paragraph:
14	"(6) Biomass fuel.—The term biomass fuel"
15	means any plant-derived fuel available on a renew-
16	able or recurring basis, including agricultural crops
17	and trees, wood and wood waste and residues (includ-
18	ing wood pellets), plants (including aquatic plants),
19	grasses, residues, and fibers.".
20	(c) Effective Date.—The amendments made this
21	section shall apply to expenditures made after December 31,
22	2007.

1	SEC. 1544. EXTENSION AND MODIFICATION OF ENERGY EF-
2	FICIENT COMMERCIAL BUILDINGS DEDUC-
3	TION.
4	Subsection (h) of section 179D (relating to termi-
5	nation) is amended by striking "December 31, 2008" and
6	inserting "December 31, 2013".
7	SEC. 1545. MODIFICATIONS OF ENERGY EFFICIENT APPLI-
8	ANCE CREDIT FOR APPLIANCES PRODUCED
9	AFTER 2007.
10	(a) In General.—Subsection (b) of section 45M (re-
11	lating to applicable amount) is amended to read as follows:
12	"(b) Applicable Amount.—For purposes of sub-
13	section (a)—
14	"(1) Dishwashers.—The applicable amount
15	is—
16	"(A) \$45 in the case of a dishwasher which
17	is manufactured in calendar year 2008 or 2009
18	and which uses no more than 324 kilowatt hours
19	per year and 5.8 gallons per cycle, and
20	"(B) \$75 in the case of a dishwasher which
21	is manufactured in calendar year 2008, 2009, or
22	2010 and which uses no more than 307 kilowatt
23	hours per year and 5.0 gallons per cycle (5.5 gal-
24	lons per cycle for dishwashers designed for great-
25	er than 12 place settings)

1	"(2) Clothes Washers.—The applicable
2	amount is—
3	"(A) \$75 in the case of a residential top-
4	loading clothes washer manufactured in calendar
5	year 2008 which meets or exceeds a 1.72 modi-
6	fied energy factor and does not exceed a 8.0
7	water consumption factor,
8	"(B) \$125 in the case of a residential top-
9	loading clothes washer manufactured in calendar
10	year 2008 or 2009 which meets or exceeds a 1.8
11	modified energy factor and does not exceed a 7.5
12	water consumption factor,
13	"(C) \$150 in the case of a residential or
14	commercial clothes washer manufactured in cal-
15	endar year 2008, 2009 or 2010 which meets or
16	exceeds 2.0 modified energy factor and does not
17	exceed a 6.0 water consumption factor, and
18	"(D) \$250 in the case of a residential or
19	commercial clothes washer manufactured in cal-
20	endar year 2008, 2009, or 2010 which meets or
21	exceeds 2.2 modified energy factor and does not
22	exceed a 4.5 water consumption factor.
23	"(3) Refrigerators.—The applicable amount
24	is

1	"(A) \$50 in the case of a refrigerator which
2	is manufactured in calendar year 2008, and con-
3	sumes at least 20 percent but not more than 22.9
4	percent less kilowatt hours per year than the
5	2001 energy conservation standards,
6	"(B) \$75 in the case of a refrigerator which
7	is manufactured in calendar year 2008 or 2009,
8	and consumes at least 23 percent but no more
9	than 24.9 percent less kilowatt hours per year
10	than the 2001 energy conservation standards,
11	"(C) \$100 in the case of a refrigerator
12	which is manufactured in calendar year 2008,
13	2009, or 2010, and consumes at least 25 percent
14	but not more than 29.9 percent less kilowatt
15	hours per year than the 2001 energy conserva-
16	tion standards, and
17	"(D) \$200 in the case of a refrigerator man-
18	ufactured in calendar year 2008, 2009, or 2010
19	and which consumes at least 30 percent less en-
20	ergy than the 2001 energy conservation stand-
21	ards.".
22	(b) Eligible Production.—
23	(1) Similar treatment for all appli-
24	ANCES.—Subsection (c) of section 45M (relating to el-
25	igible production) is amended—

1	(A) by striking paragraph (2),
2	(B) by striking "(1) In General" and all
3	that follows through "the eligible" and inserting
4	"The eligible", and
5	(C) by moving the text of such subsection in
6	line with the subsection heading and redesig-
7	nating subparagraphs (A) and (B) as para-
8	graphs (1) and (2), respectively.
9	(2) Modification of base period.—Para-
10	graph (2) of section $45M(c)$, as amended by para-
11	graph (1) of this section, is amended by striking "3-
12	calendar year" and inserting "2-calendar year".
13	(c) Types of Energy Efficient Appliances.—Sub-
14	section (d) of section 45M (defining types of energy efficient
15	appliances) is amended to read as follows:
16	"(d) Types of Energy Efficient Appliance.—For
17	purposes of this section, the types of energy efficient appli-
18	ances are—
19	"(1) dishwashers described in subsection (b)(1),
20	"(2) clothes washers described in subsection
21	(b)(2), and
22	"(3) refrigerators described in subsection (b)(3)."
23	(d) Aggregate Credit Amount Allowed.—

1	(1) Increase in limit.—Paragraph (1) of sec-
2	tion 45M(e) (relating to aggregate credit amount al-
3	lowed) is amended to read as follows:
4	"(1) Aggregate credit amount allowed.—
5	The aggregate amount of credit allowed under sub-
6	section (a) with respect to a taxpayer for any taxable
7	year shall not exceed \$75,000,000 reduced by the
8	amount of the credit allowed under subsection (a) to
9	the taxpayer (or any predecessor) for all prior taxable
10	years beginning after December 31, 2007.".
11	(2) Exception for certain refrigerator
12	AND CLOTHES WASHERS.—Paragraph (2) of section
13	45M(e) is amended to read as follows:
14	"(2) Amount allowed for certain refrig-
15	ERATORS AND CLOTHES WASHERS.—Refrigerators de-
16	scribed in subsection $(b)(3)(D)$ and clothes washers
17	described in subsection $(b)(2)(D)$ shall not be taken
18	into account under paragraph (1).".
19	(e) Qualified Energy Efficient Appliances.—
20	(1) In General.—Paragraph (1) of section
21	45M(f) (defining qualified energy efficient appliance)
22	is amended to read as follows:
23	"(1) Qualified energy efficient appli-
24	ANCE.—The term 'qualified energy efficient appliance'
25	means—

1	"(A) any dishwasher described in subsection
2	(b)(1),
3	"(B) any clothes washer described in sub-
4	section $(b)(2)$, and
5	"(C) any refrigerator described in sub-
6	section $(b)(3)$.".
7	(2) Clothes Washer.—Section $45M(f)(3)$ (de-
8	fining clothes washer) is amended by inserting "com-
9	mercial" before "residential" the second place it ap-
10	pears.
11	(3) Top-loading clothes washer.—Sub-
12	section (f) of section 45M (relating to definitions) is
13	amended by redesignating paragraphs (4), (5), (6),
14	and (7) as paragraphs (5), (6), (7), and (8), respec-
15	tively, and by inserting after paragraph (3) the fol-
16	lowing new paragraph:
17	"(4) Top-loading clothes washer.—The
18	term 'top-loading clothes washer' means a clothes
19	washer which has the clothes container compartment
20	access located on the top of the machine and which
21	operates on a vertical axis.".
22	(4) Replacement of energy factor.—Section
23	45M(f)(7), as redesignated by paragraph (3), is
24	amended to read as follows:

1	"(7) Modified energy factor.—The term
2	'modified energy factor' means the modified energy
3	factor established by the Department of Energy for
4	compliance with the Federal energy conservation
5	standard.".
6	(5) Gallons per cycle; water consumption
7	FACTOR.—Section 45M(f) (relating to definitions) is
8	amended by adding at the end the following:
9	"(9) Gallons per cycle.—The term 'gallons
10	per cycle' means, with respect to a dishwasher, the
11	amount of water, expressed in gallons, required to
12	complete a normal cycle of a dishwasher.
13	"(10) Water consumption factor.—The term
14	'water consumption factor' means, with respect to a
15	clothes washer, the quotient of the total weighted per-
16	cycle water consumption divided by the cubic foot (or
17	liter) capacity of the clothes washer.".
18	(f) Effective Date.—The amendments made by this
19	section shall apply to appliances produced after December
20	31, 2007.
21	SEC. 1546. SEVEN-YEAR APPLICABLE RECOVERY PERIOD
22	FOR DEPRECIATION OF QUALIFIED ENERGY
23	MANAGEMENT DEVICES.
24	(a) In General.—Section 168(e)(3)(C) (relating to 7-
25	year property), as amended by this Act, is amended by

1	striking "and" at the end of clause (v), by redesignating
2	clause (vi) as clause (vii), and by inserting after clause (v)
3	the following new clause:
4	"(vi) any qualified energy manage-
5	ment device, and".
6	(b) Definition of Qualified Energy Management
7	DEVICE.—Section 168(i) (relating to definitions and spe-
8	cial rules) is amended by inserting at the end the following
9	new paragraph:
10	"(18) Qualified energy management de-
11	VICE.—
12	"(A) In general.—The term 'qualified en-
13	ergy management device' means any energy
14	management device which is installed on real
15	property of a customer of the taxpayer and is
16	placed in service by a taxpayer who—
17	"(i) is a supplier of electric energy or
18	a provider of electric energy services, and
19	"(ii) provides all commercial and resi-
20	dential customers of such supplier or pro-
21	vider with net metering upon the request of
22	such customer.
23	"(B) Energy management device.—For
24	purposes of subparagraph (A), the term 'energy
25	management device' means any time-based meter

1	and related communication equipment which is
2	capable of being used by the taxpayer as part of
3	a system that—
4	"(i) measures and records electricity
5	usage data on a time-differentiated basis in
6	at least 24 separate time segments per day,
7	"(ii) provides for the exchange of infor-
8	mation between supplier or provider and
9	the customer's energy management device in
10	support of time-based rates or other forms of
11	demand response, and
12	"(iii) provides data to such supplier or
13	provider so that the supplier or provider
14	can provide energy usage information to
15	$customers\ electronically.$
16	"(C) Net metering.—For purposes of sub-
17	paragraph (A), the term 'net metering' means al-
18	lowing customers a credit for providing elec-
19	tricity to the supplier or provider.".
20	(c) Effective Date.—The amendments made by this
21	section shall apply to property placed in service after De-
22	cember 31, 2007.

Subtitle D—Other Provisions 1 2 PART I—FORESTRY PROVISIONS SEC. 1551. DEDUCTION FOR QUALIFIED TIMBER GAIN. (a) In General.—Part I of subchapter P of chapter 4 1 is amended by adding at the end the following new sec-5 6 tion: 7 "SEC. 1203. DEDUCTION FOR QUALIFIED TIMBER GAIN. 8 "(a) In General.—In the case of a taxpayer which elects the application of this section for a taxable year, there 10 shall be allowed a deduction against gross income in an 11 amount equal to 60 percent of the lesser of— 12 "(1) the taxpayer's qualified timber gain for 13 such year, or 14 "(2) the taxpayer's net capital gain for such 15 year. 16 "(b) QUALIFIED TIMBER GAIN.—For purposes of this section, the term 'qualified timber gain' means, with respect to any taxpayer for any taxable year, the excess (if any) 18 19 of— 20 "(1) the sum of the taxpayer's gains described in 21 subsections (a) and (b) of section 631 for such year, 22 over 23 "(2) the sum of the taxpayer's losses described in 24 such subsections for such year. "(c) Special Rules for Pass-Thru Entities.— 25

1	"(1) In the case of any qualified timber gain of
2	a pass-thru entity (as defined in section 1(h)(10))
3	other than a real estate investment trust, the election
4	under this section shall be made separately by each
5	taxpayer subject to tax on such gain.
6	"(2) In the case of any qualified timber gain of
7	a real estate investment trust, the election under this
8	section shall be made by the real estate investment
9	trust.
10	"(d) Election.—An election under this section may
11	be made only with respect to the first taxable year begin-
12	ning after the date of the enactment of this section.".
13	(b) Coordination With Maximum Capital Gains
14	Rates.—
15	(1) Taxpayers other than corporations.—
16	Paragraph (2) of section 1(h) is amended to read as
17	follows:
18	"(2) Reduction of Net Capital Gain.—For
19	purposes of this subsection, the net capital gain for
20	any taxable year shall be reduced (but not below zero)
21	by the sum of—
22	"(A) the amount which the taxpayer takes
23	into account as investment income under section
24	163(d)(4)(B)(iii), and

1	"(B) in the case of a taxable year with re-
2	spect to which an election is in effect under sec-
3	tion 1203, the taxpayer's qualified timber gain
4	(as defined in section 1203(b)).".
5	(2) Corporations.—Section 1201 is amended
6	by redesignating subsection (b) as subsection (c) and
7	inserting after subsection (a) the following new sub-
8	section:
9	"(b) Qualified Timber Gain Not Taken Into Ac-
10	COUNT.—For purposes of this section, in the case of a cor-
11	poration with respect to which an election is in effect under
12	section 1203, the net capital gain for any taxable year shall
13	be reduced (but not below zero) by the corporation's quali-
14	fied timber gain (as defined in section 1203(b)).".
15	(c) Deduction Allowed Whether or Not Indi-
16	VIDUAL ITEMIZES OTHER DEDUCTIONS.—Subsection (a) of
17	section 62 is amended by inserting before the last sentence
18	the following new paragraph:
19	"(22) Qualified timber gains.—The deduction
20	allowed by section 1203.".
21	(d) Deduction Allowed in Computing Adjusted
22	Current Earnings.—Subparagraph (C) of section
23	56(g)(4) is amended by adding at the end the following new
24	clause:

1	"(vii) Deduction for qualified
2	TIMBER GAIN.—Clause (i) shall not apply
3	to any deduction allowed under section
4	1203.".
5	(e) Deduction Allowed in Computing Taxable In-
6	Come of Electing Small Business Trusts.—Subpara-
7	graph (C) of section 641(c)(2) is amended by inserting after
8	clause (iv) the following new clause:
9	"(v) The deduction allowed under sec-
10	tion 1203.".
11	(f) Treatment of Qualified Timber Gain of Real
12	Estate Investment Trusts.—Paragraph (3) of section
13	857(b) is amended by inserting after subparagraph (F) the
14	following new subparagraph:
15	"(G) TREATMENT OF QUALIFIED TIMBER
16	GAIN.—For purposes of this part, in the case of
17	a real estate investment trust with respect to
18	which an election is in effect under section
19	1203—
20	"(i) REDUCTION OF NET CAPITAL
21	GAIN.—The net capital gain of the real es-
22	tate investment trust for any taxable year
23	shall be reduced (but not below zero) by the
24	real estate investment trust's qualified tim-
25	ber gain (as defined in section 1203(b)).

