In the Senate of the United States,

June 21, 2007.

Resolved, That the bill from the House of Representatives (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.", do pass with the following

AMENDMENTS:

Strike out all after the enacting clause and insert:

- 1 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.
- 2 (a) Short Title.—This Act may be cited as the "Re-
- 3 newable Fuels, Consumer Protection, and Energy Efficiency
- 4 Act of 2007".
- 5 (b) Table of Contents.—The table of contents of this
- 6 Act is as follows:
 - Sec. 1. Short title; table of contents.
 - Sec. 2. Relationship to other law.

TITLE I—BIOFUELS FOR ENERGY SECURITY AND TRANSPORTATION

- Sec. 101. Short title.
- Sec. 102. Definitions.

Subtitle A—Renewable Fuel Standard

- Sec. 111. Renewable fuel standard.
- Sec. 112. Production of renewable fuel using renewable energy.
- Sec. 113. Sense of Congress relating to the use of renewable resources to generate energy.

Subtitle B—Renewable Fuels Infrastructure

- Sec. 121. Infrastructure pilot program for renewable fuels.
- Sec. 122. Bioenergy research and development.
- Sec. 123. Bioresearch centers for systems biology program.
- Sec. 124. Loan guarantees for renewable fuel facilities.
- Sec. 125. Grants for renewable fuel production research and development in certain States.
- Sec. 126. Grants for infrastructure for transportation of biomass to local biorefineries.
- Sec. 127. Biorefinery information center.
- Sec. 128. Alternative fuel database and materials.
- Sec. 129. Fuel tank cap labeling requirement.
- Sec. 130. Biodiesel.
- Sec. 131. Transitional assistance for farmers who plant dedicated energy crops for a local cellulosic refinery.
- Sec. 132. Research and development in support of low-carbon fuels.

Subtitle C—Studies

- Sec. 141. Study of advanced biofuels technologies.
- Sec. 142. Study of increased consumption of ethanol-blended gasoline with higher levels of ethanol.
- Sec. 143. Pipeline feasibility study.
- Sec. 144. Study of optimization of flexible fueled vehicles to use E-85 fuel.
- Sec. 145. Study of credits for use of renewable electricity in electric vehicles.
- Sec. 146. Study of engine durability associated with the use of biodiesel.
- Sec. 147. Study of incentives for renewable fuels.
- Sec. 148. Study of streamlined lifecycle analysis tools for the evaluation of renewable carbon content of biofuels.
- Sec. 149. Study of effects of ethanol-blended gasoline on off-road vehicles.
- Sec. 150. Study of offshore wind resources.

Subtitle D—Environmental Safeguards

- Sec. 161. Grants for production of advanced biofuels.
- Sec. 162. Studies of effects of renewable fuel use.
- Sec. 163. Integrated consideration of water quality in determinations on fuels and fuel additives.
- Sec. 164. Anti-backsliding.

TITLE II—ENERGY EFFICIENCY PROMOTION

- Sec. 201. Short title.
- Sec. 202. Definition of Secretary.

Subtitle A—Promoting Advanced Lighting Technologies

- Sec. 211. Accelerated procurement of energy efficient lighting.
- Sec. 212. Incandescent reflector lamp efficiency standards.
- Sec. 213. Bright Tomorrow Lighting Prizes.
- Sec. 214. Sense of Senate concerning efficient lighting standards.
- Sec. 215. Renewable energy construction grants.

Subtitle B—Expediting New Energy Efficiency Standards

- Sec. 221. Definition of energy conservation standard.
- Sec. 222. Regional efficiency standards for heating and cooling products.
- Sec. 223. Furnace fan rulemaking.
- Sec. 224. Expedited rulemakings.
- Sec. 225. Periodic reviews.
- Sec. 226. Energy efficiency labeling for consumer electronic products.
- Sec. 227. Residential boiler efficiency standards.
- Sec. 228. Technical corrections.
- Sec. 229. Electric motor efficiency standards.
- Sec. 230. Energy standards for home appliances.
- Sec. 231. Improved energy efficiency for appliances and buildings in cold climates.
- Sec. 232. Deployment of new technologies for high-efficiency consumer products.
- Sec. 233. Industrial efficiency program.

Subtitle C—Promoting High Efficiency Vehicles, Advanced Batteries, and Energy Storage

- Sec. 241. Lightweight materials research and development.
- Sec. 242. Loan guarantees for fuel-efficient automobile parts manufacturers.
- Sec. 243. Advanced technology vehicles manufacturing incentive program.
- Sec. 244. Energy storage competitiveness.
- Sec. 245. Advanced transportation technology program.
- Sec. 246. Inclusion of electric drive in Energy Policy Act of 1992.
- Sec. 247. Commercial insulation demonstration program.

Subtitle D—Setting Energy Efficiency Goals

- Sec. 251. Oil savings plan and requirements.
- Sec. 252. National energy efficiency improvement goals.
- Sec. 253. National media campaign.
- Sec. 254. Modernization of electricity grid system.
- Sec. 255. Smart grid system report.
- Sec. 256. Smart grid technology research, development, and demonstration.
- Sec. 257. Smart grid interoperability framework.
- Sec. 258. State consideration of smart grid.
- Sec. 259. Support for energy independence of the United States.
- Sec. 260. Energy Policy Commission.

Subtitle E—Promoting Federal Leadership in Energy Efficiency and Renewable Energy

- Sec. 261. Federal fleet conservation requirements.
- Sec. 262. Federal requirement to purchase electricity generated by renewable energy.
- Sec. 263. Energy savings performance contracts.
- Sec. 264. Energy management requirements for Federal buildings.

- Sec. 265. Combined heat and power and district energy installations at Federal sites.
- Sec. 266. Federal building energy efficiency performance standards.
- Sec. 267. Application of International Energy Conservation Code to public and assisted housing.
- Sec. 268. Energy efficient commercial buildings initiative.
- Sec. 269. Clean energy corridors.
- Sec. 270. Federal standby power standard.
- Sec. 270A. Standard relating to solar hot water heaters.
- Sec. 270B. Renewable energy innovation manufacturing partnership.
- Sec. 270C. Express loans for renewable energy and energy efficiency.
- Sec. 270D. Small business energy efficiency.

Subtitle F—Assisting State and Local Governments in Energy Efficiency

- Sec. 271. Weatherization assistance for low-income persons.
- Sec. 272. State energy conservation plans.
- Sec. 273. Utility energy efficiency programs.
- Sec. 274. Energy efficiency and demand response program assistance.
- Sec. 275. Energy and environmental block grant.
- Sec. 276. Energy sustainability and efficiency grants for institutions of higher education.
- Sec. 277. Energy efficiency and renewable energy worker training program.
- Sec. 278. Assistance to States to reduce school bus idling.
- Sec. 279. Definition of State.
- Sec. 280. Coordination of planned refinery outages.
- Sec. 281. Technical criteria for clean coal power initiative.
- Sec. 282. Administration.
- Sec. 283. Offshore renewable energy.

Subtitle G-Marine and Hydrokinetic Renewable Energy Promotion

- Sec. 291. Definition of marine and hydrokinetic renewable energy.
- Sec. 292. Research and development.
- Sec. 293. National ocean energy research centers.

TITLE III—CARBON CAPTURE AND STORAGE RESEARCH, DEVELOPMENT, AND DEMONSTRATION

- Sec. 301. Short title.
- Sec. 302. Carbon capture and storage research, development, and demonstration program.
- Sec. 303. Carbon dioxide storage capacity assessment.
- Sec. 304. Carbon capture and storage initiative.
- Sec. 305. Capitol power plant carbon dioxide emissions demonstration program.
- Sec. 306. Assessment of carbon sequestration and methane and nitrous oxide emissions from terrestrial ecosystems.
- Sec. 307. Abrupt climate change research program.

TITLE IV—COST-EFFECTIVE AND ENVIRONMENTALLY SUSTAINABLE PUBLIC BUILDINGS

Subtitle A—Public Buildings Cost Reduction

- Sec. 401. Short title.
- Sec. 402. Cost-effective and geothermal heat pump technology acceleration program.

- Sec. 403. Environmental Protection Agency demonstration grant program for local governments.
- Sec. 404. Definitions.

Subtitle B—Installation of Photovoltaic System at Department of Energy Headquarters Building

Sec. 411. Installation of photovoltaic system at Department of Energy head-quarters building.

Subtitle C—High-Performance Green Buildings

- Sec. 421. Short title.
- Sec. 422. Findings and purposes.
- Sec. 423. Definitions.

PART I—Office of High-Performance Green Buildings

- Sec. 431. Oversight.
- Sec. 432. Office of High-Performance Green Buildings.
- Sec. 433. Green Building Advisory Committee.
- Sec. 434. Public outreach.
- Sec. 435. Research and development.
- Sec. 436. Budget and life-cycle costing and contracting.
- Sec. 437. Authorization of appropriations.

PART II—HEALTHY HIGH-PERFORMANCE SCHOOLS

- Sec. 441. Definition of high-performance school.
- Sec. 442. Grants for healthy school environments.
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- Sec. 445. Environmental health program.
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PART III—Strengthening Federal Leadership

- Sec. 451. Incentives.
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- Sec. 453. Federal green building performance.
- Sec. 454. Storm water runoff requirements for Federal development projects.

PART IV—DEMONSTRATION PROJECT

- Sec. 461. Coordination of goals.
- Sec. 462. Authorization of appropriations.

TITLE V—CORPORATE AVERAGE FUEL ECONOMY STANDARDS

- Sec. 501. Short title.
- Sec. 502. Average fuel economy standards for automobiles and certain other vehicles.
- Sec. 503. Amending Fuel Economy Standards.
- Sec. 504. Definitions.
- Sec. 505. Ensuring safety of automobiles.
- Sec. 506. Credit Trading Program.
- Sec. 507. Labels for fuel economy and greenhouse gas emissions.
- Sec. 508. Continued applicability of existing standards.

- Sec. 509. National Academy of Sciences Studies.
- Sec. 510. Standards for Executive agency automobiles.
- Sec. 511. Increasing Consumer Awareness of Flexible Fuel Automobiles.
- Sec. 512. Periodic review of accuracy of fuel economy labeling procedures.
- Sec. 513. Tire fuel efficiency consumer information.
- Sec. 514. Advanced Battery Initiative.
- Sec. 515. Biodiesel standards.
- Sec. 516. Use of Civil Penalties for research and development.
- Sec. 517. Energy Security Fund and Alternative Fuel Grant Program.
- Sec. 518. Authorization of appropriations.
- Sec. 519. Application with Clean Air Act.
- Sec. 520. Alternative fuel vehicle action plan.
- Sec. 521. Study of the adequacy of transportation of domestically-produced renewable fuel by railroads and other modes of transportation.

TITLE VI—PRICE GOUGING

- Sec. 601. Short title.
- Sec. 602. Definitions.
- Sec. 603. Prohibition on price gouging during energy emergencies.
- Sec. 604. Prohibition on market manipulation.
- Sec. 605. Prohibition on false information.
- Sec. 606. Presidential declaration of energy emergency.
- Sec. 607. Enforcement by the Federal Trade Commission.
- Sec. 608. Enforcement by State Attorneys General.
- Sec. 609. Penalties.
- Sec. 610. Effect on other laws.

TITLE VII—ENERGY DIPLOMACY AND SECURITY

- Sec. 701. Short title.
- Sec. 702. Definitions.
- Sec. 703. Sense of Congress on energy diplomacy and security.
- Sec. 704. Strategic energy partnerships.
- Sec. 705. International energy crisis response mechanisms.
- Sec. 706. Hemisphere energy cooperation forum.
- Sec. 707. National Security Council reorganization.
- Sec. 708. Annual national energy security strategy report.
- Sec. 709. Appropriate congressional committees defined.
- Sec. 710. No Oil Producing and Exporting Cartels Act of 2007.
- Sec. 711. Convention on Supplementary Compensation for Nuclear Damage contingent cost allocation.

TITLE VIII—MISCELLANEOUS

Sec. 801. Study of the effect of private wire laws on the development of combined heat and power facilities.

SEC. 2. RELATIONSHIP TO OTHER LAW.