1	"(ii) Adjustment to shareholder's
2	BASIS ATTRIBUTABLE TO DEDUCTION FOR
3	QUALIFIED TIMBER GAINS.—
4	"(I) In general.—The adjusted
5	basis of shares in the hands of the
6	shareholder shall be increased by the
7	amount of the deduction allowable
8	under section 1203(a) as provided in
9	subclauses (II) and (III).
10	"(II) Allocation of basis in-
11	CREASE FOR DISTRIBUTIONS MADE
12	DURING TAXABLE YEAR.—For any tax-
13	able year of a real estate investment
14	trust for which an election is in effect
15	under section 1203, in the case of a
16	distribution made with respect to
17	shares during such taxable year of
18	amounts attributable to the deduction
19	allowable under section 1203(a), the
20	adjusted basis of such shares shall be
21	increased by the amount of such dis-
22	tributions.
23	"(III) Allocation of excess.—
24	If the deduction allowable under sec-
25	tion 1203(a) for a taxable year exceeds

1	the amount of distributions described
2	in subclause (II), the excess shall be al-
3	located to every shareholder of the real
4	estate investment trust at the close of
5	the trust's taxable year in the same
6	manner as if a distribution of such ex-
7	cess were made with respect to such
8	shares.
9	"(IV) Designations.—To the ex-
10	tent provided in regulations, a real es-
11	tate investment trust shall designate
12	the amounts described in subclauses
13	(II) and (III) in a manner similar to
14	the designations provided with respect
15	to capital gains described in subpara-
16	graphs (C) and (D).
17	"(V) Definitions.—As used in
18	this subparagraph, the terms 'share'
19	and 'shareholder' shall include bene-
20	ficial interests and holders of beneficial
21	$interests,\ respectively.$
22	"(iii) Earnings and profits deduc-
23	TION FOR QUALIFIED TIMBER GAINS.—The
24	deduction allowable under section 1203(a)
25	for a taxable year shall be allowed as a de-

1	duction in computing the earnings and
2	profits of the real estate investment trust for
3	such taxable year. The earnings and profits
4	of any such shareholder which is a corpora-
5	tion shall be appropriately adjusted in ac-
6	cordance with regulations prescribed by the
7	Secretary.".
8	(g) Loss Attributable to Basis Adjustment for
9	DEDUCTION FOR QUALIFIED TIMBER GAIN OF REAL ES-
10	TATE INVESTMENT TRUSTS.—
11	(1) Section 857(b)(8) is amended by redesig-
12	nating subparagraphs (B) and (C) as subparagraphs
13	(C) and (D), respectively, and by inserting after sub-
14	paragraph (A) the following new subparagraph:
15	"(B) Loss attributable to basis ad-
16	JUSTMENT FOR DEDUCTION FOR QUALIFIED TIM-
17	BER GAIN.—If—
18	"(i) a shareholder of a real estate in-
19	vestment trust receives a basis adjustment
20	provided under subsection $(b)(3)(G)(ii)$, and
21	"(ii) the taxpayer has held such share
22	or interest for 6 months or less,
23	then any loss on the sale or exchange of such
24	share or interest shall, to the extent of the
25	amount described in clause (i), be disallowed.".

1	(2) Subparagraph (D) of section 857(b)(8), as
2	redesignated by paragraph (1), is amended by strik-
3	ing "subparagraph (A)" and inserting "subpara-
4	graphs (A) and (B)".
5	(h) Conforming Amendments.—
6	(1) Subparagraph (B) of section $172(d)(2)$ is
7	amended to read as follows:
8	"(B) the exclusion under section 1202, and
9	the deduction under section 1203, shall not be al-
10	lowed.".
11	(2) Paragraph (4) of section 642(c) is amended
12	by striking the first sentence and inserting "To the
13	extent that the amount otherwise allowable as a de-
14	duction under this subsection consists of gain de-
15	scribed in section 1202(a) or qualified timber gain
16	(as defined in section 1203(b)), proper adjustment
17	shall be made for any exclusion allowable to the estate
18	or trust under section 1202 and for any deduction al-
19	lowable to the estate or trust under section 1203."
20	(3) Paragraph (3) of section 643(a) is amended
21	by striking the last sentence and inserting "The exclu-
22	sion under section 1202 and the deduction under sec-
23	tion 1203 shall not be taken into account.".
24	(4) Subparagraph (C) of section $643(a)(6)$ is
25	amended to read as follows:

1	"(C) Paragraph (3) shall not apply to a
2	foreign trust. In the case of such a trust—
3	"(i) there shall be included gains from
4	the sale or exchange of capital assets, re-
5	duced by losses from such sales or exchanges
6	to the extent such losses do not exceed gains
7	from such sales or exchanges, and
8	"(ii) the deduction under section 1203
9	shall not be taken into account.".
10	(5) Paragraph (4) of section 691(c) is amended
11	by inserting "1203," after "1202,".
12	(6) Paragraph (2) of section 871(a) is amended
13	by inserting "or 1203," after "1202,".
14	(7) The table of sections for part I of subchapter
15	P of chapter 1 is amended by adding at the end the
16	following new item:
	"Sec. 1203. Deduction for qualified timber gain.".
17	(i) Effective Date.—The amendments made by this
18	section shall apply to taxable years beginning after the date
19	of the enactment of this Act.
20	SEC. 1552. EXCISE TAX NOT APPLICABLE TO SECTION 1203
21	DEDUCTION OF REAL ESTATE INVESTMENT
22	TRUSTS.
23	(a) In General.—
24	(1) Ordinary income.—Subparagraph (B) of
25	section 4981(e)(1) is amended to read as follows:

1	"(B) by not taking into account—
2	"(i) any gain or loss from the sale or
3	exchange of capital assets (determined with-
4	out regard to any reduction that would be
5	applied for purposes of section
6	857(b)(3)(G)(i)), and
7	"(ii) any deduction allowable under
8	section 1203, and".
9	(2) Capital gain net income.—Section
10	4981(e)(2) is amended by adding at the end the fol-
11	lowing new subparagraph:
12	"(D) QUALIFIED TIMBER GAIN.—The
13	amount determined under subparagraph (A)
14	shall be determined without regard to any reduc-
15	tion that would be applied for purposes of sec-
16	tion $857(b)(3)(G)(i)$ but shall be reduced for any
17	deduction allowable under section 1203 for such
18	calendar year.".
19	(b) Effective Date.—The amendments made by this
20	section shall apply to taxable years beginning after the date
21	of the enactment of this Act.
22	SEC. 1553. TIMBER REIT MODERNIZATION.
23	(a) In General.—Section 856(c)(5) is amended by
24	adding after subparagraph (G) the following new subpara-
25	graph:

1	"(H) Treatment of timber gains.—
2	"(i) In general.—Gain from the sale
3	of real property described in paragraph
4	(2)(D) and $(3)(C)$ shall include gain which
5	is—
6	"(I) recognized by an election
7	under section 631(a) from timber
8	owned by the real estate investment
9	trust, the cutting of which is provided
10	by a taxable REIT subsidiary of the
11	real estate investment trust;
12	"(II) recognized under section
13	631(b); or
14	"(III) income which would con-
15	stitute gain under subclause (I) or (II)
16	but for the failure to meet the 1-year
17	holding period requirement.
18	"(ii) Special rules.—
19	"(I) For purposes of this subtitle,
20	cut timber, the gain of which is recog-
21	nized by a real estate investment trust
22	pursuant to an election under section
23	631(a) described in clause $(i)(I)$ or so
24	much of clause (i)(III) as relates to
25	clause (i)(I), shall be deemed to be sold

1	to the taxable REIT subsidiary of the
2	real estate investment trust on the first
3	day of the taxable year.
4	"(II) For purposes of this subtitle,
5	income described in this subparagraph
6	shall not be treated as gain from the
7	sale of property described in section
8	1221(a)(1).
9	"(iii) Termination.—This subpara-
10	graph shall not apply to dispositions after
11	the termination date.".
12	(b) Termination Date.—Subsection (c) of section
13	856 is amended by adding at the end the following new
14	paragraph:
15	"(8) Termination date.—For purposes of this
16	subsection, the term 'termination date' means the last
17	day of the first taxable year beginning after the date
18	of the enactment of this paragraph.".
19	(c) Effective Date.—The amendments made by sub-
20	section (a) shall apply to dispositions in taxable years be-
21	ginning after the date of the enactment of this Act.
22	SEC. 1554. MINERAL ROYALTY INCOME QUALIFYING IN-
23	COME FOR TIMBER REITS.
24	(a) In General.—Section 856(c)(2) is amended by
25	striking "and" at the end of subparagraph (G), by inserting

1	"and" at the end of subparagraph (H), and by adding after
2	subparagraph (H) the following new subparagraph:
3	"(I) mineral royalty income earned in the
4	first taxable year beginning after the date of the
5	enactment of this subparagraph from real prop-
6	erty owned by a timber real estate investment
7	trust held, or once held, in connection with the
8	trade or business of producing timber by such
9	real estate investment trust;".
10	(b) Timber Real Estate Investment Trust.—Sec-
11	tion 856(c)(5), as amended by this Act, is amended by add-
12	ing after subparagraph (H) the following new subpara-
13	graph:
14	"(I) Timber real estate investment
15	TRUST.—The term 'timber real estate investment
16	trust' means a real estate investment trust in
17	which more than 50 percent in value of its total
18	assets consists of real property held in connection
19	with the trade or business of producing timber."
20	(c) Effective Date.—The amendments by this sec-
21	tion shall apply to taxable years beginning after the date

of the enactment of this Act.

1	SEC. 1555. MODIFICATION OF TAXABLE REIT SUBSIDIARY
2	ASSET TEST FOR TIMBER REITS.
3	(a) In General.—Section 856(c)(4)(B)(ii) is amend-
4	ed by inserting "(in the case of a quarter which closes on
5	or before the termination date, 25 percent in the case of
6	a timber real estate investment trust)" after "not more than
7	20 percent of the value of its total assets is represented by
8	securities of one or more taxable REIT subsidiaries".
9	(b) Effective Date.—The amendment made by this
10	section shall apply to taxable years beginning after the date
11	of the enactment of this Act.
12	SEC. 1556. SAFE HARBOR FOR TIMBER PROPERTY.
13	(a) In General.—Section 857(b)(6) (relating to in-
14	come from prohibited transactions) is amended by adding
15	at the end the following new subparagraph:
16	"(G) Special rules for sales to quali-
17	FIED ORGANIZATIONS.—
18	"(i) In general.—In the case of sale
19	of a real estate asset (as defined in section
20	856(c)(5)(B)) to a qualified organization
21	(as defined in section 170(h)(3)) exclusively
22	for conservation purposes (within the mean-
23	$ing\ of\ section\ 170(h)(1)(C)),\ subparagraph$
24	(D) shall be applied—
25	"(I) by substituting '2 years' for
26	'4 years' in clause (i), and

1	"(II) by substituting '2-year pe-
2	riod' for '4-year period' in clauses (ii)
3	and (iii).
4	"(ii) Termination.—This subpara-
5	graph shall not apply to sales after the ter-
6	mination date.".
7	(b) Prohibited Transactions.—Section
8	857(b)(6)(D)(v) is amended by inserting "or, in the case
9	of a sale on or before the termination date, a taxable REIT
10	subsidiary" after "independent contractor (as defined in
11	section $856(d)(3)$) from whom the trust itself does not derive
12	or receive any income".
13	(c) Sales That Are Not Prohibited Trans-
14	ACTIONS.—Section 857(b)(6), as amended by subsection (a),
15	is amended by adding at the end the following new subpara-
16	graph:
17	"(H) Sales of property that are not a
18	PROHIBITED TRANSACTION.—In the case of a sale
19	on or before the termination date, the sale of
20	property which is not a prohibited transaction
21	through application of subparagraph (D) shall
22	be considered property held for investment or for
23	use in a trade or business and not property de-
24	scribed in section 1221(a)(1) for all purposes of
25	this subtitle.".

1	(d) Termination Date.—Section $857(b)(6)$, as
2	amended by subsections (a) and (c), is amended by adding
3	at the end the following new subparagraph:
4	"(I) TERMINATION DATE.—For purposes of
5	this paragraph, the term 'termination date'
6	means the last day of the first taxable year be-
7	ginning after the date of the enactment of this
8	subparagraph.".
9	(e) Effective Date.—The amendments made by this
10	section shall apply to dispositions in taxable years begin-
11	ning after the date of the enactment of this Act.
12	PART II—EXXON VALDEZ
13	SEC. 1557. INCOME AVERAGING FOR AMOUNTS RECEIVED
14	IN CONNECTION WITH THE EXXON VALDEZ
15	LITIGATION.
16	(a) Income Averaging of Amounts Received From
17	THE EXXON VALDEZ LITIGATION.—For purposes of section
18	1301 of the Internal Revenue Code of 1986—
19	(1) any qualified taxpayer who receives any
20	qualified settlement income in any taxable year shall
21	be treated as engaged in a fishing business (deter-
22	mined without regard to the commercial nature of the
23	

1	(2) such qualified settlement income shall be
2	treated as income attributable to such a fishing busi-
3	ness for such taxable year.
4	(b) Contributions of Amounts Received to Re-
5	TIREMENT ACCOUNTS.—
6	(1) In General.—Any qualified taxpayer who
7	receives qualified settlement income during the tax-
8	able year may, at any time before the end of the tax-
9	able year in which such income was received, make
10	one or more contributions to an eligible retirement
11	plan of which such qualified taxpayer is a beneficiary
12	in an aggregate amount not to exceed the lesser of—
13	(A) \$100,000 (reduced by the amount of
14	qualified settlement income contributed to an eli-
15	gible retirement plan in prior taxable years pur-
16	suant to this subsection), or
17	(B) the amount of qualified settlement in-
18	come received by the individual during the tax-
19	able year.
20	(2) Time when contributions deemed
21	MADE.—For purposes of paragraph (1), a qualified
22	taxpayer shall be deemed to have made a contribution
23	to an eligible retirement plan on the last day of the
24	taxable year in which such income is received if the
25	contribution is made on account of such taxable year

1	and is made not later than the time prescribed by law
2	for filing the return for such taxable year (not includ-
3	ing extensions thereof).
4	(3) Treatment of contributions to eligible
5	RETIREMENT PLANS.—For purposes of the Internal
6	Revenue Code of 1986, if a contribution is made pur-
7	suant to paragraph (1) with respect to qualified set-
8	tlement income, then—
9	(A) except as provided in paragraph (4)—
10	(i) to the extent of such contribution,
11	the qualified settlement income shall not be
12	included in taxable income, and
13	(ii) for purposes of section 72 of such
14	Code, such contribution shall not be consid-
15	ered to be investment in the contract,
16	(B) the qualified taxpayer shall, to the ex-
17	tent of the amount of the contribution, be treat-
18	ed—
19	(i) as having received the qualified set-
20	tlement income—
21	(I) in the case of a contribution to
22	an individual retirement plan (as de-
23	fined under section 7701(a)(37) of such
24	Code), in a distribution described in
25	section $408(d)(3)$ of such Code, and

1	(II) in the case of any other eligi-
2	ble retirement plan, in an eligible roll-
3	over distribution (as defined under sec-
4	tion 402(f)(2) of such Code), and
5	(ii) as having transferred the amount
6	to the eligible retirement plan in a direct
7	trustee to trustee transfer within 60 days of
8	$the \ distribution,$
9	(C) section $408(d)(3)(B)$ of the Internal
10	Revenue Code of 1986 shall not apply with re-
11	spect to amounts treated as a rollover under this
12	paragraph, and
13	(D) section $408A(c)(3)(B)$ of the Internal
14	Revenue Code of 1986 shall not apply with re-
15	spect to amounts contributed to a Roth IRA (as
16	defined under section 408A(b) of such Code) or
17	a designated Roth contribution to an applicable
18	retirement plan (within the meaning of section
19	402A of such Code) under this paragraph.
20	(4) Special rule for roth iras and roth
21	401(k)8.—For purposes of the Internal Revenue Code
22	of 1986, if a contribution is made pursuant to para-
23	graph (1) with respect to qualified settlement income
24	to a Roth IRA (as defined under section 408A(b) of
25	such Code) or as a designated Roth contribution to an

1	applicable retirement plan (within the meaning of
2	section 402A of such Code), then—
3	(A) the qualified settlement income shall be
4	includible in taxable income, and
5	(B) for purposes of section 72 of such Code,
6	such contribution shall be considered to be in-
7	vestment in the contract.
8	(5) Eligible retirement plan.—For purpose
9	of this subsection, the term "eligible retirement plan"
10	has the meaning given such term under section
11	402(c)(8)(B) of the Internal Revenue Code of 1986.
12	(c) Treatment of Qualified Settlement Income
13	Under Employment Taxes.—
14	(1) SECA.—For purposes of chapter 2 of the In-
15	ternal Revenue Code of 1986 and section 211 of the
16	Social Security Act, no portion of qualified settlement
17	income received by a qualified taxpayer shall be treat-
18	ed as self-employment income.
19	(2) FICA.—For purposes of chapter 21 of the In-
20	ternal Revenue Code of 1986 and section 209 of the
21	Social Security Act, no portion of qualified settlement
22	income received by a qualified taxpayer shall be treat-
23	ed as wages.
24	(d) Qualified Taxpayer.—For purposes of this sec-
25	tion, the term "qualified taxpayer" means—

1	(1) any individual who is a plaintiff in the civil
2	action In re Exxon Valdez, No. 89–095–CV (HRH)
3	(Consolidated) (D. Alaska); or
4	(2) any individual who is a beneficiary of the es-
5	tate of such a plaintiff who—
6	(A) acquired the right to receive qualified
7	settlement income from that plaintiff; and
8	(B) was the spouse or an immediate relative
9	of that plaintiff.
10	(e) Qualified Settlement Income.—For purposes
11	of this section, the term "qualified settlement income"
12	means any interest and punitive damage awards which
13	are—
14	(1) otherwise includible in taxable income, and
15	(2) received (whether as lump sums or periodic
16	payments) in connection with the civil action In re
17	Exxon Valdez, No. 89–095–CV (HRH) (Consolidated)
18	(D. Alaska) (whether pre- or post-judgment and
19	whether related to a settlement or judgment).

1	Subtitle E—Revenue Provisions
2	SEC. 1561. LIMITATION OF DEDUCTION FOR INCOME AT-
3	TRIBUTABLE TO DOMESTIC PRODUCTION OF
4	OIL, GAS, OR A PRIMARY PRODUCTS THERE-
5	OF.
6	(a) Denial of Deduction for Major Integrated
7	OIL COMPANIES FOR INCOME ATTRIBUTABLE TO DOMESTIC
8	PRODUCTION OF OIL, GAS, OR PRIMARY PRODUCTS
9	Thereof.—
10	(1) In General.—Subparagraph (B) of section
11	199(c)(4) (relating to exceptions) is amended by strik-
12	ing "or" at the end of clause (ii), by striking the pe-
13	riod at the end of clause (iii) and inserting ", or",
14	and by inserting after clause (iii) the following new
15	clause:
16	"(iv) in the case of any major inte-
17	grated oil company (as defined in section
18	167(h)(5)(B)), the production, refining,
19	processing, transportation, or distribution
20	of oil, gas, or any primary product thereof
21	during any taxable year described in sec-
22	$tion \ 167(h)(5)(B)$.".
23	(2) PRIMARY PRODUCT.—Section $199(c)(4)(B)$ is
24	amended by adding at the end the following flush sen-
25	tence:

1	"For purposes of clause (iv), the term 'primary
2	product' has the same meaning as when used in
3	section $927(a)(2)(C)$, as in effect before its re-
4	peal.".
5	(b) Limitation on Oil Related Qualified Pro-
6	DUCTION ACTIVITIES INCOME FOR TAXPAYERS OTHER
7	Than Major Integrated Oil Companies.—
8	(1) In general.—Section 199(d) is amended by
9	redesignating paragraph (9) as paragraph (10) and
10	by inserting after paragraph (8) the following new
11	paragraph:
12	"(9) Special rule for taxpayers with oil
13	RELATED QUALIFIED PRODUCTION ACTIVITIES IN-
14	COME.—
15	"(A) In GENERAL.—If a taxpayer (other
16	than a major integrated oil company (as defined
17	in section $167(h)(5)(B))$) has oil related qualified
18	production activities income for any taxable
19	year beginning after 2009, the amount of the de-
20	duction under subsection (a) shall be reduced by
21	3 percent of the least of—
22	"(i) the oil related qualified production
23	activities income of the taxpayer for the
24	taxable year,

1	"(ii) the qualified production activities
2	income of the taxpayer for the taxable year,
3	OF
4	"(iii) taxable income (determined with-
5	out regard to this section).
6	"(B) OIL RELATED QUALIFIED PRODUCTION
7	ACTIVITIES INCOME.—The term 'oil related
8	qualified production activities income' means for
9	any taxable year the qualified production activi-
10	ties income which is attributable to the produc-
11	tion, refining, processing, transportation, or dis-
12	tribution of oil, gas, or any primary product
13	thereof during such taxable year.".
14	(2) Conforming Amendment.—Section
15	199(d)(2) (relating to application to individuals) is
16	amended by striking "subsection (a)(1)(B)" and in-
17	serting "subsections $(a)(1)(B)$ and $(d)(9)(A)(iii)$ ".
18	(c) Effective Date.—The amendments made by this
19	section shall apply to taxable years beginning after Decem-
20	ber 31, 2007.

1	SEC. 1562. ELIMINATION OF THE DIFFERENT TREATMENT
2	OF FOREIGN OIL AND GAS EXTRACTION IN-
3	COME AND FOREIGN OIL RELATED INCOME
4	FOR PURPOSES OF THE FOREIGN TAX CRED-
5	IT.
6	(a) In General.—Subsections (a) and (b) of section
7	907 (relating to special rules in case of foreign oil and gas
8	income) are amended to read as follows:
9	"(a) Reduction in Amount Allowed as Foreign
10	Tax Under Section 901.—In applying section 901, the
11	amount of any foreign oil and gas taxes paid or accrued
12	(or deemed to have been paid) during the taxable year
13	which would (but for this subsection) be taken into account
14	for purposes of section 901 shall be reduced by the amount
15	(if any) by which the amount of such taxes exceeds the prod-
16	uct of—
17	"(1) the amount of the combined foreign oil and
18	gas income for the taxable year,
19	"(2) multiplied by—
20	"(A) in the case of a corporation, the per-
21	centage which is equal to the highest rate of tax
22	specified under section 11(b), or
23	"(B) in the case of an individual, a fraction
24	the numerator of which is the tax against which
25	the credit under section 901(a) is taken and the

1	denominator of which is the taxpayer's entire
2	$taxable\ income.$
3	"(b) Combined Foreign Oil and Gas Income; For-
4	EIGN OIL AND GAS TAXES.—For purposes of this section—
5	"(1) Combined foreign oil and gas in-
6	COME.—The term 'combined foreign oil and gas in-
7	come' means, with respect to any taxable year, the
8	sum of—
9	"(A) foreign oil and gas extraction income,
10	and
11	"(B) foreign oil related income.
12	"(2) Foreign oil and gas taxes.—The term
13	'foreign oil and gas taxes' means, with respect to any
14	taxable year, the sum of—
15	"(A) oil and gas extraction taxes, and
16	"(B) any income, war profits, and excess
17	profits taxes paid or accrued (or deemed to have
18	been paid or accrued under section 902 or 960)
19	during the taxable year with respect to foreign
20	oil related income (determined without regard to
21	subsection $(c)(4)$) or loss which would be taken
22	into account for purposes of section 901 without
23	regard to this section.".
24	(b) Recapture of Foreign Oil and Gas Losses.—
25	Paragraph (4) of section 907(c) (relating to recapture of

1	foreign oil and gas extraction losses by recharacterizing
2	later extraction income) is amended to read as follows:
3	"(4) Recapture of foreign oil and gas
4	LOSSES BY RECHARACTERIZING LATER COMBINED
5	FOREIGN OIL AND GAS INCOME.—
6	"(A) In General.—The combined foreign
7	oil and gas income of a taxpayer for a taxable
8	year (determined without regard to this para-
9	graph) shall be reduced—
10	"(i) first by the amount determined
11	under subparagraph (B), and
12	"(ii) then by the amount determined
13	under subparagraph (C).
14	The aggregate amount of such reductions shall be
15	treated as income (from sources without the
16	United States) which is not combined foreign oil
17	and gas income.
18	"(B) Reduction for pre-2008 Foreign
19	OIL EXTRACTION LOSSES.—The reduction under
20	this paragraph shall be equal to the lesser of—
21	"(i) the foreign oil and gas extraction
22	income of the taxpayer for the taxable year
23	(determined without regard to this para-
24	graph), or
25	"(ii) the excess of—

1	"(I) the aggregate amount of for-
2	eign oil extraction losses for preceding
3	taxable years beginning after December
4	31, 1982, and before January 1, 2008,
5	over
6	"(II) so much of such aggregate
7	amount as was recharacterized under
8	this paragraph (as in effect before and
9	after the date of the enactment of the
10	Clean Renewable Energy and Con-
11	servation Tax Act of 2007) for pre-
12	ceding taxable years beginning after
13	December 31, 1982.
14	"(C) Reduction for Post-2007 Foreign
15	OIL AND GAS LOSSES.—The reduction under this
16	paragraph shall be equal to the lesser of—
17	"(i) the combined foreign oil and gas
18	income of the taxpayer for the taxable year
19	(determined without regard to this para-
20	graph), reduced by an amount equal to the
21	reduction under subparagraph (A) for the
22	taxable year, or
23	"(ii) the excess of—
24	"(I) the aggregate amount of for-
25	eign oil and gas losses for preceding

1	taxable years beginning after December
2	31, 2007, over
3	"(II) so much of such aggregate
4	amount as was recharacterized under
5	this paragraph for preceding taxable
6	years beginning after December 31,
7	2007.
8	"(D) Foreign oil and gas loss de-
9	FINED.—
10	"(i) In general.—For purposes of
11	this paragraph, the term 'foreign oil and
12	gas loss' means the amount by which—
13	"(I) the gross income for the tax-
14	able year from sources without the
15	United States and its possessions
16	(whether or not the taxpayer chooses
17	the benefits of this subpart for such
18	taxable year) taken into account in de-
19	termining the combined foreign oil and
20	gas income for such year, is exceeded
21	by
22	"(II) the sum of the deductions
23	properly apportioned or allocated
24	thereto.