- 2 Except to the extent expressly provided in this Act or
- 3 an amendment made by this Act, nothing in this Act or
- 4 an amendment made by this Act supersedes, limits the au-

1	thority provided or responsibility conferred by, or author-
2	izes any violation of any provision of law (including a reg-
3	ulation), including any energy or environmental law or
4	regulation.
5	TITLE I—BIOFUELS FOR ENERGY
6	SECURITY AND TRANSPOR-
7	TATION
8	SEC. 101. SHORT TITLE.
9	This title may be cited as the "Biofuels for Energy Se-
10	curity and Transportation Act of 2007".
11	SEC. 102. DEFINITIONS.
12	In this title:
13	(1) Advanced biofuel.—
14	(A) In General.—The term "advanced
15	biofuel" means fuel derived from renewable bio-
16	mass other than corn starch.
17	(B) Inclusions.—The term "advanced
18	biofuel" includes—
19	(i) ethanol derived from cellulose,
20	hemicellulose, or lignin;
21	(ii) ethanol derived from sugar or
22	starch, other than ethanol derived from corn
23	starch;
24	(iii) ethanol derived from waste mate-
25	rial, including crop residue, other vegetative

1	waste material, animal waste, and food
2	waste and yard waste;
3	(iv) diesel-equivalent fuel derived from
4	renewable biomass, including vegetable oil
5	and animal fat;
6	(v) biogas (including landfill gas and
7	sewage waste treatment gas) produced
8	through the conversion of organic matter
9	from renewable biomass;
10	(vi) butanol or other alcohols produced
11	through the conversion of organic matter
12	from renewable biomass; and
13	(vii) other fuel derived from cellulosic
14	biomass.
15	(2) Cellulosic biomass ethanol.—The term
16	"cellulosic biomass ethanol" means ethanol derived
17	from any cellulose, hemicellulose, or lignin that is de-
18	rived from renewable biomass.
19	(3) Conventional biofuel.—The term "con-
20	ventional biofuel" means ethanol derived from corn
21	starch.
22	(4) Renewable biomass.—The term "renewable
23	biomass" means—
24	(A) nonmerchantable materials or
25	precommercial thinnings that—

1	(i) are byproducts of preventive treat-
2	ments, such as trees, wood, brush, thinnings,
3	chips, and slash, that are removed—
4	(I) to reduce hazardous fuels;
5	(II) to reduce or contain disease
6	or insect infestation; or
7	(III) to restore forest health;
8	(ii) would not otherwise be used for
9	higher-value products; and
10	(iii) are harvested from National For-
11	est System land or public land (as defined
12	in section 103 of the Federal Land Policy
13	and Management Act of 1976 (43 U.S.C.
14	1702))—
15	(I) where permitted by law; and
16	(II) in accordance with—
17	(aa) applicable land manage-
18	ment plans; and
19	(bb) the requirements for old-
20	growth maintenance, restoration,
21	and management direction of
22	paragraphs (2), (3), and (4) of
23	subsection (e) and the require-
24	ments for large-tree retention of
25	subsection (f) of section 102 of the

1	Healthy Forests Restoration Act
2	of 2003 (16 U.S.C. 6512); or
3	(B) any organic matter that is available on
4	a renewable or recurring basis from non-Federal
5	land or from land belonging to an Indian tribe,
6	or an Indian individual, that is held in trust by
7	the United States or subject to a restriction
8	against alienation imposed by the United States,
9	including—
10	(i) renewable plant material,
11	including—
12	(I) feed grains;
13	(II) other agricultural commod-
14	ities;
15	(III) other plants and trees; and
16	(IV) algae; and
17	(ii) waste material, including—
18	(I) crop residue;
19	(II) other vegetative waste mate-
20	rial (including wood waste and wood
21	residues);
22	(III) animal waste and byprod-
23	ucts (including fats, oils, greases, and
24	manure); and
25	(IV) food waste and yard waste.

1	(5) Renewable fuel.—
2	(A) In General.—The term "renewable
3	fuel" means motor vehicle fuel or home heating
4	fuel that is—
5	(i) produced from renewable biomass;
6	and
7	(ii) used to replace or reduce the quan-
8	tity of fossil fuel present in a fuel or fuel
9	mixture used to operate a motor vehicle or
10	furnace.
11	(B) Inclusion.—The term "renewable fuel"
12	includes—
13	(i) conventional biofuel; and
14	(ii) advanced biofuel.
15	(6) Secretary.—The term "Secretary" means
16	the Secretary of Energy
17	(7) Small refinery.—The term "small refin-
18	ery" means a refinery for which the average aggregate
19	daily crude oil throughput for a calendar year (as de-
20	termined by dividing the aggregate throughput for the
21	calendar year by the number of days in the calendar
22	year) does not exceed 75,000 barrels.

1	Subtitle A $-\!R$ enewable Fuel
2	Standard
3	SEC. 111. RENEWABLE FUEL STANDARD.
4	(a) Renewable Fuel Program.—
5	(1) Regulations.—
6	(A) In General.—Not later than 1 year
7	after the date of enactment of this Act, the Presi-
8	dent shall promulgate regulations to ensure that
9	motor vehicle fuel and home heating oil sold or
10	introduced into commerce in the United States
11	(except in noncontiguous States or territories),
12	on an annual average basis, contains the appli-
13	cable volume of renewable fuel determined in ac-
14	cordance with paragraph (2).
15	(B) Provisions of regulations.—Re-
16	gardless of the date of promulgation, the regula-
17	tions promulgated under subparagraph (A)—
18	(i) shall contain compliance provisions
19	applicable to refineries, blenders, distribu-
20	tors, and importers, as appropriate, to en-
21	sure that—
22	(I) the requirements of this sub-
23	section are met; and
24	(II) renewable fuels produced from
25	facilities that commence operations

1	after the date of enactment of this Act
2	achieve at least a 20 percent reduction
3	in life cycle greenhouse gas emissions
4	compared to gasoline; but
5	(ii) shall not—
6	(I) restrict geographic areas in the
7	contiguous United States in which re-
8	newable fuel may be used; or
9	(II) impose any per-gallon obliga-
10	tion for the use of renewable fuel.
11	(C) Relationship to other regula-
12	TIONS.—Regulations promulgated under this
13	paragraph shall, to the maximum extent prac-
14	ticable, incorporate the program structure, com-
15	pliance, and reporting requirements established
16	under the final regulations promulgated to im-
17	plement the renewable fuel program established
18	by the amendment made by section 1501(a)(2) of
19	the Energy Policy Act of 2005 (Public Law 109–
20	58; 119 Stat. 1067).
21	(2) Applicable volume.—
22	(A) Calendar years 2008 through
23	2022.—
24	(i) Renewable fuel.—For the pur-
25	pose of paragraph (1), subject to clause (ii),

1		the applicable volume for any of calendar
2		years 2008 through 2022 shall be deter
3		mined in accordance with the following
4		table:
		Applicable volume o renewable fuel
	Calendar year:	(in billions of gallons):
		8.5
	2009	
		13.8
		18.0
		21.0
		24.0
	2019	27.0
	2020	
	2021	
	2022	36.0
5		(ii) Advanced biofuels.—For the
6		purpose of paragraph (1), of the volume of
7		renewable fuel required under clause (i), the
8		applicable volume for any of calendar years
9		2016 through 2022 for advanced biofuels
10		shall be determined in accordance with the
11		following table:
		Applicable volume o
	Calondar waar	advanced biofuels (in billions of gallons):
	Calendar year:	(in villions of gallons):
		6.0
		9.0
	2020	
	2021	18.0
	2022	21.0

1	(B) Calendar year 2023 and there-
2	AFTER.—Subject to subparagraph (C), for the
3	purposes of paragraph (1), the applicable volume
4	for calendar year 2023 and each calendar year
5	thereafter shall be determined by the President,
6	in coordination with the Secretary of Energy,
7	the Secretary of Agriculture, and the Adminis-
8	trator of the Environmental Protection Agency,
9	based on a review of the implementation of the
10	program during calendar years 2007 through
11	2022, including a review of—
12	(i) the impact of renewable fuels on the
13	energy security of the United States;
14	(ii) the expected annual rate of future
15	production of renewable fuels, including ad-
16	vanced biofuels;
17	(iii) the impact of renewable fuels on
18	the infrastructure of the United States, in-
19	cluding deliverability of materials, goods,
20	and products other than renewable fuel, and
21	the sufficiency of infrastructure to deliver
22	renewable fuel; and
23	(iv) the impact of the use of renewable
24	fuels on other factors, including job cre-
25	ation, the price and supply of agricultural

1	commodities, rural economic development,
2	and the environment.
3	(C) Minimum applicable volume.—Sub-
4	ject to subparagraph (D), for the purpose of
5	paragraph (1), the applicable volume for cal-
6	endar year 2023 and each calendar year there-
7	after shall be equal to the product obtained by
8	multiplying—
9	(i) the number of gallons of gasoline
10	that the President estimates will be sold or
11	introduced into commerce in the calendar
12	year; and
13	(ii) the ratio that—
14	(I) 36,000,000,000 gallons of re-
15	newable fuel; bears to
16	(II) the number of gallons of gaso-
17	line sold or introduced into commerce
18	in calendar year 2022.
19	(D) Minimum percentage of advanced
20	BIOFUEL.—For the purpose of paragraph (1)
21	and subparagraph (C), at least 60 percent of the
22	minimum applicable volume for calendar year
23	2023 and each calendar year thereafter shall be
24	advanced biofuel.
25	(b) Applicable Percentages.—

1	(1) Provision of estimate of volumes of
2	GASOLINE SALES.—Not later than October 31 of each
3	of calendar years 2008 through 2021, the Adminis-
4	trator of the Energy Information Administration
5	shall provide to the President an estimate, with re-
6	spect to the following calendar year, of the volumes of
7	gasoline projected to be sold or introduced into com-
8	merce in the United States.
9	(2) Determination of applicable percent-
10	AGES.—
11	(A) In general.—Not later than November
12	30 of each of calendar years 2008 through 2022,
13	based on the estimate provided under paragraph
14	(1), the President shall determine and publish in
15	the Federal Register, with respect to the fol-
16	lowing calendar year, the renewable fuel obliga-
17	tion that ensures that the requirements of sub-
18	section (a) are met.
19	(B) REQUIRED ELEMENTS.—The renewable
20	fuel obligation determined for a calendar year
21	under subparagraph (A) shall—
22	(i) be applicable to refineries, blenders,
23	and importers, as appropriate;

1	(ii) be expressed in terms of a volume
2	percentage of gasoline sold or introduced
3	into commerce in the United States; and
4	(iii) subject to paragraph (3)(A), con-
5	sist of a single applicable percentage that
6	applies to all categories of persons specified
7	in clause (i).
8	(3) Adjustments.—In determining the applica-
9	ble percentage for a calendar year, the President shall
10	make adjustments—
11	(A) to prevent the imposition of redundant
12	obligations on any person specified in paragraph
13	(2)(B)(i); and
14	(B) to account for the use of renewable fuel
15	during the previous calendar year by small re-
16	fineries that are exempt under subsection (g).
17	(c) Volume Conversion Factors for Renewable
18	Fuels Based on Energy Content or Requirements.—
19	(1) In General.—For the purpose of subsection
20	(a), the President shall assign values to specific types
21	of advanced biofuels for the purpose of satisfying the
22	fuel volume requirements of subsection $(a)(2)$ in ac-
23	cordance with this subsection.
24	(2) Energy content relative to ethanol.—
25	For advanced biofuel, 1 gallon of the advanced biofuel

1	shall be considered to be the equivalent of 1 gallon of
2	renewable fuel multiplied by the ratio that—
3	(A) the number of British thermal units of
4	energy produced by the combustion of 1 gallon of
5	the advanced biofuel (as measured under condi-
6	tions determined by the Secretary); bears to
7	(B) the number of British thermal units of
8	energy produced by the combustion of 1 gallon of
9	pure ethanol (as measured under conditions de-
10	termined by the Secretary to be comparable to
11	conditions described in subparagraph (A)).
12	(3) Transitional energy-related conver-
13	SION FACTORS FOR CELLULOSIC BIOMASS ETHANOL.—
14	For any of calendar years 2008 through 2015, 1 gal-
15	lon of cellulosic biomass ethanol shall be considered to
16	be the equivalent of 2.5 gallons of renewable fuel.
17	(d) Credit Program.—
18	(1) In general.—The President, in consultation
19	with the Secretary and the Administrator of the En-
20	vironmental Protection Agency, shall implement a
21	credit program to manage the renewable fuel require-
22	ment of this section in a manner consistent with the
23	credit program established by the amendment made
24	by section 1501(a)(2) of the Energy Policy Act of

2005 (Public Law 109–58; 119 Stat. 1067).

- 1 (2) Market transparency.—In carrying out
 2 the credit program under this subsection, the Presi3 dent shall facilitate price transparency in markets for
 4 the sale and trade of credits, with due regard for the
 5 public interest, the integrity of those markets, fair
 6 competition, and the protection of consumers and ag7 ricultural producers.
- 8 (e) Seasonal Variations in Renewable Fuel 9 Use.—
 - (1) STUDY.—For each of calendar years 2008 through 2022, the Administrator of the Energy Information Administration shall conduct a study of renewable fuel blending to determine whether there are excessive seasonal variations in the use of renewable fuel.
 - (2) REGULATION OF EXCESSIVE SEASONAL VARI-ATIONS.—If, for any calendar year, the Administrator of the Energy Information Administration, based on the study under paragraph (1), makes the determinations specified in paragraph (3), the President shall promulgate regulations to ensure that 25 percent or more of the quantity of renewable fuel necessary to meet the requirements of subsection (a) is used during each of the 2 periods specified in paragraph (4) of each subsequent calendar year.

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1	(3) Determinations re-
2	ferred to in paragraph (2) are that—
3	(A) less than 25 percent of the quantity of
4	renewable fuel necessary to meet the requirements
5	of subsection (a) has been used during 1 of the
6	2 periods specified in paragraph (4) of the cal-
7	endar year;
8	(B) a pattern of excessive seasonal variation
9	described in subparagraph (A) will continue in
10	subsequent calendar years; and
11	(C) promulgating regulations or other re-
12	quirements to impose a 25 percent or more sea-
13	sonal use of renewable fuels will not
14	significantly—
15	(i) increase the price of motor fuels to
16	the consumer; or
17	(ii) prevent or interfere with the at-
18	tainment of national ambient air quality
19	standards.
20	(4) Periods.—The 2 periods referred to in this
21	subsection are—
22	(A) April through September; and
23	(B) January through March and October
24	through December.
25	(f) Waivers.—

- (1) In General.—The President, in consultation with the Secretary of Energy, the Secretary of Agriculture, and the Administrator of the Environmental Protection Agency, may waive the requirements of subsection (a) in whole or in part on petition by one or more States by reducing the national quantity of renewable fuel required under subsection (a), based on a determination by the President (after public notice and opportunity for comment), that—
 - (A) implementation of the requirement would severely harm the economy or environment of a State, a region, or the United States; or
 - (B) extreme and unusual circumstances exist that prevent distribution of an adequate supply of domestically-produced renewable fuel to consumers in the United States.
 - (2) Petitions for Waivers.—The President, in consultation with the Secretary of Energy, the Secretary of Agriculture, and the Administrator of the Environmental Protection Agency, shall approve or disapprove a State petition for a waiver of the requirements of subsection (a) within 30 days after the date on which the petition is received by the President.