1	"(ii) Net operating loss deduction
2	NOT TAKEN INTO ACCOUNT.—For purposes
3	of clause (i), the net operating loss deduc-
4	tion allowable for the taxable year under
5	section 172(a) shall not be taken into ac-
6	count.
7	"(iii) Expropriation and casualty
8	Losses not taken into account.—For
9	purposes of clause (i), there shall not be
10	taken into account—
11	"(I) any foreign expropriation
12	loss (as defined in section 172(h) (as in
13	effect on the day before the date of the
14	enactment of the Revenue Reconcili-
15	ation Act of 1990)) for the taxable
16	year, or
17	"(II) any loss for the taxable year
18	which arises from fire, storm, ship-
19	wreck, or other casualty, or from theft,
20	to the extent such loss is not compensated
21	for by insurance or otherwise.
22	"(iv) Foreign oil extraction
23	LOSS.—For purposes of subparagraph
24	$(B)(ii)(I), for eign \ oil \ extraction \ losses \ shall$
25	be determined under this paragraph as in

1	effect on the day before the date of the enact-
2	ment of the Clean Renewable Energy and
3	Conservation Tax Act of 2007.".
4	(c) Carryback and Carryover of Disallowed
5	CREDITS.—Section 907(f) (relating to carryback and carry-
6	over of disallowed credits) is amended—
7	(1) by striking "oil and gas extraction taxes"
8	each place it appears and inserting "foreign oil and
9	gas taxes", and
10	(2) by adding at the end the following new para-
11	graph:
12	"(4) Transition rules for pre-2008 and 2008
13	DISALLOWED CREDITS.—
14	"(A) Pre-2008 credits.—In the case of
15	any unused credit year beginning before Janu-
16	ary 1, 2008, this subsection shall be applied to
17	any unused oil and gas extraction taxes carried
18	from such unused credit year to a year begin-
19	ning after December 31, 2007—
20	"(i) by substituting 'oil and gas extrac-
21	tion taxes' for 'foreign oil and gas taxes'
22	each place it appears in paragraphs (1),
23	(2), and (3), and
24	"(ii) by computing, for purposes of
25	paragraph (2)(A), the limitation under sub-

1	paragraph (A) for the year to which such
2	taxes are carried by substituting 'foreign oil
3	and gas extraction income' for 'foreign oil
4	and gas income' in subsection (a).
5	"(B) 2008 CREDITS.—In the case of any
6	unused credit year beginning in 2008, the
7	amendments made to this subsection by the
8	Clean Renewable Energy and Conservation Tax
9	Act of 2007 shall be treated as being in effect for
10	any preceding year beginning before January 1,
11	2008, solely for purposes of determining how
12	much of the unused foreign oil and gas taxes for
13	such unused credit year may be deemed paid or
14	accrued in such preceding year.".
15	(d) Conforming Amendment.—Section 6501(i) is
16	amended by striking "oil and gas extraction taxes" and in-
17	serting "foreign oil and gas taxes".
18	(e) Effective Date.—The amendments made by this
19	section shall apply to taxable years beginning after Decem-
20	ber 31, 2007.
21	SEC. 1563. SEVEN-YEAR AMORTIZATION OF GEOLOGICAL
22	AND GEOPHYSICAL EXPENDITURES FOR CER-
23	TAIN MAJOR INTEGRATED OIL COMPANIES.
24	(a) In General.—Subparagraph (A) of section
25	167(h)(5) (relating to special rule for major integrated oil

1	companies) is amended by striking "5-year" and inserting
2	"7-year".
3	(b) Effective Date.—The amendment made by this
4	section shall apply to amounts paid or incurred after the
5	date of the enactment of this Act.
6	SEC. 1564. BROKER REPORTING OF CUSTOMER'S BASIS IN
7	SECURITIES TRANSACTIONS.
8	(a) In General.—
9	(1) Broker reporting for securities trans-
10	ACTIONS.—Section 6045 (relating to returns of bro-
11	kers) is amended by adding at the end the following
12	new subsection:
13	"(g) Additional Information Required in the
14	Case of Securities Transactions.—
15	"(1) In general.—If a broker is otherwise re-
16	quired to make a return under subsection (a) with re-
17	spect to the gross proceeds of the sale of a covered se-
18	curity, the broker shall include in such return the in-
19	formation described in paragraph (2).
20	"(2) Additional information required.—
21	"(A) In General.—The information re-
22	quired under paragraph (1) to be shown on a re-
23	turn with respect to a covered security of a cus-
24	tomer shall include the customer's adjusted basis
25	in such security and whether any gain or loss

1	with respect to such security is long-term or
2	short-term (within the meaning of section 1222).
3	"(B) Determination of Adjusted
4	BASIS.—For purposes of subparagraph (A)—
5	"(i) In general.—The customer's ad-
6	justed basis shall be determined—
7	"(I) in the case of any stock (other
8	than any stock in an open-end fund),
9	in accordance with the first-in first-out
10	method unless the customer notifies the
11	broker by means of making an ade-
12	quate identification of the stock sold or
13	transferred,
14	"(II) in the case of any stock in
15	an open-end fund acquired before Jan-
16	uary 1, 2011, in accordance with any
17	acceptable method under section 1012
18	with respect to the account in which
19	such interest is held,
20	"(III) in the case of any stock in
21	an open-end fund acquired after De-
22	cember 31, 2010, in accordance with
23	the broker's default method unless the
24	customer notifies the broker that he
25	elects another acceptable method under

1	section 1012 with respect to the ac-
2	count in which such interest is held,
3	and
4	"(IV) in any other case, under the
5	method for making such determination
6	under section 1012.
7	"(ii) Exception for wash sales.—
8	Except as otherwise provided by the Sec-
9	retary, the customer's adjusted basis shall be
10	determined without regard to section 1091
11	(relating to loss from wash sales of stock or
12	securities) unless the transactions occur in
13	the same account with respect to identical
14	securities.
15	"(3) Covered Security.—For purposes of this
16	subsection—
17	"(A) In general.—The term 'covered secu-
18	rity' means any specified security acquired on or
19	after the applicable date if such security—
20	"(i) was acquired through a trans-
21	action in the account in which such security
22	is held, or
23	"(ii) was transferred to such account
24	from an account in which such security was
25	a covered security, but only if the broker re-

1	ceived a statement under section 6045A
2	with respect to the transfer.
3	"(B) Specified security.—The term
4	'specified security' means—
5	"(i) any share of stock in a corpora-
6	tion,
7	"(ii) any note, bond, debenture, or
8	other evidence of indebtedness,
9	"(iii) any commodity, or contract or
10	derivative with respect to such commodity,
11	if the Secretary determines that adjusted
12	basis reporting is appropriate for purposes
13	of this subsection, and
14	"(iv) any other financial instrument
15	with respect to which the Secretary deter-
16	mines that adjusted basis reporting is ap-
17	propriate for purposes of this subsection.
18	"(C) Applicable date.—The term 'appli-
19	cable date' means—
20	"(i) January 1, 2009, in the case of
21	any specified security which is stock in a
22	corporation, and
23	"(ii) January 1, 2011, or such later
24	date determined by the Secretary in the case
25	of any other specified security.

"(4) OPEN-END FUND.—For purposes of this subsection, the term 'open-end fund' means a regulated investment company (as defined in section 851) which is offering for sale or has outstanding any redeemable security of which it is the issuer and the shares of which are not traded on an established securities exchange.

"(5) TREATMENT OF 8 CORPORATIONS.—In the case of the sale of a covered security acquired by an 8 corporation (other than a financial institution) after December 31, 2010, such 8 corporation shall be treated in the same manner as a partnership for purposes of this section.

"(6) Special rules for short sales.—

"(A) IN GENERAL.—Notwithstanding subsection (a), in the case of a short sale under section 1233, reporting under this section shall be made for the year in which such sale is closed.

"(B) EXCEPTION FOR CONSTRUCTIVE SALES.—Subparagraph (A) shall not apply to any short sale which results in a constructive sale under section 1259 with respect to property held in the account in which the short sale is entered into.".

1 (2) Broker information required with re-2 Spect to options.—Section 6045, as amended by 3 subsection (a), is amended by adding at the end the 4 following new subsection:

"(h) Application to Options on Securities.—

- "(1) Exercise of option.—For purposes of this section, in the case of any exercise of an option on a covered security where the option was granted or acquired in the same account as the covered security, the amount received or paid with respect to such exercise shall be treated as an adjustment to gross proceeds or as an adjustment to basis, as the case may be.
- "(2) Lapse or closing transaction.—For purposes of this section, in the case of the lapse (or closing transaction (as defined insection (1234(b)(2)(A))) of an option on a specified security where the taxpayer is the grantor of the option, this section shall apply as if the premium received for such option were gross proceeds received on the date of the lapse or closing transaction, and the cost (if any) of the closing transaction shall be taken into account as adjusted basis. In the case of an option on a specified security where the taxpayer is the grantee of such option, this section shall apply as if the grant-

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1	ee received gross proceeds of zero on the date of the
2	lapse.
3	"(3) Prospective application.—Paragraphs
4	(1) and (2) shall not apply to any option which is
5	granted or acquired before January 1, 2011.
6	"(4) Definitions.—For purposes of this sub-
7	section, the terms 'covered security' and 'specified se-
8	curity' shall have the meanings given such terms in
9	subsection $(g)(3)$."
10	(3) Extension of period for statements
11	SENT TO CUSTOMERS.—
12	(A) In general.—Subsection (b) of section
13	6045 is amended by striking "January 31" and
14	inserting "February 15 (January 31 in the case
15	of returns for calendar years before 2010)".
16	(B) Statements related to substitute
17	PAYMENTS.—Subsection (d) of section 6045 is
18	amended—
19	(i) by striking "at such time and", and
20	(ii) by inserting after "other item." the
21	following new sentence: "In the case of a
22	payment made during any calendar year
23	after 2009, the written statement required
24	under the preceding sentence shall be fur-
25	nished on or before February 15 of the year

following the calendar year in which the
payment was made.".
(C) Other statements.—Subsection (b)
of section 6045 is amended by adding at the end
the following: "In the case of a consolidated re-
porting statement (as defined in regulations)
with respect to any account which includes the
statement required by this subsection, any state-
ment which would otherwise be required to be
furnished on or before January 31 of a calendar
year $after$ 2010 $under$ $section$ $6042(c),$
6049(c)(2)(A), or $6050N(b)$ with respect to any
item in such account shall instead be required to
be furnished on or before February 15 of such
calendar year if furnished as part of such con-
solidated reporting statement.".
(b) Determination of Basis of Certain Securi-
TIES ON ACCOUNT BY ACCOUNT METHOD.—Section 1012
(relating to basis of property-cost) is amended—
(1) by striking "The basis of property" and in-
serting the following:
"(a) In General.—The basis of property",
(2) by striking "The cost of real property" and
inserting the following:

1	"(b) Special Rule for Apportioned Real Estate
2	TAXES.—The cost of real property", and
3	(3) by adding at the end the following new sub-
4	section:
5	"(c) Determinations by Account.—
6	"(1) In general.—In the case of the sale, ex-
7	change, or other disposition of a specified security on
8	or after the applicable date, the conventions pre-
9	scribed by regulations under this section shall be ap-
10	plied on an account by account basis.
11	"(2) Application to open-end funds.—
12	"(A) In general.—Except as provided in
13	subparagraph (B), any stock in an open-end
14	fund acquired before January 1, 2009, shall be
15	treated as a separate account from any such
16	stock acquired on or after such date.
17	"(B) Election by open-end fund for
18	TREATMENT AS SINGLE ACCOUNT.—If an open-
19	end fund elects (at such time and in such form
20	and manner as the Secretary may prescribe) to
21	have this subparagraph apply with respect to
22	one or more of its stockholders—
23	"(i) subparagraph (A) shall not apply
24	with respect to any stock in such fund held
25	by such stockholders, and

1	"(ii) all stock in such fund which is
2	held by such stockholders shall be treated as
3	covered securities described in section
4	6045(g)(3) without regard to the date of the
5	acquisition of such stock.
6	A rule similar to the rule of the preceding sen-
7	tence shall apply with respect to a broker holding
8	stock in an open-end fund as a nominee.
9	"(3) Definitions.—For purposes of this section,
10	the terms 'specified security', 'applicable date', and
11	'open-end fund' shall have the meaning given such
12	terms in section $6045(g)$.".
13	(c) Information by Transferors To Aid Bro-
14	KERS.—
15	(1) In general.—Subpart B of part III of sub-
16	chapter A of chapter 61 is amended by inserting after
17	section 6045 the following new section:
18	"SEC. 6045A. INFORMATION REQUIRED IN CONNECTION
19	WITH TRANSFERS OF COVERED SECURITIES
20	TO BROKERS.
21	"(a) Furnishing of Information.—Every applica-
22	ble person which transfers to a broker (as defined in section
23	6045(c)(1)) a security which is a covered security (as de-
24	fined in section $6045(g)(3)$) in the hands of such applicable
25	person shall furnish to such broker a written statement in

1	such manner and setting forth such information as the Sec-
2	retary may by regulations prescribe for purposes of ena-
3	bling such broker to meet the requirements of section
4	6045(g).
5	"(b) Applicable Person.—For purposes of sub-
6	section (a), the term 'applicable person' means—
7	"(1) any broker (as defined in section
8	6045(c)(1)), and
9	"(2) any other person as provided by the Sec-
10	retary in regulations.
11	"(c) Time for Furnishing Statement.—Any state-
12	ment required by subsection (a) shall be furnished not later
13	than the earlier of—
14	"(1) 45 days after the date of the transfer de-
15	scribed in subsection (a), or
16	"(2) January 15 of the year following the cal-
17	endar year during which such transfer occurred.".
18	(2) Assessable penalties.—Paragraph (2) of
19	section 6724(d) (defining payee statement) is amend-
20	ed by redesignating subparagraphs (I) through (CC)
21	as subparagraphs (I) through (DD), respectively, and
22	by inserting after subparagraph (H) the following
23	new subparagraph:

1	"(I) section 6045A (relating to information
2	required in connection with transfers of covered
3	securities to brokers).".
4	(3) Clerical amendment.—The table of sec-
5	tions for subpart B of part III of subchapter A of
6	chapter 61 is amended by inserting after the item re-
7	lating to section 6045 the following new item:
	"Sec. 6045A. Information required in connection with transfers of covered securities to brokers.".
8	(d) Additional Issuer Information to Aid Bro-
9	KERS.—
10	(1) In general.—Subpart B of part III of sub-
11	chapter A of chapter 61 of the Internal Revenue Code
12	of 1986, as amended by subsection (b), is amended by
13	inserting after section 6045A the following new sec-
14	tion:
15	"SEC. 6045B. RETURNS RELATING TO ACTIONS AFFECTING
16	BASIS OF SPECIFIED SECURITIES.
17	"(a) In General.—According to the forms or regula-
18	tions prescribed by the Secretary, any issuer of a specified
19	security shall make a return setting forth—
20	"(1) a description of any organizational action
21	which affects the basis of such specified security of
22	such issuer,
23	"(2) the quantitative effect on the basis of such
24	specified security resulting from such action, and

1	"(3) such other information as the Secretary
2	may prescribe.
3	"(b) Time for Filing Return.—Any return required
4	by subsection (a) shall be filed not later than the earlier
5	of—
6	"(1) 45 days after the date of the action de-
7	scribed in subsection (a), or
8	"(2) January 15 of the year following the cal-
9	endar year during which such action occurred.
10	"(c) Statements To Be Furnished to Holders of
11	Specified Securities or Their Nominees.—According
12	to the forms or regulations prescribed by the Secretary,
13	every person required to make a return under subsection
14	(a) with respect to a specified security shall furnish to the
15	nominee with respect to the specified security (or certificate
16	holder if there is no nominee) a written statement show-
17	ing—
18	"(1) the name, address, and phone number of the
19	information contact of the person required to make
20	such return,
21	"(2) the information required to be shown on
22	such return with respect to such security, and
23	"(3) such other information as the Secretary
24	may prescribe.

- The written statement required under the preceding sentence shall be furnished to the holder on or before January 3 15 of the year following the calendar year during which the action described in subsection (a) occurred. 5 "(d) Specified Security.—For purposes of this section, the term 'specified security' has the meaning given such term by section 6045(q)(3)(B). No return shall be re-8 quired under this section with respect to actions described in subsection (a) with respect to a specified security which 10 occur before the applicable date (as defined in section 6045(g)(3)(C)) with respect to such security. 12 "(e) Public Reporting in Lieu of Return.—The Secretary may waive the requirements under subsections (a) and (c) with respect to a specified security, if the person 14 15 required to make the return under subsection (a) makes publicly available, in such form and manner as the Secretary determines necessary to carry out the purposes of this section— 18
- 19 "(1) the name, address, phone number, and 20 email address of the information contact of such per-21 son, and
- 22 "(2) the information described in paragraphs 23 (1), (2), and (3) of subsection (a).".
- 24 (2) Assessable penalties.—

1	(A) Subparagraph (B) of section $6724(d)(1)$
2	of such Code (defining information return) is
3	amended by redesignating clauses (iv) through
4	(xix) as clauses (v) through (xx), respectively,
5	and by inserting after clause (iii) the following
6	new clause:
7	"(iv) section 6045B(a) (relating to re-
8	turns relating to actions affecting basis of
9	specified securities),".
10	(B) Paragraph (2) of section 6724(d) of
11	such Code (defining payee statement), as amend-
12	ed by subsection $(c)(2)$, is amended by redesig-
13	nating subparagraphs (J) through (DD) as sub-
14	paragraphs (K) through (EE), respectively, and
15	by inserting after subparagraph (I) the following
16	$new\ subparagraph:$
17	"(J) subsections (c) and (e) of section
18	6045B (relating to returns relating to actions af-
19	fecting basis of specified securities).".
20	(3) Clerical amendment.—The table of sec-
21	tions for subpart B of part III of subchapter A of
22	chapter 61 of such Code, as amended by subsection
23	(b)(3), is amended by inserting after the item relating
24	to section 6045A the following new item:

 $\hbox{``Sec. 6045B. Returns relating to actions affecting basis of specified securities.''}.$

1	(e) Effective Date.—The amendments made by this
2	section shall take effect on January 1, 2009.
3	(f) Study Regarding Information Returns.—
4	(1) In general.—The Secretary of the Treasury
5	shall study the effect and feasibility of delaying the
6	date for furnishing statements under sections $6042(c)$,
7	6045, $6049(c)(2)(A)$, and $6050N(b)$ of the Internal
8	Revenue Code of 1986 until February 15 following the
9	year to which such statements relate.
10	(2) Report.—Not later than 6 months after the
11	date of the enactment of this Act, the Secretary of the
12	Treasury shall report to Congress on the results of the
13	study conducted under paragraph (1). Such report
14	shall include the Secretary's findings regarding—
15	(A) the effect on tax administration of such
16	delay, and
17	(B) other administrative or legislative op-
18	tions to improve compliance and ease burdens on
19	taxpayers and brokers with respect to such state-
20	ments.
21	SEC. 1565. EXTENSION OF ADDITIONAL 0.2 PERCENT FUTA
22	SURTAX.
23	(a) In General.—Section 3301 (relating to rate of
24	tax) is amended—

1	(1) by striking "2007" in paragraph (1) and in-
2	serting "2008", and
3	(2) by striking "2008" in paragraph (2) and in-
4	serting "2009".
5	(b) Effective Date.—The amendments made by this
6	section shall apply to wages paid after December 31, 2007.
7	SEC. 1566. TERMINATION OF TREATMENT OF NATURAL GAS
8	DISTRIBUTION LINES AS 15-YEAR PROPERTY
9	(a) In General.—Section 168(e)(3)(E)(viii) of the
10	Internal Revenue Code of 1986 is amended by striking
11	"January 1, 2011" and inserting "December 4, 2007".
12	(b) Effective Date.—
13	(1) In GENERAL.—The amendments made by
14	this section shall apply to property placed in service
15	after December 3, 2007.
16	(2) Exception.—The amendments made by this
17	section shall not apply to any property with respect
18	to which the taxpayer or a related party has entered
19	into a binding contract for the construction thereof on
20	or before December 3, 2007, or, in the case of self-con-
21	structed property, has started construction on or be-
22	fore such date.

1	SEC. 1567. TIME FOR PAYMENT OF CORPORATE ESTIMATED
2	TAXES.
3	The percentage under subparagraph (B) of section
4	401(1) of the Tax Increase Prevention and Reconciliation
5	Act of 2005 in effect on the date of the enactment of this
6	Act is increased by 6.25 percentage points.
7	SEC. 1568. MODIFICATION OF PENALTY FOR FAILURE TO
8	FILE PARTNERSHIP RETURNS.
9	(a) Extension of Time Limitation.—Section
10	6698(a) (relating to failure to file partnership returns) is
11	amended by striking "5 months" and inserting "12
12	months".
13	(b) Increase in Penalty Amount.—Paragraph (1)
14	of section 6698(b) is amended by striking "\$50" and insert-
15	ing "\$80".
16	(c) Effective Date.—The amendments made by this
17	section shall apply to returns required to be filed after the
18	date of the enactment of this Act.
19	Subtitle F—Secure Rural Schools
20	SEC. 1571. SECURE RURAL SCHOOLS AND COMMUNITY
21	SELF-DETERMINATION PROGRAM.
22	(a) Reauthorization of the Secure Rural
23	Schools and Community Self-Determination Act of
24	2000.—The Secure Rural Schools and Community Self-De-
25	termination Act of 2000 (16 U.S.C. 500 note; Public Law

1	106–393) is amended by striking sections 1 through 403
2	and inserting the following:
3	"SECTION 1. SHORT TITLE.
4	"This Act may be cited as the 'Secure Rural Schools
5	and Community Self-Determination Act of 2000'.
6	"SEC. 2. PURPOSES.
7	"The purposes of this Act are—
8	"(1) to stabilize and transition payments to
9	counties to provide funding for schools and roads that
10	supplements other available funds;
11	"(2) to make additional investments in, and cre-
12	ate additional employment opportunities through,
13	projects that—
14	"(A)(i) improve the maintenance of existing
15	in frastructure;
16	"(ii) implement stewardship objectives that
17	enhance forest ecosystems; and
18	"(iii) restore and improve land health and
19	water quality;
20	"(B) enjoy broad-based support; and
21	"(C) have objectives that may include—
22	"(i) road, trail, and infrastructure
23	$maintenance\ or\ oblite ration;$
24	"(ii) soil productivity improvement;

1	"(iii) improvements in forest ecosystem
2	health;
3	"(iv) watershed restoration and main-
4	tenance;
5	"(v) the restoration, maintenance, and
6	improvement of wildlife and fish habitat;
7	"(vi) the control of noxious and exotic
8	weeds; and
9	"(vii) the reestablishment of native spe-
10	cies; and
11	"(3) to improve cooperative relationships
12	among—
13	"(A) the people that use and care for Fed-
14	eral land; and
15	"(B) the agencies that manage the Federal
16	land.
17	"SEC. 3. DEFINITIONS.
18	"In this Act:
19	"(1) Adjusted share.—The term 'adjusted
20	share' means the number equal to the quotient ob-
21	tained by dividing—
22	"(A) the number equal to the quotient ob-
23	tained by dividing—
24	"(i) the base share for the eligible coun-
25	ty; by

1	"(ii) the income adjustment for the eli-
2	gible county; by
3	"(B) the number equal to the sum of the
4	quotients obtained under subparagraph (A) and
5	paragraph $(8)(A)$ for all eligible counties.
6	"(2) Base share.—The term 'base share' means
7	the number equal to the average of—
8	"(A) the quotient obtained by dividing—
9	"(i) the number of acres of Federal
10	land described in paragraph (7)(A) in each
11	eligible county; by
12	"(ii) the total number acres of Federal
13	land in all eligible counties in all eligible
14	States; and
15	"(B) the quotient obtained by dividing—
16	"(i) the amount equal to the average of
17	the 3 highest 25-percent payments and safe-
18	ty net payments made to each eligible State
19	for each eligible county during the eligi-
20	bility period; by
21	"(ii) the amount equal to the sum of
22	the amounts calculated under clause (i) and
23	paragraph (9)(B)(i) for all eligible counties
24	in all eligible States during the eligibility
25	period.

1	"(3) County payment.—The term 'county pay-
2	ment' means the payment for an eligible county cal-
3	culated under section 101(b).
4	"(4) Eligible county.—The term 'eligible
5	county' means any county that—
6	"(A) contains Federal land (as defined in
7	paragraph (7)); and
8	"(B) elects to receive a share of the State
9	payment or the county payment under section
10	102(b).
11	"(5) Eligibility Period.—The term 'eligibility
12	period' means fiscal year 1986 through fiscal year
13	1999.
14	"(6) Eligible State.—The term 'eligible State'
15	means a State or territory of the United States that
16	received a 25-percent payment for 1 or more fiscal
17	years of the eligibility period.
18	"(7) FEDERAL LAND.—The term 'Federal land'
19	means—
20	"(A) land within the National Forest Sys-
21	tem, as defined in section 11(a) of the Forest and
22	Rangeland Renewable Resources Planning Act of
23	1974 (16 U.S.C. 1609(a)) exclusive of the Na-
24	tional Grasslands and land utilization projects
25	designated as National Grasslands administered

1	pursuant to the Act of July 22, 1937 (7 U.S.C.
2	1010–1012); and
3	"(B) such portions of the revested Oregon
4	and California Railroad and reconveyed Coos
5	Bay Wagon Road grant land as are or may
6	hereafter come under the jurisdiction of the De-
7	partment of the Interior, which have heretofore
8	or may hereafter be classified as timberlands,
9	and power-site land valuable for timber, that
10	shall be managed, except as provided in the
11	former section 3 of the Act of August 28, 1937
12	(50 Stat. 875; 43 U.S.C. 1181c), for permanent
13	forest production.
14	"(8) 50-Percent adjusted share.—The term
15	'50-percent adjusted share' means the number equal to
16	the quotient obtained by dividing—
17	"(A) the number equal to the quotient ob-
18	tained by dividing—
19	"(i) the 50-percent base share for the
20	eligible county; by
21	"(ii) the income adjustment for the eli-
22	gible county; by
23	"(B) the number equal to the sum of the
24	quotients obtained under subparagraph (A) and
25	paragraph (1)(A) for all eligible counties.

1	"(9) 50-Percent base share.—The term '50-
2	percent base share' means the number equal to the av-
3	erage of—
4	"(A) the quotient obtained by dividing—
5	"(i) the number of acres of Federal
6	land described in paragraph $(7)(B)$ in each
7	eligible county; by
8	"(ii) the total number acres of Federal
9	land in all eligible counties in all eligible
10	States; and
11	"(B) the quotient obtained by dividing—
12	"(i) the amount equal to the average of
13	the 3 highest 50-percent payments made to
14	each eligible county during the eligibility
15	period; by
16	"(ii) the amount equal to the sum of
17	the amounts calculated under clause (i) and
18	paragraph (2)(B)(i) for all eligible counties
19	in all eligible States during the eligibility
20	period.
21	"(10) 50-percent payment.—The term '50-per-
22	cent payment' means the payment that is the sum of
23	the 50-percent share otherwise paid to a county pur-
24	suant to title II of the Act of August 28, 1937 (chap-
25	ter 876; 50 Stat. 875; 43 U.S.C. 1181f), and the pay-

1	ment made to a county pursuant to the Act of May
2	24, 1939 (chapter 144; 53 Stat. 753; 43 U.S.C. 1181f-
3	1 et seq.).
4	"(11) Full funding amount.—The term 'full
5	funding amount' means—
6	"(A) \$500,000,000 for fiscal year 2008; and
7	"(B) for fiscal year 2009 and each fiscal
8	year thereafter, the amount that is equal to 85
9	percent of the full funding amount for the pre-
10	ceding fiscal year.
11	"(12) Income adjustment.—The term 'income
12	adjustment' means the square of the quotient obtained
13	by dividing—
14	"(A) the per capita personal income for
15	each eligible county; by
16	"(B) the median per capita personal income
17	of all eligible counties.
18	"(13) Per capita personal income.—The
19	term 'per capita personal income' means the most re-
20	cent per capita personal income data, as determined
21	by the Bureau of Economic Analysis.
22	"(14) Safety net payments.—The term 'safety
23	net payments' means the special payment amounts
24	paid to States and counties required by section 13982
25	or 13983 of the Omnibus Budget Reconciliation Act

1	of 1993 (Public Law 103–66; 16 U.S.C. 500 note; 43
2	$U.S.C.\ 1181 f\ note).$
3	"(15) Secretary concerned.—The term 'Sec-
4	retary concerned' means—
5	"(A) the Secretary of Agriculture or the des-
6	ignee of the Secretary of Agriculture with respect
7	to the Federal land described in paragraph
8	(7)(A); and
9	"(B) the Secretary of the Interior or the des-
10	ignee of the Secretary of the Interior with respect
11	to the Federal land described in paragraph
12	(7)(B).
13	"(16) State payment.—The term 'State pay-
14	ment' means the payment for an eligible State cal-
15	culated under section 101(a).
16	"(17) 25-Percent payment.—The term '25-per-
17	cent payment' means the payment to States required
18	by the sixth paragraph under the heading of FOR-
19	EST SERVICE' in the Act of May 23, 1908 (35 Stat.
20	260; 16 U.S.C. 500), and section 13 of the Act of
21	March 1, 1911 (36 Stat. 963; 16 U.S.C. 500).