1	(3) Termination of Waivers.—A waiver
2	granted under paragraph (1) shall terminate after 1
3	year, but may be renewed by the President after con-
4	sultation with the Secretary of Energy, the Secretary
5	of Agriculture, and the Administrator of the Environ-
6	mental Protection Agency.
7	(g) Small Refineries.—
8	(1) Temporary exemption.—
9	(A) In general.—The requirements of sub-
10	section (a) shall not apply to—
11	(i) small refineries (other than a small
12	refinery described in clause (ii)) until cal-
13	endar year 2013; and
14	(ii) small refineries owned by a small
15	business refiner (as defined in section
16	45H(c) of the Internal Revenue Code of
17	1986) until calendar year 2015.
18	(B) Extension of exemption.—
19	(i) Study by secretary.—Not later
20	than December 31, 2008, the Secretary shall
21	submit to the President and Congress a re-
22	port describing the results of a study to de-
23	termine whether compliance with the re-
24	quirements of subsection (a) would impose a

1	disproportionate economic hardship on
2	small refineries.
3	(ii) Extension of exemption.—In
4	the case of a small refinery that the Sec-
5	retary determines under clause (i) would be
6	subject to a disproportionate economic hard-
7	ship if required to comply with subsection
8	(a), the President shall extend the exemp-
9	tion under subparagraph (A) for the small
10	refinery for a period of not less than 2 ad-
11	ditional years.
12	(2) Petitions based on disproportionate
13	ECONOMIC HARDSHIP.—
14	(A) Extension of exemption.—A small
15	refinery may at any time petition the President
16	for an extension of the exemption under para-
17	graph (1) for the reason of disproportionate eco-
18	nomic hardship.
19	(B) Evaluation of petitions.—In evalu-
20	ating a petition under subparagraph (A), the
21	President, in consultation with the Secretary,
22	shall consider the findings of the study under
23	paragraph $(1)(B)$ and other economic factors.
24	(C) Deadline for action on peti-
25	Tions.—The President shall act on any petition

1	submitted by a small refinery for a hardship ex-
2	emption not later than 90 days after the date of
3	receipt of the petition.
4	(3) Opt-in for small refineries.—A small
5	refinery shall be subject to the requirements of sub-
6	section (a) if the small refinery notifies the President
7	that the small refinery waives the exemption under
8	paragraph (1).
9	(h) Penalties and Enforcement.—
10	(1) Civil penalties.—
11	(A) In general.—Any person that violates
12	a regulation promulgated under subsection (a),
13	or that fails to furnish any information required
14	under such a regulation, shall be liable to the
15	United States for a civil penalty of not more
16	than the total of—
17	(i) \$25,000 for each day of the viola-
18	tion; and
19	(ii) the amount of economic benefit or
20	savings received by the person resulting
21	from the violation, as determined by the
22	President.
23	(B) Collection.—Civil penalties under
24	subparagraph (A) shall be assessed by, and col-
25	lected in a civil action brought by, the Secretary

1	or such other officer of the United States as is
2	designated by the President.
3	(2) Injunctive authority.—
4	(A) In general.—The district courts of the
5	United States shall have jurisdiction to—
6	(i) restrain a violation of a regulation
7	promulgated under subsection (a);
8	(ii) award other appropriate relief;
9	and
10	(iii) compel the furnishing of informa-
11	tion required under the regulation.
12	(B) Actions.—An action to restrain such
13	violations and compel such actions shall be
14	brought by and in the name of the United States.
15	(C) Subpoenas.—In the action, a subpoena
16	for a witness who is required to attend a district
17	court in any district may apply in any other
18	district.
19	(i) Voluntary Labeling Program.—
20	(1) In general.—The President shall establish
21	criteria for a system of voluntary labeling of renew-
22	able fuels based on life cycle greenhouse gas emissions.
23	(2) Consumer education.—The President shall
24	ensure that the labeling system under this subsection

1	provides useful information to consumers making fuel
2	purchases.
3	(3) Flexibility.—In carrying out this sub-
4	section, the President may establish more than 1
5	label, as appropriate.
6	(j) Study of Impact of Renewable Fuel Stand-
7	ARD.—
8	(1) In general.—The Secretary shall enter into
9	an arrangement with the National Academy of
0	Sciences under which the Academy shall conduct a
11	study to assess the impact of the requirements de-
12	scribed in subsection (a)(2) on each industry relating
13	to the production of feed grains, livestock, food, and
14	energy.
15	(2) Participation.—In conducting the study
16	under paragraph (1), the National Academy of
17	Sciences shall seek the participation, and consider the
18	input, of—
19	(A) producers of feed grains;
20	(B) producers of livestock, poultry, and pork
21	products;
22	(C) producers of food and food products;
23	(D) producers of energy;

1	(E) individuals and entities interested in
2	issues relating to conservation, the environment,
3	and nutrition; and
4	(F) users of renewable fuels.
5	(3) Considerations.—In conducting the study,
6	the National Academy of Sciences shall consider—
7	(A) the likely impact on domestic animal
8	agriculture feedstocks that, in any crop year, are
9	significantly below current projections; and
10	(B) policy options to alleviate the impact
11	on domestic animal agriculture feedstocks that
12	are significantly below current projections.
13	(4) Components.—The study shall include—
14	(A) a description of the conditions under
15	which the requirements described in subsection
16	(a)(2) should be suspended or reduced to prevent
17	adverse impacts to domestic animal agriculture
18	feedstocks described in paragraph (3)(B); and
19	(B) recommendations for the means by
20	which the Federal Government could prevent or
21	minimize adverse economic hardships and im-
22	pacts.
23	(5) Deadline for completion of study.—Not
24	later than 270 days after the date of enactment of this

1	Act, the Secretary shall submit to Congress a report
2	that describes the results of the study.
3	(6) Periodic reviews.—
4	(A) In general.—To allow for the appro-
5	priate adjustment of the requirements described
6	in subsection (a)(2), the Secretary shall conduct
7	periodic reviews of—
8	(i) existing technologies;
9	(ii) the feasibility of achieving compli-
10	ance with the requirements; and
11	(iii) the impacts of the requirements
12	described in subsection (a)(2) on each indi-
13	vidual and entity described in paragraph
14	(2).
15	(k) Effective Date.—Except as otherwise specifi-
16	cally provided in this section, this section takes effect on
17	the date on which the National Academies of Science com-
18	pletes the study under subsection (j).
19	SEC. 112. PRODUCTION OF RENEWABLE FUEL USING RE-
20	NEWABLE ENERGY.
21	(a) Definitions.—In this section:
22	(1) Facility.—The term "facility" means a fa-
23	cility used for the production of renewable fuel.
24	(2) Renewable energy.—

1	(A) In General.—The term "renewable en-
2	ergy" has the meaning given the term in section
3	203(b) of the Energy Policy Act of 2005 (42
4	$U.S.C. \ 15852(b)).$
5	(B) Inclusion.—The term "renewable en-
6	ergy" includes biogas produced through the con-
7	version of organic matter from renewable bio-
8	mass.
9	(b) Additional Credit.—
10	(1) In general.—The President shall provide a
11	credit under the program established under section
12	111(d) to the owner of a facility that uses renewable
13	energy to displace more than 90 percent of the fossil
14	fuel normally used in the production of renewable
15	fuel.
16	(2) Credit amount.—The President may pro-
17	vide the credit in a quantity that is not more than
18	the equivalent of 1.5 gallons of renewable fuel for each
19	gallon of renewable fuel produced in a facility de-
20	scribed in paragraph (1).
21	SEC. 113. SENSE OF CONGRESS RELATING TO THE USE OF
22	RENEWABLE RESOURCES TO GENERATE EN-
23	ERGY.
24	(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.

1	Subtitle B—Renewable Fuels
2	In frastructure
3	SEC. 121. INFRASTRUCTURE PILOT PROGRAM FOR RENEW-
4	ABLE FUELS.
5	(a) In General.—The Secretary, in consultation with
6	the Secretary of Transportation and the Administrator of
7	the Environmental Protection Agency, shall establish a
8	competitive grant pilot program (referred to in this section
9	as the "pilot program"), to be administered through the Ve-
10	hicle Technology Deployment Program of the Department
11	of Energy, to provide not more than 10 geographically-dis-
12	persed project grants to State governments, Indian tribal
13	governments, local governments, metropolitan transpor-
14	tation authorities, or partnerships of those entities to carry
15	out 1 or more projects for the purposes described in sub-
16	section (b).
17	(b) Grant Purposes.—A grant under this section
18	shall be used for the establishment of refueling infrastruc-
19	ture corridors, as designated by the Secretary, for gasoline
20	blends that contain not less than 11 percent, and not more
21	than 85 percent, renewable fuel or diesel fuel that contains
22	at least 10 percent renewable fuel, including—
23	(1) installation of infrastructure and equipment
24	necessary to ensure adequate distribution of renewable
25	fuels within the corridor:

1	(2) installation of infrastructure and equipment
2	necessary to directly support vehicles powered by re-
3	newable fuels; and
4	(3) operation and maintenance of infrastructure
5	and equipment installed as part of a project funded
6	by the grant.
7	(c) Applications.—
8	(1) Requirements.—
9	(A) In general.—Subject to subparagraph
10	(B), not later than 90 days after the date of en-
11	actment of this Act, the Secretary shall issue re-
12	quirements for use in applying for grants under
13	the pilot program.
14	(B) Minimum requirements.—At a min-
15	imum, the Secretary shall require that an appli-
16	cation for a grant under this section—
17	(i) be submitted by—
18	(I) the head of a State, tribal, or
19	local government or a metropolitan
20	transportation authority, or any com-
21	bination of those entities; and
22	(II) a registered participant in
23	the Vehicle Technology Deployment
24	Program of the Department of Energy;
25	and

1	(ii) include—
2	(I) a description of the project
3	proposed in the application, including
4	the ways in which the project meets the
5	requirements of this section;
6	(II) an estimate of the degree of
7	use of the project, including the esti-
8	mated size of fleet of vehicles operated
9	with renewable fuel available within
10	the geographic region of the corridor,
11	measured as a total quantity and a
12	percentage;
13	(III) an estimate of the potential
14	petroleum displaced as a result of the
15	project (measured as a total quantity
16	and a percentage), and a plan to col-
17	lect and disseminate petroleum dis-
18	placement and other relevant data re-
19	lating to the project to be funded under
20	the grant, over the expected life of the
21	project;
22	(IV) a description of the means by
23	which the project will be sustainable
24	without Federal assistance after the
25	completion of the term of the grant;

1	(V) a complete description of the
2	costs of the project, including acquisi-
3	tion, construction, operation, and
4	maintenance costs over the expected life
5	of the project; and
6	(VI) a description of which costs
7	of the project will be supported by Fed-
8	eral assistance under this subsection.
9	(2) Partners.—An applicant under paragraph
10	(1) may carry out a project under the pilot program
11	in partnership with public and private entities.
12	(d) Selection Criteria.—In evaluating applica-
13	tions under the pilot program, the Secretary shall—
14	(1) consider the experience of each applicant
15	with previous, similar projects; and
16	(2) give priority consideration to applications
17	that—
18	(A) are most likely to maximize displace-
19	ment of petroleum consumption, measured as a
20	total quantity and a percentage;
21	(B) are best able to incorporate existing in-
22	frastructure while maximizing, to the extent
23	practicable, the use of advanced biofuels;
24	(C) demonstrate the greatest commitment on
25	the part of the applicant to ensure funding for

1	the proposed project and the greatest likelihood
2	that the project will be maintained or expanded
3	after Federal assistance under this subsection is
4	completed;
5	(D) represent a partnership of public and
6	private entities; and
7	(E) exceed the minimum requirements of
8	subsection $(c)(1)(B)$.
9	(e) Pilot Project Requirements.—
10	(1) Maximum amount.—The Secretary shall
11	provide not more than \$20,000,000 in Federal assist-
12	ance under the pilot program to any applicant.
13	(2) Cost sharing.—The non-Federal share of
14	the cost of any activity relating to renewable fuel in-
15	frastructure development carried out using funds from
16	a grant under this section shall be not less than 20
17	percent.
18	(3) Maximum period of grants.—The Sec-
19	retary shall not provide funds to any applicant under
20	the pilot program for more than 2 years.
21	(4) Deployment and distribution.—The Sec-
22	retary shall seek, to the maximum extent practicable,
23	to ensure a broad geographic distribution of project
24	sites funded by grants under this section.

(5) Transfer of information and knowledge gained by ensure that the information and knowledge gained by participants in the pilot program are transferred among the pilot program participants and to other interested parties, including other applicants that submitted applications.