1	"TITLE I—SECURE PAYMENTS
2	FOR STATES AND COUNTIES
3	CONTAINING FEDERAL LAND
4	"SEC. 101. SECURE PAYMENTS FOR STATES CONTAINING
5	FEDERAL LAND.
6	"(a) State Payment.—For each of fiscal years 2008
7	through 2011, the Secretary of Agriculture shall calculate
8	for each eligible State an amount equal to the sum of the
9	products obtained by multiplying—
10	"(1) the adjusted share for each eligible county
11	within the eligible State; by
12	"(2) the full funding amount for the fiscal year.
13	"(b) County Payment.—For each of fiscal years 2008
14	through 2011, the Secretary of the Interior shall calculate
15	for each eligible county that received a 50-percent payment
16	during the eligibility period an amount equal to the product
17	obtained by multiplying—
18	"(1) the 50-percent adjusted share for the eligible
19	county; by
20	"(2) the full funding amount for the fiscal year.
21	"SEC. 102. PAYMENTS TO STATES AND COUNTIES.
22	"(a) Payment Amounts.—Except as provided in sec-
23	tion 103, the Secretary of the Treasury shall pay to—
24	"(1) a State or territory of the United States an
25	amount equal to the sum of the amounts elected under

1	subsection (b) by each county within the State or ter-
2	ritory for—
3	"(A) if the county is eligible for the 25-per-
4	cent payment, the share of the 25-percent pay-
5	ment; or
6	"(B) the share of the State payment of the
7	eligible county; and
8	"(2) a county an amount equal to the amount
9	elected under subsection (b) by each county for—
10	"(A) if the county is eligible for the 50-per-
11	cent payment, the 50-percent payment; or
12	"(B) the county payment for the eligible
13	county.
14	"(b) Election To Receive Payment Amount.—
15	"(1) Election; submission of results.—
16	"(A) In general.—The election to receive
17	a share of the State payment, the county pay-
18	ment, a share of the State payment and the
19	county payment, a share of the 25-percent pay-
20	ment, the 50-percent payment, or a share of the
21	25-percent payment and the 50-percent payment,
22	as applicable, shall be made at the discretion of
23	each affected county by August 1, 2008, and Au-
24	gust 1 of each second fiscal year thereafter, in ac-
25	cordance with paragraph (2), and transmitted to

1	the Secretary concerned by the Governor of each
2	eligible State.
3	"(B) Failure to transmit.—If an elec-
4	tion for an affected county is not transmitted to
5	the Secretary concerned by the date specified
6	under subparagraph (A), the affected county
7	shall be considered to have elected to receive a
8	share of the State payment, the county payment,
9	or a share of the State payment and the county
10	payment, as applicable.
11	"(2) Duration of election.—
12	"(A) In general.—A county election to re-
13	ceive a share of the 25-percent payment or 50-
14	percent payment, as applicable, shall be effective
15	for 2 fiscal years.
16	"(B) Full funding amount.—If a county
17	elects to receive a share of the State payment or
18	the county payment, the election shall be effective
19	for all subsequent fiscal years through fiscal year
20	2011.
21	"(3) Source of payment amounts.—The pay-
22	ment to an eligible State or eligible county under this
23	section for a fiscal year shall be derived from—
24	"(A) any revenues, fees, penalties, or mis-
25	cellaneous receipts, exclusive of deposits to any

1	relevant trust fund, special account, or perma-
2	nent operating funds, received by the Federal
3	Government from activities by the Bureau of
4	Land Management or the Forest Service on the
5	applicable Federal land; and
6	"(B) to the extent of any shortfall, out of
7	any amounts in the Treasury of the United
8	States not otherwise appropriated.
9	"(c) Distribution and Expenditure of Pay-
10	MENTS.—
11	"(1) Distribution method.—A State that re-
12	ceives a payment under subsection (a) for Federal
13	land described in section 3(7)(A) shall distribute the
14	appropriate payment amount among the appropriate
15	counties in the State in accordance with—
16	"(A) the Act of May 23, 1908 (16 U.S.C.
17	500); and
18	"(B) section 13 of the Act of March 1, 1911
19	(36 Stat. 963; 16 U.S.C. 500).
20	"(2) Expenditure purposes.—Subject to sub-
21	section (d), payments received by a State under sub-
22	section (a) and distributed to counties in accordance
23	with paragraph (1) shall be expended as required by
24	the laws referred to in paragraph (1).

1	"(d) Expenditure Rules for Eligible Coun-
2	TIES.—
3	"(1) Allocations.—
4	"(A) Use of portion in same manner as
5	25-PERCENT PAYMENT OR 50-PERCENT PAYMENT,
6	AS APPLICABLE.—Except as provided in para-
7	graph $(3)(B)$, if an eligible county elects to re-
8	ceive its share of the State payment or the coun-
9	ty payment, not less than 80 percent, but not
10	more than 85 percent, of the funds shall be ex-
11	pended in the same manner in which the 25-per-
12	cent payments or 50-percent payment, as appli-
13	cable, are required to be expended.
14	"(B) Election as to use of balance.—
15	Except as provided in subparagraph (C), an eli-
16	gible county shall elect to do 1 or more of the fol-
17	lowing with the balance of any funds not ex-
18	pended pursuant to subparagraph (A):
19	"(i) Reserve any portion of the balance
20	for projects in accordance with title II.
21	"(ii) Reserve not more than 7 percent
22	of the total share for the eligible county of
23	the State payment or the county payment
24	for projects in accordance with title III.

1	"(iii) Return the portion of the balance
2	not reserved under clauses (i) and (ii) to the
3	Treasury of the United States.
4	"(C) Counties with modest distribu-
5	TIONS.—In the case of each eligible county to
6	which more than \$100,000, but less than
7	\$350,000, is distributed for any fiscal year pur-
8	suant to either or both of paragraphs (1)(B) and
9	(2)(B) of subsection (a), the eligible county, with
10	respect to the balance of any funds not expended
11	pursuant to subparagraph (A) for that fiscal
12	year, shall—
13	"(i) reserve any portion of the balance
14	for—
15	"(I) carrying out projects under
16	titleII;
17	"(II) carrying out projects under
18	$title\ III;\ or$
19	"(III) a combination of the pur-
20	poses described in subclauses (I) and
21	(II); or
22	"(ii) return the portion of the balance
23	not reserved under clause (i) to the Treas-
24	ury of the United States.
25	"(2) Distribution of funds.—

1	"(A) In general.—Funds reserved by an
2	$eligible\ county\ under\ subparagraph\ (B)(i)\ or$
3	(C)(i) of paragraph (1) for carrying out projects
4	under title II shall be deposited in a special ac-
5	count in the Treasury of the United States.
6	"(B) AVAILABILITY.—Amounts deposited
7	under subparagraph (A) shall—
8	"(i) be available for expenditure by the
9	Secretary concerned, without further appro-
10	priation; and
11	"(ii) remain available until expended
12	in accordance with title II.
13	"(3) Election.—
14	"(A) Notification.—
15	"(i) In general.—An eligible county
16	shall notify the Secretary concerned of an
17	election by the eligible county under this
18	subsection not later than September 30 of
19	each fiscal year.
20	"(ii) Failure to elect.—Except as
21	provided in subparagraph (B), if the eligi-
22	ble county fails to make an election by the
23	date specified in clause (i), the eligible
24	county shall—

1	"(I) be considered to have elected
2	to expend 85 percent of the funds in
3	accordance with paragraph (1)(A); and
4	"(II) return the balance to the
5	Treasury of the United States.
6	"(B) Counties with minor distribu-
7	TIONS.—In the case of each eligible county to
8	which less than \$100,000 is distributed for any
9	fiscal year pursuant to either or both of para-
10	graphs $(1)(B)$ and $(2)(B)$ of subsection (a) , the
11	eligible county may elect to expend all the funds
12	in the same manner in which the 25-percent
13	payments or 50-percent payments, as applicable,
14	are required to be expended.
15	"(e) Time for Payment.—The payments required
16	under this section for a fiscal year shall be made as soon
17	as practicable after the end of that fiscal year.
18	"SEC. 103. TRANSITION PAYMENTS TO THE STATES OF CALI-
19	FORNIA, OREGON, AND WASHINGTON.
20	"(a) DEFINITIONS.—In this section:
21	"(1) Adjusted amount.—The term 'adjusted
22	amount' means, with respect to a covered State—
23	"(A) for fiscal year 2008, 90 percent of—
24	"(i) the sum of the amounts paid for
25	fiscal year 2006 under section 102(a)(2) (as

1	in effect on September 29, 2006) for the eli-
2	gible counties in the covered State that have
3	elected under section 102(b) to receive a
4	share of the State payment for fiscal year
5	2008; and
6	"(ii) the sum of the amounts paid for
7	fiscal year 2006 under section $103(a)(2)$ (as
8	in effect on September 29, 2006) for the eli-
9	gible counties in the State of Oregon that
10	have elected under section 102(b) to receive
11	the county payment for fiscal year 2008;
12	"(B) for fiscal year 2009, 76 percent of—
13	"(i) the sum of the amounts paid for
14	fiscal year 2006 under section $102(a)(2)$ (as
15	in effect on September 29, 2006) for the eli-
16	gible counties in the covered State that have
17	elected under section 102(b) to receive a
18	share of the State payment for fiscal year
19	2009; and
20	"(ii) the sum of the amounts paid for
21	fiscal year 2006 under section $103(a)(2)$ (as
22	in effect on September 29, 2006) for the eli-
23	gible counties in the State of Oregon that
24	have elected under section 102(b) to receive

1	the county payment for fiscal year 2009;
2	and
3	"(C) for fiscal year 2010, 65 percent of—
4	"(i) the sum of the amounts paid for
5	fiscal year 2006 under section $102(a)(2)$ (as
6	in effect on September 29, 2006) for the eli-
7	gible counties in the covered State that have
8	elected under section 102(b) to receive a
9	share of the State payment for fiscal year
10	2010; and
11	"(ii) the sum of the amounts paid for
12	fiscal year 2006 under section $103(a)(2)$ (as
13	in effect on September 29, 2006) for the eli-
14	gible counties in the State of Oregon that
15	have elected under section 102(b) to receive
16	the county payment for fiscal year 2010.
17	"(2) Covered State.—The term 'covered State'
18	means each of the States of California, Oregon, and
19	Washington.
20	"(b) Transition Payments.—For each of fiscal years
21	2008 through 2010, in lieu of the payment amounts that
22	otherwise would have been made under paragraphs (1)(B)
23	and (2)(B) of section 102(a), the Secretary of the Treasury
24	shall pay the adjusted amount to each covered State and
25	the eligible counties within the covered State, as applicable.

1	"(c) Distribution of Adjusted Amount in Oregon
2	AND WASHINGTON.—It is the intent of Congress that the
3	method of distributing the payments under subsection (b)
4	among the counties in the States of Oregon and Washington
5	for each of fiscal years 2008 through 2010 be in the same
6	proportion that the payments were distributed to the eligi-
7	ble counties in fiscal year 2006.
8	"(d) Distribution of Payments in California.—
9	The following payments shall be distributed among the eli-
10	gible counties in the State of California in the same propor-
11	tion that payments under section 102(a)(2) (as in effect on
12	September 29, 2006) were distributed to the eligible counties
13	for fiscal year 2006:
14	"(1) Payments to the State of California under
15	subsection (b).
16	"(2) The shares of the eligible counties of the
17	State payment for California under section 102 for
18	fiscal year 2011.
19	"(e) Treatment of Payments.—For purposes of this
20	Act, any payment made under subsection (b) shall be con-
21	sidered to be a payment made under section 102(a).
22	"TITLE II—SPECIAL PROJECTS
23	ON FEDERAL LAND
24	"SEC. 201. DEFINITIONS.
25	"In this title:

1	"(1) Participating county.—The term 'par-
2	ticipating county' means an eligible county that elects
3	under section 102(d) to expend a portion of the Fed-
4	eral funds received under section 102 in accordance
5	with this title.
6	"(2) Project funds.—The term 'project funds'
7	means all funds an eligible county elects under section
8	102(d) to reserve for expenditure in accordance with
9	$this\ title.$
10	"(3) Resource advisory committee.—The
11	term 'resource advisory committee' means—
12	"(A) an advisory committee established by
13	the Secretary concerned under section 205; or
14	"(B) an advisory committee determined by
15	the Secretary concerned to meet the requirements
16	of section 205.
17	"(4) Resource management plan.—The term
18	'resource management plan' means—
19	"(A) a land use plan prepared by the Bu-
20	reau of Land Management for units of the Fed-
21	$eral\ land\ described\ in\ section\ 3(7)(B)\ pursuant$
22	to section 202 of the Federal Land Policy and
23	Management Act of 1976 (43 U.S.C. 1712); or
24	"(B) a land and resource management plan
25	prepared by the Forest Service for units of the

1	National Forest System pursuant to section 6 of
2	the Forest and Rangeland Renewable Resources
3	Planning Act of 1974l (16 U.S.C. 1604).
4	"SEC. 202. GENERAL LIMITATION ON USE OF PROJECT
5	FUNDS.
6	"(a) Limitation.—Project funds shall be expended
7	solely on projects that meet the requirements of this title.
8	"(b) Authorized Uses.—Project funds may be used
9	by the Secretary concerned for the purpose of entering into
10	and implementing cooperative agreements with willing
11	Federal agencies, State and local governments, private and
12	nonprofit entities, and landowners for protection, restora-
13	tion, and enhancement of fish and wildlife habitat, and
14	other resource objectives consistent with the purposes of this
15	Act on Federal land and on non-Federal land where projects
16	would benefit the resources on Federal land.
17	"SEC. 203. SUBMISSION OF PROJECT PROPOSALS.
18	"(a) Submission of Project Proposals to Sec-
19	retary Concerned.—
20	"(1) Projects funded using project
21	FUNDS.—Not later than September 30 for fiscal year
22	2008, and each September 30 thereafter for each suc-
23	ceeding fiscal year through fiscal year 2011, each re-
24	source advisory committee shall submit to the Sec-
25	retary concerned a description of any projects that the

1	resource advisory committee proposes the Secretary
2	undertake using any project funds reserved by eligible
3	counties in the area in which the resource advisory
4	committee has geographic jurisdiction.

- "(2) Projects funded using other funds.—
 A resource advisory committee may submit to the Secretary concerned a description of any projects that the committee proposes the Secretary undertake using funds from State or local governments, or from the private sector, other than project funds and funds appropriated and otherwise available to do similar work.
- "(3) Joint projects.—Participating counties or other persons may propose to pool project funds or other funds, described in paragraph (2), and jointly propose a project or group of projects to a resource advisory committee established under section 205.
- "(b) REQUIRED DESCRIPTION OF PROJECTS.—In sub-19 mitting proposed projects to the Secretary concerned under 20 subsection (a), a resource advisory committee shall include 21 in the description of each proposed project the following in-22 formation:
- 23 "(1) The purpose of the project and a description 24 of how the project will meet the purposes of this title.
- 25 "(2) The anticipated duration of the project.

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1	"(3) The anticipated cost of the project.
2	"(4) The proposed source of funding for the
3	project, whether project funds or other funds.
4	"(5)(A) Expected outcomes, including how the
5	project will meet or exceed desired ecological condi-
6	tions, maintenance objectives, or stewardship objec-
7	tives.
8	"(B) An estimate of the amount of any timber,
9	forage, and other commodities and other economic ac-
10	tivity, including jobs generated, if any, anticipated as
11	part of the project.
12	"(6) A detailed monitoring plan, including fund-
13	ing needs and sources, that—
14	"(A) tracks and identifies the positive or
15	negative impacts of the project, implementation,
16	and provides for validation monitoring; and
17	"(B) includes an assessment of the fol-
18	lowing:
19	"(i) Whether or not the project met or
20	exceeded desired ecological conditions; cre-
21	ated local employment or training opportu-
22	nities, including summer youth jobs pro-
23	grams such as the Youth Conservation
24	Corps where appropriate.

1	"(ii) Whether the project improved the
2	use of, or added value to, any products re-
3	moved from land consistent with the pur-
4	poses of this title.
5	"(7) An assessment that the project is to be in
6	the public interest.
7	"(c) Authorized Projects.—Projects proposed
8	under subsection (a) shall be consistent with section 2.
9	"SEC. 204. EVALUATION AND APPROVAL OF PROJECTS BY
10	SECRETARY CONCERNED.
11	"(a) Conditions for Approval of Proposed
12	Project.—The Secretary concerned may make a decision
13	to approve a project submitted by a resource advisory com-
14	mittee under section 203 only if the proposed project satis-
15	fies each of the following conditions:
16	"(1) The project complies with all applicable
17	Federal laws (including regulations).
18	"(2) The project is consistent with the applicable
19	resource management plan and with any watershed
20	or subsequent plan developed pursuant to the resource
21	management plan and approved by the Secretary
22	concerned.
23	"(3) The project has been approved by the re-
24	source advisory committee in accordance with section

- 205, including the procedures issued under subsection
 (e) of that section.
 - "(4) A project description has been submitted by the resource advisory committee to the Secretary concerned in accordance with section 203.
 - "(5) The project will improve the maintenance of existing infrastructure, implement stewardship objectives that enhance forest ecosystems, and restore and improve land health and water quality.

"(b) Environmental Reviews.—

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- "(1) Request for payment by county.—The Secretary concerned may request the resource advisory committee submitting a proposed project to agree to the use of project funds to pay for any environmental review, consultation, or compliance with applicable environmental laws required in connection with the project.
- "(2) Conduct of environmental review.—If a payment is requested under paragraph (1) and the resource advisory committee agrees to the expenditure of funds for this purpose, the Secretary concerned shall conduct environmental review, consultation, or other compliance responsibilities in accordance with Federal laws (including regulations).
- 25 "(3) Effect of refusal to pay.—

1	"(A) In general.—If a resource advisory
2	committee does not agree to the expenditure of
3	funds under paragraph (1), the project shall be
4	deemed withdrawn from further consideration by
5	the Secretary concerned pursuant to this title.
6	"(B) Effect of withdrawal.—A with-
7	drawal under subparagraph (A) shall be deemed
8	to be a rejection of the project for purposes of sec-
9	$tion \ 207(c).$
10	"(c) Decisions of Secretary Concerned.—
11	"(1) Rejection of projects.—
12	"(A) In General.—A decision by the Sec-
13	retary concerned to reject a proposed project
14	shall be at the sole discretion of the Secretary
15	concerned.
16	"(B) No administrative appeal or judi-
17	CIAL REVIEW.—Notwithstanding any other pro-
18	vision of law, a decision by the Secretary con-
19	cerned to reject a proposed project shall not be
20	subject to administrative appeal or judicial re-
21	view.
22	"(C) Notice of rejection.—Not later
23	than 30 days after the date on which the Sec-
24	retary concerned makes the rejection decision, the
25	Secretary concerned shall notify in writing the

1	resource advisory committee that submitted the
2	proposed project of the rejection and the reasons
3	for rejection.
4	"(2) Notice of project approval.—The Sec-
5	retary concerned shall publish in the Federal Register
6	notice of each project approved under subsection (a)
7	if the notice would be required had the project origi-
8	nated with the Secretary.
9	"(d) Source and Conduct of Project.—Once the
10	Secretary concerned accepts a project for review under sec-
11	tion 203, the acceptance shall be deemed a Federal action
12	for all purposes.
13	"(e) Implementation of Approved Projects.—
14	"(1) Cooperation.—Notwithstanding chapter
15	63 of title 31, United States Code, using project funds
16	the Secretary concerned may enter into contracts,
17	grants, and cooperative agreements with States and
18	local governments, private and nonprofit entities, and
19	landowners and other persons to assist the Secretary
20	in carrying out an approved project.
21	"(2) Best value contracting.—
22	"(A) In general.—For any project involv-
23	ing a contract authorized by paragraph (1) the
24	Secretary concerned may elect a source for per-
25	formance of the contract on a best value basis.

1	"(B) Factors.—The Secretary concerned
2	shall determine best value based on such factors
3	as—
4	"(i) the technical demands and com-
5	plexity of the work to be done;
6	" $(ii)(I)$ the ecological objectives of the
7	project; and
8	"(II) the sensitivity of the resources
9	$being\ treated;$
10	"(iii) the past experience by the con-
11	tractor with the type of work being done,
12	using the type of equipment proposed for
13	the project, and meeting or exceeding de-
14	sired ecological conditions; and
15	"(iv) the commitment of the contractor
16	to hiring highly qualified workers and local
17	residents.
18	"(3) Merchantable timber contracting
19	PILOT PROGRAM.—
20	"(A) Establishment.—The Secretary con-
21	cerned shall establish a pilot program to imple-
22	ment a certain percentage of approved projects
23	involving the sale of merchantable timber using
24	separate contracts for—

1	"(i) the harvesting or collection of mer-
2	chantable timber; and
3	"(ii) the sale of the timber.
4	"(B) Annual percentages.—Under the
5	pilot program, the Secretary concerned shall en-
6	sure that, on a nationwide basis, not less than
7	the following percentage of all approved projects
8	involving the sale of merchantable timber are
9	implemented using separate contracts:
10	"(i) For fiscal year 2008, 35 percent.
11	"(ii) For fiscal year 2009, 45 percent.
12	"(iii) For each of fiscal years 2010 and
13	2011, 50 percent.
14	"(C) Inclusion in pilot program.—The
15	decision whether to use separate contracts to im-
16	plement a project involving the sale of merchant-
17	able timber shall be made by the Secretary con-
18	cerned after the approval of the project under
19	this title.
20	"(D) Assistance.—
21	"(i) In general.—The Secretary con-
22	cerned may use funds from any appro-
23	priated account available to the Secretary
24	for the Federal land to assist in the admin-

1	istration of projects conducted under the
2	pilot program.
3	"(ii) Maximum amount of assist-
4	ANCE.—The total amount obligated under
5	this subparagraph may not exceed
6	\$1,000,000 for any fiscal year during which
7	the pilot program is in effect.
8	"(E) REVIEW AND REPORT.—
9	"(i) Initial report.—Not later than
10	September 30, 2010, the Comptroller Gen-
11	eral shall submit to the Committees on Ag-
12	riculture, Nutrition, and Forestry and En-
13	ergy and Natural Resources of the Senate
14	and the Committees on Agriculture and
15	Natural Resources of the House of Rep-
16	resentatives a report assessing the pilot pro-
17	gram.
18	"(ii) Annual report.—The Secretary
19	concerned shall submit to the Committees on
20	Agriculture, Nutrition, and Forestry and
21	Energy and Natural Resources of the Senate
22	and the Committees on Agriculture and
23	Natural Resources of the House of Rep-
24	resentatives an annual report describing the
25	results of the pilot program.

1	"(f) Requirements for Project Funds.—The Sec-
2	retary shall ensure that at least 50 percent of all project
3	funds be used for projects that are primarily dedicated—
4	"(1) to road maintenance, decommissioning, or
5	obliteration; or
6	"(2) to restoration of streams and watersheds.
7	"SEC. 205. RESOURCE ADVISORY COMMITTEES.
8	"(a) Establishment and Purpose of Resource
9	Advisory Committees.—
10	"(1) Establishment.—The Secretary concerned
11	shall establish and maintain resource advisory com-
12	mittees to perform the duties in subsection (b), except
13	as provided in paragraph (4).
14	"(2) Purpose.—The purpose of a resource advi-
15	sory committee shall be—
16	"(A) to improve collaborative relationships;
17	and
18	"(B) to provide advice and recommenda-
19	tions to the land management agencies consistent
20	with the purposes of this title.
21	"(3) Access to resource advisory commit-
22	TEES.—To ensure that each unit of Federal land has
23	access to a resource advisory committee, and that
24	there is sufficient interest in participation on a com-
25	mittee to ensure that membership can be balanced in

terms of the points of view represented and the functions to be performed, the Secretary concerned may, establish resource advisory committees for part of, or 1 or more, units of Federal land.

"(4) Existing advisory committees.—

- "(A) In General.—An advisory committee that meets the requirements of this section, a resource advisory committee established before September 29, 2006, or an advisory committee determined by the Secretary concerned before September 29, 2006, to meet the requirements of this section may be deemed by the Secretary concerned to be a resource advisory committee for the purposes of this title.
- "(B) CHARTER.—A charter for a committee described in subparagraph (A) that was filed on or before September 29, 2006, shall be considered to be filed for purposes of this Act.
- "(C) Bureau of land management advisory committees.—The Secretary of the Interior may deem a resource advisory committee meeting the requirements of subpart 1784 of part 1780 of title 43, Code of Federal Regulations, as a resource advisory committee for the purposes of this title.

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1	"(b) Duties.—A resource advisory committee shall—
2	"(1) review projects proposed under this title by
3	participating counties and other persons;
4	"(2) propose projects and funding to the Sec-
5	retary concerned under section 203;
6	"(3) provide early and continuous coordination
7	with appropriate land management agency officials
8	in recommending projects consistent with purposes of
9	this Act under this title;
10	"(4) provide frequent opportunities for citizens,
11	organizations, tribes, land management agencies, and
12	other interested parties to participate openly and
13	meaningfully, beginning at the early stages of the
14	project development process under this title;
15	"(5)(A) monitor projects that have been approved
16	under section 204; and
17	"(B) advise the designated Federal official on the
18	progress of the monitoring efforts under subparagraph
19	(A); and
20	"(6) make recommendations to the Secretary
21	concerned for any appropriate changes or adjustments
22	to the projects being monitored by the resource advi-
23	$sory\ committee.$
24	"(c) Appointment by the Secretary.—
25	"(1) Appointment and term.—

1	"(A) In General.—The Secretary con-
2	cerned, shall appoint the members of resource ad-
3	visory committees for a term of 4 years begin-
4	ning on the date of appointment.
5	"(B) Reappointment.—The Secretary con-
6	cerned may reappoint members to subsequent 4-
7	year terms.
8	"(2) Basic requirements.—The Secretary con-
9	cerned shall ensure that each resource advisory com-
10	mittee established meets the requirements of subsection
11	(d).
12	"(3) Initial appointment.—Not later than 180
13	days after the date of the enactment of this Act, the
14	Secretary concerned shall make initial appointments
15	to the resource advisory committees.
16	"(4) Vacancies.—The Secretary concerned shall
17	make appointments to fill vacancies on any resource
18	advisory committee as soon as practicable after the
19	vacancy has occurred.
20	"(5) Compensation.—Members of the resource
21	advisory committees shall not receive any compensa-
22	tion.
23	"(d) Composition of Advisory Committee.—
24	"(1) Number.—Each resource advisory com-
25	mittee shall be comprised of 15 members.