(f) Schedule.—

(1) Initial Grants.—

- (A) In General.—Not later than 90 days after the date of enactment of this Act, the Secretary shall publish in the Federal Register, Commerce Business Daily, and such other publications as the Secretary considers to be appropriate, a notice and request for applications to carry out projects under the pilot program.
- (B) DEADLINE.—An application described in subparagraph (A) shall be submitted to the Secretary by not later than 180 days after the date of publication of the notice under that subparagraph.
- (C) Initial selection.—Not later than 90 days after the date by which applications for grants are due under subparagraph (B), the Secretary shall select by competitive, peer-reviewed

1 proposal up to 5 applications for projects to be 2 awarded a grant under the pilot program.

(2) Additional grants.—

- (A) In General.—Not later than 2 years after the date of enactment of this Act, the Secretary shall publish in the Federal Register, Commerce Business Daily, and such other publications as the Secretary considers to be appropriate, a notice and request for additional applications to carry out projects under the pilot program that incorporate the information and knowledge obtained through the implementation of the first round of projects authorized under the pilot program.
- (B) DEADLINE.—An application described in subparagraph (A) shall be submitted to the Secretary by not later than 180 days after the date of publication of the notice under that subparagraph.
- (C) Initial selection.—Not later than 90 days after the date by which applications for grants are due under subparagraph (B), the Secretary shall select by competitive, peer-reviewed proposal such additional applications for projects to be awarded a grant under the pilot

1	program as the Secretary determines to be ap-
2	propriate.
3	(g) Reports to Congress.—
4	(1) Initial report.—Not later than 60 days
5	after the date on which grants are awarded under this
6	section, the Secretary shall submit to Congress a re-
7	port containing—
8	(A) an identification of the grant recipients
9	and a description of the projects to be funded
10	under the pilot program;
11	(B) an identification of other applicants
12	that submitted applications for the pilot pro-
13	gram but to which funding was not provided;
14	and
15	(C) a description of the mechanisms used by
16	the Secretary to ensure that the information and
17	knowledge gained by participants in the pilot
18	program are transferred among the pilot pro-
19	gram participants and to other interested par-
20	ties, including other applicants that submitted
21	applications.
22	(2) Evaluation.—Not later than 2 years after
23	the date of enactment of this Act, and annually there-
24	after until the termination of the pilot program, the
25	Secretary shall submit to Congress a report con-

- 1 taining an evaluation of the effectiveness of the pilot
- 2 program, including an assessment of the petroleum
- 3 displacement and benefits to the environment derived
- 4 from the projects included in the pilot program.
- 5 (h) AUTHORIZATION OF APPROPRIATIONS.—There is
- 6 authorized to be appropriated to the Secretary to carry out
- 7 this section \$200,000,000, to remain available until ex-
- 8 pended.
- 9 SEC. 122. BIOENERGY RESEARCH AND DEVELOPMENT.
- 10 Section 931(c) of the Energy Policy Act of 2005 (42)
- 11 U.S.C. 16231(c)) is amended—
- 12 (1) in paragraph (2), by striking
- "\$251,000,000" and inserting "\$377,000,000"; and
- 14 (2) in paragraph (3), by striking
- "\$274,000,000" and inserting "\$398,000,000".
- 16 SEC. 123. BIORESEARCH CENTERS FOR SYSTEMS BIOLOGY
- 17 **PROGRAM.**
- 18 Section 977(a)(1) of the Energy Policy Act of 2005 (42)
- 19 U.S.C. 16317(a)(1)) is amended by inserting before the pe-
- 20 riod at the end the following: ", including the establishment
- 21 of at least 11 bioresearch centers of varying sizes, as appro-
- 22 priate, that focus on biofuels, of which at least 2 centers
- 23 shall be located in each of the 4 Petroleum Administration
- 24 for Defense Districts with no subdistricts and 1 center shall

1	be located in each of the subdistricts of the Petroleum Ad-
2	$ministration\ for\ Defense\ District\ with\ subdistricts".$
3	SEC. 124. LOAN GUARANTEES FOR RENEWABLE FUEL FA-
4	CILITIES.
5	(a) In General.—Section 1703 of the Energy Policy
6	Act of 2005 (42 U.S.C. 16513) is amended by adding at
7	the end the following:
8	"(f) Renewable Fuel Facilities.—
9	"(1) In General.—The Secretary may make
10	guarantees under this title for projects that produce
11	advanced biofuel (as defined in section 102 of the
12	Biofuels for Energy Security and Transportation Act
13	of 2007).
14	"(2) Requirements.—A project under this sub-
15	section shall employ new or significantly improved
16	technologies for the production of renewable fuels as
17	compared to commercial technologies in service in the
18	United States at the time that the guarantee is issued.
19	"(3) Issuance of first loan guarantees.—
20	The requirement of section 20320(b) of division B of
21	the Continuing Appropriations Resolution, 2007
22	(Public Law 109–289, Public Law 110–5), relating to
23	the issuance of final regulations, shall not apply to
24	the first 6 guarantees issued under this subsection.

- 1 "(4) PROJECT DESIGN.—A project for which a 2 guarantee is made under this subsection shall have a 3 project design that has been validated through the op-4 eration of a continuous process pilot facility with an 5 annual output of at least 50,000 gallons of ethanol or 6 the energy equivalent volume of other advanced 7 biofuels.
 - "(5) MAXIMUM GUARANTEED PRINCIPAL.—The total principal amount of a loan guaranteed under this subsection may not exceed \$250,000,000 for a single facility.
 - "(6) Amount of guarantee.—The Secretary shall guarantee 100 percent of the principal and interest due on 1 or more loans made for a facility that is the subject of the guarantee under paragraph (3).
 - "(7) DEADLINE.—The Secretary shall approve or disapprove an application for a guarantee under this subsection not later than 90 days after the date of receipt of the application.
 - "(8) Report.—Not later than 30 days after approving or disapproving an application under paragraph (7), the Secretary shall submit to Congress a report on the approval or disapproval (including the reasons for the action)."

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1	(b) Improvements to Underlying Loan Guar-
2	ANTEE AUTHORITY.—
3	(1) Definition of commercial tech-
4	NOLOGY.—Section 1701(1) of the Energy Policy Act
5	of 2005 (42 U.S.C. 16511(1)) is amended by striking
6	subparagraph (B) and inserting the following:
7	"(B) Exclusion.—The term 'commercial
8	technology' does not include a technology if the
9	sole use of the technology is in connection with—
10	"(i) a demonstration plant; or
11	"(ii) a project for which the Secretary
12	approved a loan guarantee.".
13	(2) Specific appropriation or contribu-
14	TION.—Section 1702 of the Energy Policy Act of 2005
15	(42 U.S.C. 16512) is amended by striking subsection
16	(b) and inserting the following:
17	"(b) Specific Appropriation or Contribution.—
18	"(1) In general.—No guarantee shall be made
19	unless—
20	"(A) an appropriation for the cost has been
21	$made;\ or$
22	"(B) the Secretary has received from the
23	borrower a payment in full for the cost of the ob-
24	ligation and deposited the payment into the
25	Treasury.

ceived from a borrower under paragraph (1)(B) not be a loan or other debt obligation that is a or guaranteed by the Federal Government. "(3) Relation to other laws.—Se 504(b) of the Federal Credit Reform Act of 199 U.S.C. 661c(b)) shall not apply to a loan or guarantee made in accordance with parag (1)(B).". (3) Amount.—Section 1702 of the Energy F Act of 2005 (42 U.S.C. 16512) is amended by str subsection (c) and inserting the following: "(c) Amount.— "(1) In General.—Subject to paragraph (2) Secretary shall guarantee up to 100 percent of principal and interest due on 1 or more loans facility that are the subject of the guarantee. "(2) Limitation.—The total amount of it guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarante issued." (4) Subrogation.—Section 1702(g)(2) of		
not be a loan or other debt obligation that is a or guaranteed by the Federal Government. "(3) Relation to other Laws.—Se but 193 U.S.C. 661c(b)) shall not apply to a loan or guarantee made in accordance with parag (1)(B).". (3) Amount.—Section 1702 of the Energy F Act of 2005 (42 U.S.C. 16512) is amended by str subsection (c) and inserting the following: "(c) Amount.— "(1) In General.—Subject to paragraph (2) Secretary shall guarantee up to 100 percent of principal and interest due on 1 or more loans facility that are the subject of the guarantee. "(2) Limitation.—The total amount of it guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarante issued." (4) Subrogation.—Section 1702(g)(2) of	1	"(2) Limitation.—The source of payments re-
or guaranteed by the Federal Government. "(3) RELATION TO OTHER LAWS.—Se 504(b) of the Federal Credit Reform Act of 199 U.S.C. 661c(b)) shall not apply to a loan or guarantee made in accordance with parag (1)(B).". (3) AMOUNT.—Section 1702 of the Energy F Act of 2005 (42 U.S.C. 16512) is amended by str subsection (c) and inserting the following: "(c) AMOUNT.— "(1) IN GENERAL.—Subject to paragraph (2, Secretary shall guarantee up to 100 percent of principal and interest due on 1 or more loans facility that are the subject of the guarantee. "(2) LIMITATION.—The total amount of it guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarante issued." (4) SUBROGATION.—Section 1702(g)(2) of	2	ceived from a borrower under paragraph (1)(B) shall
"(3) RELATION TO OTHER LAWS.—See 6 504(b) of the Federal Credit Reform Act of 199 7 U.S.C. 661c(b)) shall not apply to a loan or 8 guarantee made in accordance with parage 9 (1)(B).". 10 (3) AMOUNT.—Section 1702 of the Energy P 11 Act of 2005 (42 U.S.C. 16512) is amended by str 12 subsection (c) and inserting the following: 13 "(c) AMOUNT.— 14 "(1) IN GENERAL.—Subject to paragraph (2) 15 Secretary shall guarantee up to 100 percent of 16 principal and interest due on 1 or more loans 17 facility that are the subject of the guarantee. 18 "(2) LIMITATION.—The total amount of it 19 guaranteed for a facility by the Secretary shall 20 exceed 80 percent of the total cost of the facility 21 estimated at the time at which the guarantee 22 issued.". 23 (4) SUBROGATION.—Section 1702(g)(2) of	3	not be a loan or other debt obligation that is made
504(b) of the Federal Credit Reform Act of 199 U.S.C. 661c(b)) shall not apply to a loan or guarantee made in accordance with parage (1)(B).". (3) Amount.—Section 1702 of the Energy P Act of 2005 (42 U.S.C. 16512) is amended by str subsection (c) and inserting the following: "(c) Amount.— "(1) In General.—Subject to paragraph (2) Secretary shall guarantee up to 100 percent of principal and interest due on 1 or more loans facility that are the subject of the guarantee. "(2) Limitation.—The total amount of guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarante issued." (4) Subrogation.—Section 1702(g)(2) of	4	or guaranteed by the Federal Government.
U.S.C. 661c(b)) shall not apply to a loan or guarantee made in accordance with parage (1)(B).". (3) AMOUNT.—Section 1702 of the Energy P Act of 2005 (42 U.S.C. 16512) is amended by str subsection (c) and inserting the following: "(c) AMOUNT.— "(1) IN GENERAL.—Subject to paragraph (2) Secretary shall guarantee up to 100 percent of principal and interest due on 1 or more loans facility that are the subject of the guarantee. "(2) LIMITATION.—The total amount of guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarantee issued." (4) SUBROGATION.—Section 1702(g)(2) of	5	"(3) Relation to other laws.—Section
guarantee made in accordance with parage (1)(B).". (3) AMOUNT.—Section 1702 of the Energy P Act of 2005 (42 U.S.C. 16512) is amended by str subsection (c) and inserting the following: "(c) AMOUNT.— "(1) IN GENERAL.—Subject to paragraph (2). Secretary shall guarantee up to 100 percent of principal and interest due on 1 or more loans facility that are the subject of the guarantee. "(2) LIMITATION.—The total amount of guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarantee issued.". (4) SUBROGATION.—Section 1702(g)(2) of	6	504(b) of the Federal Credit Reform Act of 1990 (2
9 (1)(B).". 10 (3) AMOUNT.—Section 1702 of the Energy P 11 Act of 2005 (42 U.S.C. 16512) is amended by str 12 subsection (c) and inserting the following: 13 "(c) AMOUNT.— 14 "(1) IN GENERAL.—Subject to paragraph (2, 15 Secretary shall guarantee up to 100 percent of principal and interest due on 1 or more loans of facility that are the subject of the guarantee. 18 "(2) LIMITATION.—The total amount of facility that are the subject of the guarantee. 19 guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarantee issued." 20 (4) SUBROGATION.—Section 1702(g)(2) of	7	U.S.C. 661c(b)) shall not apply to a loan or loan
10 (3) Amount.—Section 1702 of the Energy P 11 Act of 2005 (42 U.S.C. 16512) is amended by str 12 subsection (c) and inserting the following: 13 "(c) Amount.— 14 "(1) In General.—Subject to paragraph (2) 15 Secretary shall guarantee up to 100 percent of 16 principal and interest due on 1 or more loans 17 facility that are the subject of the guarantee. 18 "(2) Limitation.—The total amount of it 19 guaranteed for a facility by the Secretary shall 20 exceed 80 percent of the total cost of the facility 21 estimated at the time at which the guarantee 22 issued.". 23 (4) Subrogation.—Section 1702(g)(2) of	8	guarantee made in accordance with paragraph
Act of 2005 (42 U.S.C. 16512) is amended by str subsection (c) and inserting the following: "(c) AMOUNT.— "(1) IN GENERAL.—Subject to paragraph (2) Secretary shall guarantee up to 100 percent of principal and interest due on 1 or more loans facility that are the subject of the guarantee. "(2) LIMITATION.—The total amount of guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarante issued." (4) SUBROGATION.—Section 1702(g)(2) of	9	(1)(B).".
subsection (c) and inserting the following: "(c) Amount.— "(1) In General.—Subject to paragraph (2). Secretary shall guarantee up to 100 percent of principal and interest due on 1 or more loans. facility that are the subject of the guarantee. "(2) Limitation.—The total amount of guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarantee issued." (4) Subrogation.—Section 1702(g)(2) of	10	(3) Amount.—Section 1702 of the Energy Policy
"(c) Amount.— "(1) In General.—Subject to paragraph (2) Secretary shall guarantee up to 100 percent of principal and interest due on 1 or more loans facility that are the subject of the guarantee. "(2) Limitation.—The total amount of guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarante issued." (4) Subrogation.—Section 1702(g)(2) of	11	Act of 2005 (42 U.S.C. 16512) is amended by striking
"(1) IN GENERAL.—Subject to paragraph (2) Secretary shall guarantee up to 100 percent of principal and interest due on 1 or more loans facility that are the subject of the guarantee. "(2) LIMITATION.—The total amount of guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarante issued.". (4) SUBROGATION.—Section 1702(g)(2) of	12	subsection (c) and inserting the following:
Secretary shall guarantee up to 100 percent of principal and interest due on 1 or more loans facility that are the subject of the guarantee. "(2) LIMITATION.—The total amount of guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarantee issued." (4) SUBROGATION.—Section 1702(g)(2) of	13	"(c) Amount.—
principal and interest due on 1 or more loans facility that are the subject of the guarantee. "(2) LIMITATION.—The total amount of guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarantee issued." (4) SUBROGATION.—Section 1702(g)(2) of	14	"(1) In general.—Subject to paragraph (2), the
facility that are the subject of the guarantee. "(2) LIMITATION.—The total amount of Superanteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarantee issued." (4) SUBROGATION.—Section 1702(g)(2) of	15	Secretary shall guarantee up to 100 percent of the
"(2) LIMITATION.—The total amount of a guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guaranteed issued." (4) SUBROGATION.—Section 1702(g)(2) of	16	principal and interest due on 1 or more loans for a
guaranteed for a facility by the Secretary shall exceed 80 percent of the total cost of the facility estimated at the time at which the guarantee issued." (4) SUBROGATION.—Section 1702(g)(2) of	17	facility that are the subject of the guarantee.
exceed 80 percent of the total cost of the facility estimated at the time at which the guarante issued.". (4) Subrogation.—Section 1702(g)(2) of	18	"(2) Limitation.—The total amount of loans
estimated at the time at which the guarante issued.". 22 issued.". 23 (4) SUBROGATION.—Section 1702(g)(2) of	19	guaranteed for a facility by the Secretary shall not
22 issued.". 23 (4) SUBROGATION.—Section 1702(g)(2) of	20	exceed 80 percent of the total cost of the facility, as
23 (4) Subrogation.—Section $1702(g)(2)$ of	21	estimated at the time at which the guarantee is
	22	issued.".
24 Energy Policy Act of 2005 (42 U.S.C. 16512(g))	23	(4) Subrogation.—Section 1702(g)(2) of the
	24	Energy Policy Act of 2005 (42 U.S.C. 16512(g)(2)) is

amended—

1	(A) by striking subparagraph (B); and
2	(B) by redesignating subparagraph (C) as
3	subparagraph (B).
4	(5) FEES.—Section 1702(h) of the Energy Policy
5	Act of 2005 (42 U.S.C. 16512(h)) is amended by
6	striking paragraph (2) and inserting the following:
7	"(2) AVAILABILITY.—Fees collected under this
8	subsection shall—
9	"(A) be deposited by the Secretary into a
10	special fund in the Treasury to be known as the
11	'Incentives For Innovative Technologies Fund';
12	and
13	"(B) remain available to the Secretary for
14	expenditure, without further appropriation or
15	fiscal year limitation, for administrative ex-
16	penses incurred in carrying out this title.".
17	SEC. 125. GRANTS FOR RENEWABLE FUEL PRODUCTION RE-
18	SEARCH AND DEVELOPMENT IN CERTAIN
19	STATES.
20	(a) In General.—The Secretary shall provide grants
21	to eligible entities to conduct research into, and develop and
22	implement, renewable fuel production technologies in States
23	with low rates of ethanol production, including low rates
24	of production of cellulosic biomass ethanol, as determined
25	by the Secretary.

1	(b) Eligibility.—To be eligible to receive a grant
2	under the section, an entity shall—
3	(1)(A) be an institution of higher education (as
4	defined in section 2 of the Energy Policy Act of 2005
5	(42 U.S.C. 15801)) located in a State described in
6	subsection (a);
7	(B) be an institution—
8	(i) referred to in section 532 of the Equity
9	in Educational Land-Grant Status Act of 1994
10	(Public Law 103–382; 7 U.S.C. 301 note);
11	(ii) that is eligible for a grant under the
12	Tribally Controlled College or University Assist-
13	ance Act of 1978 (25 U.S.C. 1801 et seq.), in-
14	cluding Diné College; or
15	(iii) that is eligible for a grant under the
16	Navajo Community College Act (25 U.S.C. 640a
17	$et \ seq.); \ or$
18	(C) be a consortium of such institutions of higher
19	education, industry, State agencies, Indian tribal
20	agencies, or local government agencies located in the
21	State; and
22	(2) have proven experience and capabilities with
23	relevant technologies.

1	(c) Authorization of Appropriations.—There is
2	authorized to be appropriated to carry out this section
3	\$25,000,000 for each of fiscal years 2008 through 2010.
4	SEC. 126. GRANTS FOR INFRASTRUCTURE FOR TRANSPOR-
5	TATION OF BIOMASS TO LOCAL BIOREFIN-
6	ERIES.
7	(a) In General.—The Secretary shall conduct a pro-
8	gram under which the Secretary shall provide grants to In-
9	dian tribal and local governments and other eligible entities
10	(as determined by the Secretary) (referred to in this section
11	as "eligible entities") to promote the development of infra-
12	structure to support the separation, production, processing,
13	and transportation of biomass to local biorefineries, includ-
14	ing by portable processing equipment.
15	(b) Phases.—The Secretary shall conduct the pro-
16	gram in the following phases:
17	(1) Development.—In the first phase of the
18	program, the Secretary shall make grants to eligible
19	entities to assist the eligible entities in the develop-
20	ment of local projects to promote the development of
21	infrastructure to support the separation, production,
22	processing, and transportation of biomass to local bio-
23	refineries, including by portable processing equip-

ment.

1	(2) Implementation.—In the second phase of
2	the program, the Secretary shall make competitive
3	grants to eligible entities to implement projects devel-
4	oped under paragraph (1).
5	(c) Authorization of Appropriations.—There are
6	authorized to be appropriated such sums as are necessary
7	to carry out this section.
8	SEC. 127. BIOREFINERY INFORMATION CENTER.
9	(a) In General.—The Secretary, in cooperation with
10	the Secretary of Agriculture, shall establish a biorefinery
1	information center to make available to interested parties
12	information on—
13	(1) renewable fuel resources, including informa-
14	tion on programs and incentives for renewable fuels;
15	(2) renewable fuel producers;
16	(3) renewable fuel users; and
17	(4) potential renewable fuel users.
18	(b) Administration.—In administering the bio-
19	refinery information center, the Secretary shall—
20	(1) continually update information provided by
21	the center;
22	(2) make information available to interested par-
23	ties on the process for establishing a biorefinery; and

1	(3) make information and assistance provided by
2	the center available through a toll-free telephone num-
3	ber and website.
4	(c) Authorization of Appropriations.—There are
5	authorized to be appropriated such sums as are necessary
6	to carry out this section.
7	SEC. 128. ALTERNATIVE FUEL DATABASE AND MATERIALS.
8	The Secretary and the Director of the National Insti-
9	tute of Standards and Technology shall jointly establish and
10	make available to the public—
11	(1) a database that describes the physical prop-
12	erties of different types of alternative fuel; and
13	(2) standard reference materials for different
14	types of alternative fuel.
15	SEC. 129. FUEL TANK CAP LABELING REQUIREMENT.
16	Section 406(a) of the Energy Policy Act of 1992 (42
17	U.S.C. 13232(a)) is amended—
18	(1) by striking "The Federal Trade Commission"
19	and inserting the following:
20	"(1) In general.—The Federal Trade Commis-
21	sion"; and
22	(2) by adding at the end the following:
23	"(2) Fuel tank cap labeling require-
24	MENT.—Beginning with model year 2010, the fuel
2.5	tank can of each alternative fueled vehicle manufac-

- 1 tured for sale in the United States shall be clearly la-
- 2 beled to inform consumers that such vehicle can oper-
- 3 ate on alternative fuel.".
- 4 SEC. 130. BIODIESEL.
- 5 (a) In General.—Not later than 180 days after the
- 6 date of enactment of this Act, the Secretary shall submit
- 7 to Congress a report on any research and development chal-
- 8 lenges inherent in increasing to 5 percent the proportion
- 9 of diesel fuel sold in the United States that is biodiesel (as
- 10 defined in section 757 of the Energy Policy Act of 2005
- 11 (42 U.S.C. 16105)).
- 12 (b) Regulations.—The President shall promulgate
- 13 regulations providing for the uniform labeling of biodiesel
- 14 blends that are certified to meet applicable standards pub-
- 15 lished by the American Society for Testing and Materials.
- 16 (c) National Biodiesel Fuel Quality Stand-
- 17 *ARD.*—
- 18 (1) Quality regulations.—Not later than 180
- days after the date of enactment of this Act, the Presi-
- 20 dent shall promulgate regulations to ensure that each
- 21 diesel-equivalent fuel derived from renewable biomass
- and introduced into interstate commerce is tested and
- 23 certified to comply with applicable standards of the
- 24 American Society for Testing and Materials.

1	(2) Enforcement.—The President shall ensure
2	that all biodiesel entering interstate commerce meets
3	the requirements of paragraph (1).
4	(3) Funding.—There are authorized to be ap-
5	propriated to the President to carry out this section:
6	(A) \$3,000,000 for fiscal year 2008.
7	(B) \$3,000,000 for fiscal year 2009.
8	(C) \$3,000,000 for fiscal year 2010.
9	SEC. 131. TRANSITIONAL ASSISTANCE FOR FARMERS WHO
10	PLANT DEDICATED ENERGY CROPS FOR A
11	LOCAL CELLULOSIC REFINERY.
12	(a) Definitions.—In this section:
13	(1) Cellulosic crop.—The term "cellulosic
14	crop" means a tree or grass that is grown
15	specifically—
16	(A) to provide raw materials (including
17	feedstocks) for conversion to liquid transpor-
18	tation fuels or chemicals through biochemical or
19	thermochemical processes; or
20	(B) for energy generation through combus-
21	tion, pyrolysis, or cofiring.
22	(2) Cellulosic refiner.—The term "cellulosic
23	refiner" means the owner or operator of a cellulosic
24	refinery.

1	(3) Cellulosic refinery.—The term "cel-
2	lulosic refinery" means a refinery that processes a cel-
3	$lulosic\ crop.$
4	(4) Qualified cellulosic crop.—The term
5	"qualified cellulosic crop" means, with respect to an
6	agricultural producer, a cellulosic crop that is—
7	(A) the subject of a contract or memo-
8	randum of understanding between the producer
9	and a cellulosic refiner, under which the pro-
10	ducer is obligated to sell the crop to the cellulosic
11	refiner by a certain date; and
12	(B) produced not more than 70 miles from
13	a cellulosic refinery owned or operated by the
14	cellulosic refiner.
15	(5) Secretary.—The term "Secretary" means
16	the Secretary of Agriculture.
17	(b) Transitional Assistance Payments.—The Sec-
18	retary shall make transitional assistance payments to an
19	agricultural producer during the first year in which the
20	producer devotes land to the production of a qualified cel-
21	lulosic crop.
22	(c) Amount of Payment.—
23	(1) Determined by formula.—Subject to
24	paragraph (2), the Secretary shall devise a formula to
25	be used to calculate the amount of a payment to be

- made to an agricultural producer under this section,
 based on the opportunity cost (as determined in accordance with such standard as the Secretary may establish, taking into consideration land rental rates
 and other applicable costs) incurred by the producer
 during the first year in which the producer devotes
- 8 (2) LIMITATION.—The total of the amount paid 9 to a producer under this section shall not exceed an 10 amount equal to 25 percent of the amounts made 11 available under subsection (e) for the applicable fiscal 12 year.

land to the production of the qualified cellulosic crop.