1	"(2) Community interests represented.—
2	Committee members shall be representative of the in-
3	terests of the following 3 categories:
4	"(A) 5 persons that—
5	"(i) represent organized labor or non-
6	timber forest product harvester groups;
7	"(ii) represent developed outdoor recre-
8	ation, off highway vehicle users, or commer-
9	$cial\ recreation\ activities;$
10	"(iii) represent—
11	"(I) energy and mineral develop-
12	ment interests; or
13	"(II) commercial or recreational
14	$fishing\ interests;$
15	"(iv) represent the commercial timber
16	$industry;\ or$
17	"(v) hold Federal grazing or other land
18	use permits, or represent nonindustrial pri-
19	vate forest land owners, within the area for
20	which the committee is organized.
21	"(B) 5 persons that represent—
22	"(i) nationally recognized environ-
23	$mental\ organizations;$
24	"(ii) regionally or locally recognized
25	environmental organizations:

1	"(iii) dispersed recreational activities;
2	"(iv) archaeological and historical in-
3	terests; or
4	"(v) nationally or regionally recog-
5	nized wild horse and burro interest groups,
6	wildlife or hunting organizations, or water-
7	shed associations.
8	"(C) 5 persons that—
9	"(i) hold State elected office (or a des-
10	ignee);
11	"(ii) hold county or local elected office;
12	"(iii) represent American Indian tribes
13	within or adjacent to the area for which the
14	$committee \ is \ or ganized;$
15	"(iv) are school officials or teachers; or
16	"(v) represent the affected public at
17	large.
18	"(3) Balanced representation.—In appoint-
19	ing committee members from the 3 categories in para-
20	graph (2), the Secretary concerned shall provide for
21	balanced and broad representation from within each
22	category.
23	"(4) Geographic distribution.—The members
24	of a resource advisory committee shall reside within
25	the State in which the committee has jurisdiction

1	and, to extent practicable, the Secretary concerned
2	shall ensure local representation in each category in
3	paragraph (2).
4	"(5) Chairperson.—A majority on each re-
5	source advisory committee shall select the chairperson
6	of the committee.
7	"(e) Approval Procedures.—
8	"(1) In general.—Subject to paragraph (3),
9	each resource advisory committee shall establish pro-
10	cedures for proposing projects to the Secretary con-
11	cerned under this title.
12	"(2) Quorum.—A quorum must be present to
13	constitute an official meeting of the committee.
14	"(3) Approval by majority of members.—A
15	project may be proposed by a resource advisory com-
16	mittee to the Secretary concerned under section
17	203(a), if the project has been approved by a majority
18	of members of the committee from each of the 3 cat-
19	egories in subsection $(d)(2)$.
20	"(f) Other Committee Authorities and Require-
21	MENTS.—
22	"(1) Staff assistance.—A resource advisory
23	committee may submit to the Secretary concerned a
24	request for periodic staff assistance from Federal em-
25	ployees under the jurisdiction of the Secretary.

1	"(2) Meetings.—All meetings of a resource ad-
2	visory committee shall be announced at least 1 week
3	in advance in a local newspaper of record and shall
4	be open to the public.
5	"(3) Records.—A resource advisory committee
6	shall maintain records of the meetings of the com-
7	mittee and make the records available for public in-
8	spection.
9	"SEC. 206. USE OF PROJECT FUNDS.
10	"(a) Agreement Regarding Schedule and Cost
11	of Project.—
12	"(1) Agreement between parties.—The Sec-
13	retary concerned may carry out a project submitted
14	by a resource advisory committee under section
15	203(a) using project funds or other funds described in
16	section 203(a)(2), if, as soon as practicable after the
17	issuance of a decision document for the project and
18	the exhaustion of all administrative appeals and judi-
19	cial review of the project decision, the Secretary con-
20	cerned and the resource advisory committee enter into
21	an agreement addressing, at a minimum, the fol-
22	lowing:
23	"(A) The schedule for completing the
24	project.

1	"(B) The total cost of the project, including
2	the level of agency overhead to be assessed
3	against the project.
4	"(C) For a multiyear project, the estimated
5	cost of the project for each of the fiscal years in
6	which it will be carried out.
7	"(D) The remedies for failure of the Sec-
8	retary concerned to comply with the terms of the
9	agreement consistent with current Federal law.
10	"(2) Limited use of federal funds.—The
11	Secretary concerned may decide, at the sole discretion
12	of the Secretary concerned, to cover the costs of a por-
13	tion of an approved project using Federal funds ap-
14	propriated or otherwise available to the Secretary for
15	the same purposes as the project.
16	"(b) Transfer of Project Funds.—
17	"(1) Initial transfer required.—As soon as
18	practicable after the agreement is reached under sub-
19	section (a) with regard to a project to be funded in
20	whole or in part using project funds, or other funds
21	described in section $203(a)(2)$, the Secretary con-
22	cerned shall transfer to the applicable unit of Na-
23	tional Forest System land or Bureau of Land Man-
24	agement District an amount of project funds equal
25	to—

1	"(A) in the case of a project to be completed
2	in a single fiscal year, the total amount specified
3	in the agreement to be paid using project funds,
4	or other funds described in section 203(a)(2); or
5	"(B) in the case of a multiyear project, the
6	amount specified in the agreement to be paid
7	using project funds, or other funds described in
8	section $203(a)(2)$ for the first fiscal year.
9	"(2) Condition on project commencement.—
10	The unit of National Forest System land or Bureau
11	of Land Management District concerned, shall not
12	commence a project until the project funds, or other
13	funds described in section 203(a)(2) required to be
14	transferred under paragraph (1) for the project, have
15	been made available by the Secretary concerned.
16	"(3) Subsequent transfers for multiyear
17	PROJECTS.—
18	"(A) In General.—For the second and sub-
19	sequent fiscal years of a multiyear project to be
20	funded in whole or in part using project funds,
21	the unit of National Forest System land or Bu-
22	reau of Land Management District concerned
23	shall use the amount of project funds required to
24	continue the project in that fiscal year according

1	to the agreement entered into under subsection					
2	(a).					
3	"(B) Suspension of work.—The Sec-					
4	retary concerned shall suspend work on the					
5	project if the project funds required by the agree-					
6	ment in the second and subsequent fiscal years					
7	are not available.					
8	"SEC. 207. AVAILABILITY OF PROJECT FUNDS.					
9	"(a) Submission of Proposed Projects to Obli-					
10	GATE FUNDS.—By September 30 of each fiscal year through					
11	fiscal year 2011, a resource advisory committee shall submit					
12	to the Secretary concerned pursuant to section 203(a)(1) a					
13	sufficient number of project proposals that, if approved,					
14	would result in the obligation of at least the full amount					
15	of the project funds reserved by the participating county					
16	in the preceding fiscal year.					
17	"(b) Use or Transfer of Unobligated Funds.—					
18	Subject to section 208, if a resource advisory committee fails					
19	to comply with subsection (a) for a fiscal year, any project					
20	funds reserved by the participating county in the preceding					
21	fiscal year and remaining unobligated shall be available for					
22	use as part of the project submissions in the next fiscal year.					
23	"(c) Effect of Rejection of Projects.—Subject					
24	to section 208, any project funds reserved by a partici-					
25	pating county in the preceding fiscal year that are unobli-					

gated at the end of a fiscal year because the Secretary concerned has rejected one or more proposed projects shall be available for use as part of the project submissions in the 3 4 next fiscal year. 5 "(d) Effect of Court Orders.— 6 "(1) In General.—If an approved project under 7 this Act is enjoined or prohibited by a Federal court, 8 the Secretary concerned shall return the unobligated 9 project funds related to the project to the partici-10 pating county or counties that reserved the funds. "(2) Expenditure of funds.—The returned 11 12 funds shall be available for the county to expend in 13 the same manner as the funds reserved by the county 14 under subparagraph (B) or(C)(i) of section 15 102(d)(1). 16 "SEC. 208. TERMINATION OF AUTHORITY. 17 "(a) In General.—The authority to initiate projects under this title shall terminate on September 30, 2011. 18 19 "(b) Deposits in Treasury.—Any project funds not 20 obligated by September 30, 2012, shall be deposited in the 21 Treasury of the United States. "TITLE III—COUNTY FUNDS 22 23 "SEC. 301. DEFINITIONS.

•HR 6 EAH

24

"In this title:

1	"(1) County Funds.—The term 'county funds'					
2	means all funds an eligible county elects under section					
3	102(d) to reserve for expenditure in accordance wit					
4	this title.					
5	"(2) Participating county.—The term 'par-					
6	ticipating county' means an eligible county that elec					
7	under section 102(d) to expend a portion of the Fed					
8	eral funds received under section 102 in accordance					
9	with this title.					
10	"SEC. 302. USE.					
11	"(a) Authorized Uses.—A participating county,					
12	including any applicable agencies of the participating					
13	county, shall use county funds, in accordance with this title,					
14	only—					
15	"(1) to carry out activities under the Firewise					
16	Communities program to provide to homeowners in					
17	fire-sensitive ecosystems education on, and assistance					
18	with implementing, techniques in home siting, home					
19	construction, and home landscaping that can increase					
20	the protection of people and property from wildfires;					
21	"(2) to reimburse the participating county for					
22	search and rescue and other emergency services, in-					
23	cluding firefighting, that are—					

1	"(A) performed on Federal land after the
2	date on which the use was approved under sub-
3	section (b);
4	"(B) paid for by the participating county;
5	and
6	"(3) to develop community wildfire protection
7	plans in coordination with the appropriate Secretary
8	concerned.
9	"(b) Proposals.—A participating county shall use
10	county funds for a use described in subsection (a) only after
11	a 45-day public comment period, at the beginning of which
12	the participating county shall—
13	"(1) publish in any publications of local record
14	a proposal that describes the proposed use of the coun-
15	ty funds; and
16	"(2) submit the proposal to any resource advi-
17	sory committee established under section 205 for the
18	participating county.
19	"SEC. 303. CERTIFICATION.
20	"(a) In General.—Not later than February 1 of the
21	year after the year in which any county funds were ex-
22	pended by a participating county, the appropriate official
23	of the participating county shall submit to the Secretary
24	concerned a certification that the county funds expended in
25	the applicable year have been used for the uses authorized

- 1 under section 302(a), including a description of the
- 2 amounts expended and the uses for which the amounts were
- 3 expended.
- 4 "(b) Review.—The Secretary concerned shall review
- 5 the certifications submitted under subsection (a) as the Sec-
- 6 retary concerned determines to be appropriate.
- 7 "SEC. 304. TERMINATION OF AUTHORITY.
- 8 "(a) In General.—The authority to initiate projects
- 9 under this title terminates on September 30, 2011.
- 10 "(b) AVAILABILITY.—Any county funds not obligated
- 11 by September 30, 2012, shall be returned to the Treasury
- 12 of the United States.

13 "TITLE IV—MISCELLANEOUS

- 14 **PROVISIONS**
- 15 "SEC. 401. REGULATIONS.
- 16 "The Secretary of Agriculture and the Secretary of the
- 17 Interior shall issue regulations to carry out the purposes
- 18 of this Act.
- 19 "SEC. 402. AUTHORIZATION OF APPROPRIATIONS.
- 20 "There are authorized to be appropriated such sums
- 21 as are necessary to carry out this Act for each of fiscal years
- 22 2008 through 2011.
- 23 "SEC. 403. TREATMENT OF FUNDS AND REVENUES.
- 24 "(a) Relation to Other Appropriations.—Funds
- 25 made available under section 402 and funds made available

- 1 to a Secretary concerned under section 206 shall be in addi-
- 2 tion to any other annual appropriations for the Forest
- 3 Service and the Bureau of Land Management.
- 4 "(b) Deposit of Revenues and Other Funds.—
- 5 All revenues generated from projects pursuant to title II,
- 6 including any interest accrued from the revenues, shall be
- 7 deposited in the Treasury of the United States.".
- 8 (b) Forest Receipt Payments to Eligible States
- 9 AND COUNTIES.—
- 10 (1) ACT OF MAY 23, 1908.—The sixth paragraph 11 under the heading "FOREST SERVICE" in the Act 12 of May 23, 1908 (16 U.S.C. 500) is amended in the 13 first sentence by striking "twenty-five percentum" 14 and all that follows through "shall be paid" and in-15 serting the following: "an amount equal to the annual 16 average of 25 percent of all amounts received for the 17 applicable fiscal year and each of the preceding 6 fis-18 cal years from each national forest shall be paid".
- 19 (2) WEEKS LAW.—Section 13 of the Act of
 20 March 1, 1911 (commonly known as the "Weeks
 21 Law") (16 U.S.C. 500) is amended in the first sen22 tence by striking "twenty-five percentum" and all
 23 that follows through "shall be paid" and inserting the
 24 following: "an amount equal to the annual average of
 25 percent of all amounts received for the applicable

1	fiscal year and each of the preceding 6 fiscal years
2	from each national forest shall be paid".
3	(c) Payments in Lieu of Taxes.—
4	(1) In General.—Section 6906 of title 31,
5	United States Code, is amended to read as follows:
6	"§ 6906. Funding
7	"For fiscal year 2009—
8	"(1) each county or other eligible unit of local
9	government shall be entitled to payment under this
10	chapter; and
11	"(2) sums shall be made available to the Sec-
12	retary of the Interior for obligation or expenditure in
13	accordance with this chapter.".
14	(2) Conforming amendment.—The table of sec-
15	tions for chapter 69 of title 31, United States Code,
16	is amended by striking the item relating to section
17	6906 and inserting the following:
	"6906. Funding.".
18	(3) Budget scorekeeping.—
19	(A) In GENERAL.—Notwithstanding the
20	Budget Scorekeeping Guidelines and the accom-
21	panying list of programs and accounts set forth
22	in the joint explanatory statement of the com-
23	mittee of conference accompanying Conference
24	Report 105–217, the amendment made by para-
25	graph (1) shall be treated in the baseline for pur-

1	poses of section 257 of the Balanced Budget and
2	Emergency Deficit Control Act of 1985 (2 U.S.C.
3	907) (as in effect before September 30, 2002), by
4	the Chairpersons of the Committee on the Budget
5	of the House of Representatives and the Com-
6	mittee on the Budget of the Senate, as appro-
7	priate, for purposes of budget enforcement in the
8	House of Representatives and the Senate, and
9	under the Congressional Budget Act of 1974 (2
10	U.S.C. 601 et seq.) as if Payment in Lieu of
11	Taxes (14-1114-0-1-806) were an account des-
12	ignated as Appropriated Entitlements and
13	Mandatories for Fiscal Year 1997 in the joint ex-
14	planatory statement of the committee of con-
15	ference accompanying Conference Report 105-
16	217.
17	(B) Effective date.—This paragraph
18	shall—
19	(i) be effective beginning on the date of
20	enactment of this Act; and
21	(ii) remain in effect for any fiscal year
22	for which the entitlement in section 6906 of
23	title 31, United States Code (as amended by
24	paragraph (1)), applies.

In lieu of the matter proposed to be inserted by the amendment of the Senate to the title of the bill, amend the title so as to read: "An Act to move the United States toward greater energy independence and security, to increase the production of clean renewable fuels, to protect consumers, to increase the efficiency of products, buildings, and vehicles, to promote research on and deploy greenhouse gas capture and storage options, and to improve the energy performance of the Federal Government, and for other purposes.".

Attest:

Clerk.

HOUSE AMENDMENTS TO SENATE AMENDMENTS