- 13 (d) REGULATIONS.—The Secretary shall promulgate 14 such regulations as the Secretary determines to be necessary 15 to carry out this section.
- 16 (e) AUTHORIZATION OF APPROPRIATIONS.—There is 17 authorized to be appropriated to carry out this section 18 \$4,088,000 for each of fiscal years 2008 through 2012, to 19 remain available until expended.
- 20 SEC. 132. RESEARCH AND DEVELOPMENT IN SUPPORT OF
 LOW-CARBON FUELS.
- 22 (a) Declaration of Policy.—Congress declares that, 23 in order to achieve maximum reductions in greenhouse gas 24 emissions, enhance national security, and ensure the protec-25 tion of wildlife habitat, biodiversity, water quality, air

- 1 quality, and rural and regional economies throughout the
- 2 lifecycle of each low-carbon fuel, it is necessary and desir-
- 3 able to undertake a combination of basic and applied re-
- 4 search, as well as technology development and demonstra-
- 5 tion, involving the colleges and universities of the United
- 6 States, in partnership with the Federal Government, State
- 7 governments, and the private sector.
- 8 (b) Purpose.—The purpose of this section is to pro-
- 9 vide for research support to facilitate the development of
- 10 sustainable markets and technologies to produce and use
- 11 woody biomass and other low-carbon fuels for the produc-
- 12 tion of thermal and electric energy, biofuels, and bioprod-
- 13 ucts.
- 14 (c) Definition of Fuel Emission Baseline.—In
- 15 this section, the term "fuel emission baseline" means the
- 16 average lifecycle greenhouse gas emissions per unit of energy
- 17 of the fossil fuel component of conventional transportation
- 18 fuels in commerce in the United States in calendar year
- 19 2008, as determined by the President.
- 20 (d) Grant Program.—The President shall establish
- 21 a program to provide to eligible entities (as identified by
- 22 the President) grants for use in—
- 23 (1) providing financial support for not more
- 24 than 4 nor less than 6 demonstration facilities that—

1	(A) use woody biomass to deploy advanced
2	technologies for production of thermal and elec-
3	tric energy, biofuels, and bioproducts; and
4	(B) are targeted at regional feedstocks and
5	markets;
6	(2) conducting targeted research for the develop-
7	ment of cellulosic ethanol and other liquid fuels from
8	woody or other biomass that may be used in transpor-
9	tation or stationary applications, such as industrial
10	processes or industrial, commercial, and residential
11	heating;
12	(3) conducting research into the best scientif-
13	ically-based and periodically-updated methods of as-
14	sessing and certifying the impacts of each low-carbon
15	fuel with respect to—
16	(A) the reduction in lifecycle greenhouse gas
17	emissions of each fuel as compared to—
18	(i) the fuel emission baseline; and
19	(ii) the greenhouse gas emissions of
20	other sectors, such as the agricultural, in-
21	dustrial, and manufacturing sectors;
22	(B) the contribution of the fuel toward en-
23	hancing the energy security of the United States
24	by displacing imported petroleum and petroleum
25	products;

1	(C) any impacts of the fuel on wildlife habi-
2	tat, biodiversity, water quality, and air quality;
3	and
4	(D) any effect of the fuel with respect to
5	rural and regional economies;
6	(4) conducting research to determine to what ex-
7	tent the use of low-carbon fuels in the transportation
8	sector would impact greenhouse gas emissions in other
9	sectors, such as the agricultural, industrial, and man-
10	ufacturing sectors;
11	(5) conducting research for the development of
12	the supply infrastructure that may provide renewable
13	biomass feedstocks in a consistent, predictable, and
14	$environmentally \hbox{-} sustainable\ manner;$
15	(6) conducting research for the development of
16	supply infrastructure that may provide renewable
17	low-carbon fuels in a consistent, predictable, and en-
18	vironmentally-sustainable manner; and
19	(7) conducting policy research on the global
20	movement of low-carbon fuels in a consistent, predict-
21	able, and environmentally-sustainable manner.
22	(e) Authorization of Appropriations.—Of the
23	funding authorized under section 122, there are authorized
24	to be appropriated to carry out this section—
25	(1) \$45,000,000 for fiscal year 2009;

1	(2) \$50,000,000 for fiscal year 2010;
2	(3) \$55,000,000 for fiscal year 2011;
3	(4) \$60,000,000 for fiscal year 2012; and
4	(5) \$65,000,000 for fiscal year 2013.
5	Subtitle C—Studies
6	SEC. 141. STUDY OF ADVANCED BIOFUELS TECHNOLOGIES.
7	(a) In General.—Not later than October 1, 2012, the
8	Secretary shall offer to enter into a contract with the Na-
9	tional Academy of Sciences under which the Academy shall
10	conduct a study of technologies relating to the production,
11	transportation, and distribution of advanced biofuels.
12	(b) Scope.—In conducting the study, the Academy
13	shall—
14	(1) include an assessment of the maturity of ad-
15	vanced biofuels technologies;
16	(2) consider whether the rate of development of
17	those technologies will be sufficient to meet the ad-
18	vanced biofuel standards required under section 111;
19	(3) consider the effectiveness of the research and
20	development programs and activities of the Depart-
21	ment of Energy relating to advanced biofuel tech-
22	nologies; and
23	(4) make policy recommendations to accelerate
24	the development of those technologies to commercial
25	viabilitu, as appropriate.

1	(c) Report.—Not later than November 30, 2014, the
2	Secretary shall submit to the Committee on Energy and
3	Natural Resources of the Senate and the Committee on En-
4	ergy and Commerce of the House of Representatives a report
5	describing the results of the study conducted under this sec-
6	tion.
7	SEC. 142. STUDY OF INCREASED CONSUMPTION OF ETH-
8	ANOL-BLENDED GASOLINE WITH HIGHER
9	LEVELS OF ETHANOL.
10	(a) In General.—The Secretary, in cooperation with
11	the Secretary of Agriculture, the Administrator of the Envi-
12	ronmental Protection Agency, and the Secretary of Trans-
13	portation, and after providing notice and an opportunity
14	for public comment, shall conduct a study of the feasibility
15	of increasing consumption in the United States of ethanol-
16	blended gasoline with levels of ethanol that are not less than
17	10 percent and not more than 40 percent.
18	(b) Study.—The study under subsection (a) shall
19	include—
20	(1) a review of production and infrastructure
21	constraints on increasing consumption of ethanol;
22	(2) an evaluation of the economic, market, and
23	energy-related impacts of State and regional dif-
24	ferences in ethanol blends;

- (3) an evaluation of the economic, market, and
 energy-related impacts on gasoline retailers and consumers of separate and distinctly labeled fuel storage
 facilities and dispensers;
 - (4) an evaluation of the environmental impacts of mid-level ethanol blends on evaporative and exhaust emissions from on-road, off-road, and marine engines, recreational boats, vehicles, and equipment;
 - (5) an evaluation of the impacts of mid-level ethanol blends on the operation, durability, and performance of on-road, off-road, and marine engines, recreational boats, vehicles, and equipment; and
- 13 (6) an evaluation of the safety impacts of mid-14 level ethanol blends on consumers that own and oper-15 ate off-road and marine engines, recreational boats, 16 vehicles, or equipment.
- 17 (c) Report.—Not later than 1 year after the date of 18 enactment of this Act, the Secretary shall submit to Con-19 gress a report describing the results of the study conducted 20 under this section.
- 21 SEC. 143. PIPELINE FEASIBILITY STUDY.
- 22 (a) In General.—The Secretary, in coordination 23 with the Secretary of Agriculture and the Secretary of 24 Transportation, shall conduct a study of the feasibility of 25 the construction of dedicated ethanol pipelines.

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1	(b) Factors.—In conducting the study, the Secretary
2	shall consider—
3	(1) the quantity of ethanol production that
4	would make dedicated pipelines economically viable;
5	(2) existing or potential barriers to dedicated
6	ethanol pipelines, including technical, siting, financ-
7	ing, and regulatory barriers;
8	(3) market risk (including throughput risk) and
9	means of mitigating the risk;
10	(4) regulatory, financing, and siting options that
11	would mitigate risk in those areas and help ensure
12	the construction of 1 or more dedicated ethanol pipe-
13	lines;
14	(5) financial incentives that may be necessary
15	for the construction of dedicated ethanol pipelines, in-
16	cluding the return on equity that sponsors of the ini-
17	tial dedicated ethanol pipelines will require to invest
18	in the pipelines;
19	(6) technical factors that may compromise the
20	safe transportation of ethanol in pipelines, identi-
21	fying remedial and preventative measures to ensure
22	pipeline integrity; and
23	(7) such other factors as the Secretary considers
24	appropriate.

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(c) Report.—Not later than 15 months after the date

of enactment of this Act, the Secretary shall submit to Con-
gress a report describing the results of the study conducted
under this section.
SEC. 144. STUDY OF OPTIMIZATION OF FLEXIBLE FUELED
VEHICLES TO USE E-85 FUEL.
(a) In General.—The Secretary shall conduct a
study of methods of increasing the fuel efficiency of flexible
fueled vehicles by optimizing flexible fueled vehicles to oper-
ate using E –85 fuel.
(b) Report.—Not later than 180 days after the date
of enactment of this Act, the Secretary shall submit to the
Committee on Energy and Natural Resources of the Senate
and the Committee on Natural Resources of the House of
Representatives a report that describes the results of the
study, including any recommendations of the Secretary.
SEC. 145. STUDY OF CREDITS FOR USE OF RENEWABLE
ELECTRICITY IN ELECTRIC VEHICLES.
(a) Definition of Electric Vehicle.—In this sec-
tion, the term "electric vehicle" means an electric motor ve-
hicle (as defined in section 601 of the Energy Policy Act
of 1992 (42 U.S.C. 13271)) for which the rechargeable stor-
age battery—
(1) receives a charge directly from a source of
electric current that is external to the vehicle; and

1	(2) provides a minimum of 80 percent of the mo-
2	tive power of the vehicle.
3	(b) Study.—The Secretary shall conduct a study on
4	the feasibility of issuing credits under the program estab-
5	lished under section 111(d) to electric vehicles powered by
6	electricity produced from renewable energy sources.
7	(c) Report.—Not later than 18 months after the date
8	of enactment of this Act, the Secretary shall submit to the
9	Committee on Energy and Natural Resources of the Senate
10	and the Committee on Energy and Commerce of the House
11	of Representatives a report that describes the results of the
12	study, including a description of—
13	(1) existing programs and studies on the use of
14	renewable electricity as a means of powering electric
15	vehicles; and
16	(2) alternatives for—
17	(A) designing a pilot program to determine
18	the feasibility of using renewable electricity to
19	power electric vehicles as an adjunct to a renew-
20	able fuels mandate;
21	(B) allowing the use, under the pilot pro-
22	gram designed under subparagraph (A), of elec-
23	tricity generated from nuclear energy as an ad-
24	ditional source of supply:

1	(C) identifying the source of electricity used
2	to power electric vehicles; and
3	(D) equating specific quantities of elec-
4	tricity to quantities of renewable fuel under sec-
5	$tion \ 111(d).$
6	SEC. 146. STUDY OF ENGINE DURABILITY ASSOCIATED
7	WITH THE USE OF BIODIESEL.
8	(a) In General.—Not later than 30 days after the
9	date of enactment of this Act, the Secretary shall initiate
0	a study on the effects of the use of biodiesel on engine dura-
11	bility.
12	(b) Components.—The study under this section shall
13	include—
14	(1) an assessment of whether the use of biodiesel
15	in conventional diesel engines lessens engine dura-
16	bility; and
17	(2) an assessment of the effects referred to in sub-
18	section (a) with respect to biodiesel blends at varying
19	$concentrations,\ including$ —
20	(A) B5;
21	(B) $B10;$
22	(C) B20; and
23	(D) $B30$.

1	SEC. 147. STUDY OF INCENTIVES FOR RENEWABLE FUELS.
2	(a) Study.—The President shall conduct a study of
3	the renewable fuels industry and markets in the United
4	States, including—
5	(1) the costs to produce conventional and ad-
6	vanced biofuels;
7	(2) the factors affecting the future market prices
8	for those biofuels, including world oil prices; and
9	(3) the financial incentives necessary to enhance,
10	to the maximum extent practicable, the biofuels in-
11	dustry of the United States to reduce the dependence
12	of the United States on foreign oil during calendar
13	years 2011 through 2030.
14	(b) GOALS.—The study shall include an analysis of the
15	options for financial incentives and the advantage and dis-
16	advantages of each option.
17	(c) Report.—Not later than 1 year after the date of
18	enactment of this Act, the President shall submit to Con-
19	gress a report that describes the results of the study.
20	SEC. 148. STUDY OF STREAMLINED LIFECYCLE ANALYSIS
21	TOOLS FOR THE EVALUATION OF RENEWABLE
22	CARBON CONTENT OF BIOFUELS.
23	(a) In General.—The Secretary, in consultation with
24	the Secretary of Agriculture and the Administrator of the
25	Environmental Protection Agency, shall conduct a study
26	of—

1	(1) published methods for evaluating the lifecycle
2	fossil and renewable carbon content of fuels, including
3	conventional and advanced biofuels; and
4	(2) methods for performing simplified, stream-
5	lined lifecycle analyses of the fossil and renewable
6	carbon content of biofuels.
7	(b) Report.—Not later than 1 year after the date of
8	enactment of this Act, the Secretary shall submit to the
9	Committee on Energy and Natural Resources of the Senate
10	and the Committee on Energy and Commerce of the House
11	of Representatives a report that describes the results of the
12	study under subsection (a), including recommendations for
13	a method for performing a simplified, streamlined lifecycle
14	analysis of the fossil and renewable carbon content of
15	biofuels that includes—
16	(1) carbon inputs to feedstock production; and
17	(2) carbon inputs to the biofuel production proc-
18	ess, including the carbon associated with electrical
19	and thermal energy inputs.
20	SEC. 149. STUDY OF EFFECTS OF ETHANOL-BLENDED GASO-
21	LINE ON OFF-ROAD VEHICLES.
22	(a) Study.—
23	(1) In General.—The Secretary, in consultation
24	with the Secretary of Transportation and the Admin-
25	istrator of the Environmental Protection Agency

1	shall conduct a study to determine the effects of eth-
2	anol-blended gasoline on off-road vehicles and rec-
3	reational boats.
4	(2) EVALUATION.—The study shall include an
5	evaluation of the operational, safety, durability, and
6	environmental impacts of ethanol-blended gasoline on
7	off-road and marine engines, recreational boats, and
8	related equipment.
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 describing the results of the study.
12	SEC. 150. STUDY OF OFFSHORE WIND RESOURCES.
13	(a) Definitions.—In this section:
14	(1) Eligible institution.—The term "eligible
15	institution" means a college or university that—
16	(A) as of the date of enactment of this Act,
17	has an offshore wind power research program;
18	and
19	(B) is located in a region of the United
20	States that is in reasonable proximity to the
21	eastern outer Continental Shelf, as determined
22	by the Secretary.
23	(2) Secretary.—The term "Secretary" means
24	the Secretary of the Interior, acting through the Di-
25	rector of the Minerals Management Service

1	(b) STUDY.—The Secretary, in cooperation with an el-
2	igible institution, as selected by the Secretary, shall conduct
3	a study to assess each offshore wind resource located in the
4	region of the eastern outer Continental Shelf.
5	(c) Report.—Upon completion of the study under
6	subsection (b), the Secretary shall submit to Congress a re-
7	port that includes—
8	(1) a description of—
9	(A) the locations and total power generation
10	resources of the best offshore wind resources lo-
11	cated in the region of the eastern outer Conti-
12	nental Shelf, as determined by the Secretary;
13	(B) based on conflicting zones relating to
14	any infrastructure that, as of the date of enact-
15	ment of this Act, is located in close proximity to
16	any offshore wind resource, the likely exclusion
17	zones of each offshore wind resource described in
18	subparagraph (A);
19	(C) the relationship of the temporal vari-
20	ation of each offshore wind resource described in
21	subparagraph (A) with—
22	(i) any other offshore wind resource;
23	and
24	(ii) with loads and corresponding sys-
25	tem operator markets;

1	(D) the geological compatibility of each off-
2	shore wind resource described in subparagraph
3	(A) with any potential technology relating to sea
4	floor towers; and
5	(E) with respect to each area in which an
6	offshore wind resource described in subparagraph
7	(A) is located, the relationship of the authority
8	under any coastal management plan of the State
9	in which the area is located with the Federal
10	Government; and
11	(2) recommendations on the manner by which to
12	handle offshore wind intermittence.
13	(d) Incorporation of Study.—Effective beginning
14	on the date on which the Secretary completes the study
15	under subsection (b), the Secretary shall incorporate the
16	findings included in the report under subsection (c) into
17	the planning process documents for any wind energy lease
18	sale—
19	(1) relating to any offshore wind resource located
20	in any appropriate area of the outer Continental
21	Shelf, as determined by the Secretary; and
22	(2) that is completed on or after the date of en-
23	actment of this Act.
24	(e) Effect.—Nothing in this section—

1	(1) delays any final regulation to be promul-
2	gated by the Secretary of the Interior to carry out sec-
3	tion 8(p) of the Outer Continental Shelf Lands Act
4	$(43\ U.S.C.\ 1337(p));\ or$
5	(2) limits the authority of the Secretary to lease
6	any offshore wind resource located in any appro-
7	priate area of the outer Continental Shelf, as deter-
8	mined by the Secretary.
9	(f) Authorization of Appropriations.—There is
10	authorized to be appropriated to carry out this section
11	\$5,000,000, to remain available until expended.
12	Subtitle D—Environmental
13	Safeguards
14	SEC. 161. GRANTS FOR PRODUCTION OF ADVANCED
15	BIOFUELS.
16	(a) In General.—The Secretary shall establish a
17	grant program to encourage the production of advanced
18	biofuels.
19	(b) Requirements and Priority.—In making
20	grants under this section, the Secretary—
21	(1) shall make awards to the proposals for ad-
22	vanced biofuels with the greatest reduction in lifecycle
23	greenhouse gas emissions compared to the comparable
24	motor vehicle fuel lifecycle emissions during calendar
25	unar 2007, and
	year 2007; and

1	(2) shall not make an award to a project that
2	does not achieve at least a 50-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. 162. STUDIES OF EFFECTS OF RENEWABLE FUEL USE.
9	Section 211 of the Clean Air Act (42 U.S.C. 7545) is
10	amended by adding at the end the following:
11	"(t) Studies of Effects of Renewable Fuel
12	USE.—
13	"(1) In general.—Not later than 1 year after
14	the date of enactment of this subsection, the Adminis-
15	trator shall offer to enter into appropriate arrange-
16	ments with the National Academy of Sciences and
17	any other independent research institute determined
18	to be appropriate by the Administrator, in consulta-
19	tion with appropriate Federal agencies, to conduct 2
20	studies on the effects of increased domestic use of re-
21	newable fuels under the Renewable Fuels, Consumer
22	Protection, and Energy Efficiency Act of 2007.
23	"(2) Matters to be studied.—
24	"(A) In general.—The studies under this
25	subsection shall assess, quantify, and recommend

1	analytical methodologies in relation to environ-
2	mental changes associated with the increased do-
3	mestic use of renewable fuels under the Renew-
4	able Fuels, Consumer Protection, and Energy Ef-
5	ficiency Act of 2007, including production, han-
6	dling, transportation, and use of the fuels.
7	"(B) Specific matters.—The studies shall
8	include an assessment and quantification, to the
9	maximum extent practicable, of significant
10	changes—
11	"(i) in air and water quality and the
12	quality of other natural resources;
13	"(ii) in land use patterns;
14	"(iii) in the rate of deforestation in the
15	United States and globally;
16	"(iv) to greenhouse gas emissions;
17	"(v) to significant geographic areas
18	and habitats with high biodiversity values
19	(including species richness, the presence of
20	species that are exclusively native to a
21	place, or the presence of endangered species);
22	or
23	"(vi) in the long-term capacity of the
24	United States to produce biomass feedstocks.

1	"(C) Baseline comparison.—In making
2	an assessment or quantifying effects of increased
3	use of renewable fuels, the studies shall use an
4	appropriate baseline involving increased use of
5	the conventional transportation fuels, if displace-
6	ment by use of renewable fuels had not occurred.
7	"(3) Reports to congress.—The Adminis-
8	trator shall submit to Congress a report summarizing
9	the assessments and findings of—
10	"(A) the first study, along with any rec-
11	ommendations by the Administrator to mitigate
12	adverse effects identified by the study, not later
13	than 3 years after the date of enactment of this
14	subsection; and
15	"(B) the second study, along with any rec-
16	ommendations by the Administrator to mitigate
17	adverse effects identified by the study, not later
18	December 31, 2015.".
19	SEC. 163. INTEGRATED CONSIDERATION OF WATER QUAL-
20	ITY IN DETERMINATIONS ON FUELS AND
21	FUEL ADDITIVES.
22	Section 211(c)(1) of the Clean Air Act (42 U.S.C.
23	7545(c)(1)) is amended—

1	(1) by striking "nonroad vehicle (A) if in the
2	judgment of the Administrator" and inserting
3	"nonroad vehicle—
4	"(A) if, in the judgment of the Adminis-
5	trator, any fuel or fuel additive or";
6	(2) in subparagraph (A), by striking "air pollu-
7	tion which" and inserting "air pollution or water
8	pollution (including any degradation in the quality
9	of groundwater) that"; and
10	(3) by striking ", or (B) if" and inserting the
11	following: "; or
12	"(B) if".
13	SEC. 164. ANTI-BACKSLIDING.
14	Section 211 of the Clean Air Act (42 U.S.C. 7545) (as
15	amended by section 162) is amended by adding at the end
16	the following:
17	"(u) Prevention of Air Quality Deteriora-
18	TION.—
19	"(1) STUDY.—
20	"(A) In General.—Not later than 18
21	months after the date of enactment of the Renew-
22	able Fuels, Consumer Protection, and Energy Ef-
23	ficiency Act of 2007, the Administrator shall
24	complete a study to determine whether the re-
25	newable fuel volumes required by that Act will

1	adversely impact air quality as a result of
2	changes in vehicle and engine emissions of air
3	pollutants regulated under this Act.
4	"(B) Considerations.—The study shall
5	include consideration of—
6	"(i) different blend levels, types of re-
7	newable fuels, and available vehicle tech-
8	nologies; and
9	"(ii) appropriate national, regional,
10	and local air quality control measures.
11	"(2) Regulations.—Not later than 3 years
12	after the date of enactment of the Renewable Fuels,
13	Consumer Protection, and Energy Efficiency Act of
14	2007, the Administrator shall—
15	"(A) promulgate regulations to implement
16	appropriate measures to mitigate, to the greatest
17	extent achievable, considering the results of the
18	study under paragraph (1), any adverse impacts
19	on air quality, as the result of the renewable vol-
20	umes required by that Act; or
21	"(B) make a determination that no such
22	measures are necessary.
23	"(3) Other requirements.—Nothing in title I
24	of the Renewable Fuels, Consumer Protection, and
25	Energy Efficiency Act of 2007 supercedes or otherwise

1	affects any Federal or State requirement under any
2	other provision of law that is more stringent than
3	any requirement of this title.".
4	TITLE II—ENERGY EFFICIENCY
5	PROMOTION
6	SEC. 201. SHORT TITLE.
7	This title may be cited as the "Energy Efficiency Pro-
8	motion Act of 2007".
9	SEC. 202. DEFINITION OF SECRETARY.
10	In this title, the term "Secretary" means the Secretary
11	$of\ Energy.$
12	Subtitle A—Promoting Advanced
13	Lighting Technologies
14	SEC. 211. ACCELERATED PROCUREMENT OF ENERGY EFFI-
14 15	SEC. 211. ACCELERATED PROCUREMENT OF ENERGY EFFI- CIENT LIGHTING.
15 16	CIENT LIGHTING.
15 16 17	CIENT LIGHTING. Section 553 of the National Energy Conservation Pol-
15 16	CIENT LIGHTING. Section 553 of the National Energy Conservation Policy Act (42 U.S.C. 8259b) is amended by adding the fol-
15 16 17 18	CIENT LIGHTING. Section 553 of the National Energy Conservation Policy Act (42 U.S.C. 8259b) is amended by adding the following:
15 16 17 18	CIENT LIGHTING. Section 553 of the National Energy Conservation Policy Act (42 U.S.C. 8259b) is amended by adding the following: "(f) Accelerated Procurement of Energy Efficiency (42 U.S.C. 8259b) is a mended by adding the following:
15 16 17 18 19	CIENT LIGHTING. Section 553 of the National Energy Conservation Policy Act (42 U.S.C. 8259b) is amended by adding the following: "(f) Accelerated Procurement of Energy Efficient Lighting.—
15 16 17 18 19 20 21	CIENT LIGHTING. Section 553 of the National Energy Conservation Policy Act (42 U.S.C. 8259b) is amended by adding the following: "(f) Accelerated Procurement of Energy Efficient Lighting.— "(1) In General.—Not later than October 1,

1	ignated under the Federal Energy Management Pro-
2	gram.
3	"(2) Guidelines.—
4	"(A) In general.—Not later than 1 year
5	after the date of enactment of this subsection, the
6	Secretary shall issue guidelines to carry out this
7	subsection.
8	"(B) Replacement costs.—The guidelines
9	shall take into consideration the costs of replac-
10	ing all general service lighting and the reduced
11	cost of operation and maintenance expected to
12	result from such replacement.".
13	SEC. 212. INCANDESCENT REFLECTOR LAMP EFFICIENCY
14	STANDARDS.
15	(a) Definitions.—Section 321 of the Energy Policy
16	and Conservation Act (42 U.S.C. 6291) is amended—
17	(1) in paragraph (30)(C)(ii)—
18	(A) in the matter preceding subclause (I)—
19	(i) by striking "or similar bulb shapes
20	(excluding ER or BR)" and inserting "ER,
21	BR, BPAR, or similar bulb shapes"; and
22	(ii) by striking "2.75" and inserting
23	"2.25"; and

1	(B) by striking "is either—" and all that
2	follows through subclause (II) and inserting "has
3	a rated wattage that is 40 watts or higher"; and
4	(2) by adding at the end the following:
5	"(52) BPAR INCANDESCENT REFLECTOR
6	LAMP.—The term 'BPAR incandescent reflector lamp'
7	means a reflector lamp as shown in figure C78.21-
8	278 on page 32 of ANSI C78.21–2003.
9	"(53) BR INCANDESCENT REFLECTOR LAMP;
10	BR30; BR40.—
11	"(A) BR INCANDESCENT REFLECTOR
12	LAMP.—The term 'BR incandescent reflector
13	lamp' means a reflector lamp that has—
14	"(i) a bulged section below the major
15	diameter of the bulb and above the approxi-
16	mate baseline of the bulb, as shown in fig-
17	ure 1 (RB) on page 7 of ANSI C79.1–1994,
18	incorporated by reference in section 430.22
19	of title 10, Code of Federal Regulations (as
20	in effect on the date of enactment of this
21	paragraph); and
22	"(ii) a finished size and shape shown
23	in ANSI C78.21-1989, including the ref-
24	erenced reflective characteristics in part 7 of
25	ANSI C78.21–1989. incorporated by ref-

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

1	Federal Regulations (as in effect on the date
2	of enactment of this paragraph).
3	"(B) ER30.—The term 'ER30' means an
4	ER incandescent reflector lamp with a diameter
5	of 30/8ths of an inch.
6	"(C) ER40.—The term 'ER40' means an
7	ER incandescent reflector lamp with a diameter
8	of 40/8ths of an inch.
9	"(55) R20 incandescent reflector lamp.—
10	The term 'R20 incandescent reflector lamp' means a
11	reflector lamp that has a face diameter of approxi-
12	mately 2.5 inches, as shown in figure 1(R) on page
13	7 of ANSI C79.1–1994.".
14	(b) Standards for Fluorescent Lamps and In-
15	CANDESCENT REFLECTOR LAMPS.—Section 325(i) of the
16	Energy Policy and Conservation Act (42 U.S.C. 6925(i))
17	is amended by striking paragraph (1) and inserting the fol-
18	lowing:
19	"(1) Standards.—
20	"(A) Definition of effective date.—In
21	this paragraph (other than $subparagraph$ (D)),
22	the term 'effective date' means, with respect to
23	each type of lamp specified in a table contained
24	in subparagraph (B), the last day of the period
25	of months corresponding to that type of lamp (as

specified in the table) that follows October 24, 2 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
	≤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

9 "(C) EXEMPTIONS.—The standards speci10 fied in subparagraph (B) shall not apply to the
11 following types of incandescent reflector lamps:
12 "(i) Lamps rated at 50 watts or less
13 that are ER30, BR30, BR40, or ER40
14 lamps.

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1	"(ii) Lamps rated at 65 watts that are
2	$BR30,\ BR40,\ or\ ER40\ lamps.$
3	"(iii) R20 incandescent reflector lamps
4	rated 45 watts or less.
5	"(D) Effective dates.—
6	"(i) ER, BR, AND BPAR LAMPS.—The
7	standards specified in subparagraph (B)
8	shall apply with respect to ER incandescent
9	reflector lamps, BR incandescent reflector
10	lamps, BPAR incandescent reflector lamps,
11	and similar bulb shapes on and after Janu-
12	ary 1, 2008.
13	"(ii) LAMPS BETWEEN 2.25-2.75
14	INCHES IN DIAMETER.—The standards spec-
15	ified in subparagraph (B) shall apply with
16	respect to incandescent reflector lamps with
17	a diameter of more than 2.25 inches, but
18	not more than 2.75 inches, on and after
19	January 1, 2008.".
20	SEC. 213. 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 the submission of
10	10,000 such units equal to or exceeding the cri-
11	teria described in subparagraphs (A) through (I).
12	(2) PAR TYPE 38 HALOGEN REPLACEMENT LAMP
13	PRIZE.—The Secretary shall award a Parabolic Alu-
14	minized Reflector Type 38 Halogen Replacement
15	Lamp Prize (referred to in this section as the "PAR
16	Type 38 Halogen Replacement Lamp Prize") to an
17	entrant that produces a solid-state-light package si-
18	multaneously capable of—
19	(A) producing a luminous flux greater than
20	or equal to 1,350 lumens;
21	(B) consuming less than or equal to 11
22	watts;
23	(C) having an efficiency greater than 123
24	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 the submission of
21	10,000 such units equal to or exceeding the cri-
22	teria described in subparagraphs (A) through (I).
23	(3) Twenty-first century lamp prize.—The
24	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.—The Secretary may accept and
14	use funding from private sources as part of the prizes
15	awarded under this section.
16	(d) Technical Review.—The Secretary shall estab-
17	lish a technical review committee composed of non-Federal
18	officers to review entrant data submitted under this section
19	to determine whether the data meets the prize specifications
20	described in subsection (b).
21	(e) Third Party Administration.—The Secretary
22	may competitively select a third party to administer
23	awards under this section.
24	(f) AWARD AMOUNTS.—Subject to the availability of
25	funds to carry out this section, the amount of—

1	(1) the 60-Watt Incandescent Replacement Lamp
2	Prize described in subsection (b)(1) shall be
3	\$10,000,000;
4	(2) the PAR Type 38 Halogen Replacement
5	Lamp Prize described in subsection (b)(2) shall be
6	\$5,000,000; and
7	(3) the Twenty-First Century Lamp Prize de-
8	scribed in subsection (b)(3) shall be \$5,000,000.
9	(g) Federal Procurement of Solid-State-
10	LIGHTS.—
11	(1) 60-watt incandescent replacement.—
12	Subject to paragraph (3), as soon as practicable after
13	the successful award of the 60-Watt Incandescent Re-
14	placement Lamp Prize under subsection (b)(1), the
15	Secretary (in consultation with the Administrator of
16	General Services) shall develop governmentwide Fed-
17	eral purchase guidelines with a goal of replacing the
18	use of 60-watt incandescent lamps in Federal Govern-
19	ment buildings with a solid-state-light package de-
20	scribed in subsection (b)(1) by not later than the date
21	that is 5 years after the date the award is made.
22	(2) PAR 38 HALOGEN REPLACEMENT LAMP RE-
23	Placement.—Subject to paragraph (3), as soon as
24	practicable after the successful award of the PAR
25	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 than the date that is 5 years after the date the award is made.

(3) Waivers.—

- (A) In General.—The Secretary or the Administrator of General Services may waive the application of paragraph (1) or (2) if the Secretary or Administrator determines that the return on investment from the purchase of a solid-state-light package described in paragraph (1) or (2) of subsection (b), respectively, is cost prohibitive.
- (B) REPORT OF WAIVER.—If the Secretary or Administrator waives the application of paragraph (1) or (2), the Secretary or Administrator, respectively, shall submit to Congress an annual report that describes the waiver and provides a detailed justification for the waiver.
- 24 (h) REPORT.—Not later than 2 years after the date 25 of enactment of this Act, and annually thereafter, the Ad-

1	ministrator of General Services shall submit to the Energy
2	Information Agency a report describing the quantity, type,
3	and cost of each lighting product purchased by the Federal
4	Government.
5	(i) Bright Light Tomorrow Award Fund.—
6	(1) Establishment.—There is established in
7	the United States Treasury a Bright Light Tomorrow
8	permanent fund without fiscal year limitation to
9	award prizes under paragraphs (1), (2), and (3) of
10	subsection (b).
11	(2) Sources of funding.—The fund established
12	under paragraph (1) shall accept—
13	(A) fiscal year appropriations; and
14	(B) private contributions authorized under
15	subsection (c).
16	(j) Authorization of Appropriations.—There are
17	authorized to be appropriated such sums as are necessary
18	to carry out this section.
19	SEC. 214. SENSE OF SENATE CONCERNING EFFICIENT
20	LIGHTING STANDARDS.
21	(a) Findings.—The Senate finds that—
22	(1) there are approximately 4,000,000,000 screw-
23	based sockets in the United States that contain tradi-
24	tional, energy-inefficient, incandescent light bulbs;

1	(2) incandescent light bulbs are based on tech-
2	nology that is more than 125 years old;
3	(3) there are radically more efficient lighting al-
4	ternatives in the market, with the promise of even
5	more choices over the next several years;
6	(4) national policy can support a rapid substi-
7	tution of new, energy-efficient light bulbs for the less
8	efficient products in widespread use; and,
9	(5) transforming the United States market to use
10	of more efficient lighting technologies can—
11	(A) reduce electric costs in the United
12	States by more than \$18,000,000,000 annually;
13	(B) save the equivalent electricity that is
14	produced by 80 base load coal-fired power
15	plants; and
16	(C) reduce fossil fuel related emissions by
17	approximately 158,000,000 tons each year.
18	(b) Sense of the Senate.—It is the sense of the Sen-
19	ate that the Senate should—
20	(1) pass a set of mandatory, technology-neutral
21	standards to establish firm energy efficiency perform-
22	ance targets for lighting products;
23	(2) ensure that the standards become effective
24	within the next 10 years; and
25	(3) in developing the standards—

1	(A) establish the efficiency requirements to
2	ensure that replacement lamps will provide con-
3	sumers with the same quantity of light while
4	using significantly less energy;
5	(B) ensure that consumers will continue to
6	have multiple product choices, including energy-
7	saving halogen, incandescent, compact fluores-
8	cent, and LED light bulbs; and
9	(C) work with industry and key stake-
10	holders on measures that can assist consumers
11	and businesses in making the important transi-
12	tion to more efficient lighting.
13	SEC. 215. RENEWABLE ENERGY CONSTRUCTION GRANTS.
13 14	SEC. 215. RENEWABLE ENERGY CONSTRUCTION GRANTS. (a) DEFINITIONS.—In this section:
14	(a) Definitions.—In this section:
14 15	(a) Definitions.—In this section: (1) Alaska small hydroelectric power.—
14 15 16	(a) Definitions.—In this section: (1) Alaska small hydroelectric power" means
14 15 16 17	(a) Definitions.—In this section: (1) Alaska small hydroelectric power" means power that—
14 15 16 17	(a) Definitions.—In this section: (1) Alaska small hydroelectric power.— The term "Alaska small hydroelectric power" means power that— (A) is generated—
14 15 16 17 18	(a) Definitions.—In this section: (1) Alaska small hydroelectric power.— The term "Alaska small hydroelectric power" means power that— (A) is generated— (i) in the State of Alaska;
14 15 16 17 18 19 20	(a) Definitions.—In this section: (1) Alaska small hydroelectric power.— The term "Alaska small hydroelectric power" means power that— (A) is generated— (i) in the State of Alaska; (ii) without the use of a dam or im-
14 15 16 17 18 19 20 21	(a) Definitions.—In this section: (1) Alaska small hydroelectric power.— The term "Alaska small hydroelectric power" means power that— (A) is generated— (i) in the State of Alaska; (ii) without the use of a dam or impoundment of water; and

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

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

- whole or in part, by a grant under this section
 shall be paid wages at rates not less than those
 prevailing on similar construction in the locality, as determined by the Secretary of Labor in
 accordance with sections 3141–3144, 3146, and
 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.
- 19 (c) Authorization of Appropriations.—There are 20 authorized to be appropriated to the Fund such sums as 21 are necessary to carry out this section.

1	Subtitle B—Expediting New Energy
2	Efficiency Standards
3	SEC. 221. DEFINITION OF ENERGY CONSERVATION STAND-
4	ARD.
5	Section 321 of the Energy Policy and Conservation Act
6	(42 U.S.C. 6291) is amended by striking paragraph (6) and
7	inserting the following:
8	"(6) Energy conservation standard.—
9	"(A) In General.—The term 'energy con-
0	servation standard' means 1 or more perform-
11	ance standards that—
12	"(i) for covered products (excluding
13	clothes washers, dishwashers, showerheads,
14	faucets, water closets, and urinals), pre-
15	scribe a minimum level of energy efficiency
16	or a maximum quantity of energy use, de-
17	termined in accordance with test procedures
18	prescribed under section 323;
19	"(ii) for showerheads, faucets, water
20	closets, and urinals, prescribe a minimum
21	level of water efficiency or a maximum
22	quantity of water use, determined in ac-
23	cordance with test procedures prescribed
24	under section 323; and

1	"(iii) for clothes washers and
2	dishwashers—
3	"(I) prescribe a minimum level of
4	energy efficiency or a maximum quan-
5	tity of energy use, determined in ac-
6	cordance with test procedures pre-
7	scribed under section 323; and
8	"(II) may include a minimum
9	level of water efficiency or a maximum
10	quantity of water use, determined in
11	accordance with those test procedures.
12	"(B) Inclusions.—The term 'energy con-
13	servation standard' includes—
14	"(i) 1 or more design requirements, if
15	the requirements were established—
16	"(I) on or before the date of enact-
17	ment of this subclause; or
18	"(II) as part of a consensus agree-
19	ment under section 325(hh); and
20	"(ii) any other requirements that the
21	Secretary may prescribe under section
22	325(r).
23	"(C) Exclusion.—The term 'energy con-
24	servation standard' does not include a perform-
25	ance standard for a component of a finished cov-

1	ered product, unless regulation of the component
2	is authorized or established pursuant to this
3	title.".
4	SEC. 222. REGIONAL EFFICIENCY STANDARDS FOR HEAT-
5	ING AND COOLING PRODUCTS.
6	(a) In General.—Section 327 of the Energy Policy
7	and Conservation Act (42 U.S.C. 6297) is amended—
8	(1) by redesignating subsections (e), (f), and (g)
9	as subsections (f), (g), and (h), respectively; and
10	(2) by inserting after subsection (d) the fol-
11	lowing:
12	"(e) Regional Efficiency Standards for Heating
13	and Cooling Products.—
14	"(1) In General.—
15	"(A) Determination.—The Secretary may
16	determine, after notice and comment, that more
17	stringent Federal energy conservation standards
18	are appropriate for furnaces, boilers, or central
19	air conditioning equipment than applicable Fed-
20	eral energy conservation standards.
21	"(B) Finding.—The Secretary may deter-
22	mine that more stringent standards are appro-
23	priate for up to 2 different regions only after
24	finding that the regional standards—

1	"(i) would contribute to energy savings
2	that are substantially greater than that of a
3	single national energy standard; and
4	"(ii) are economically justified.
5	"(C) Regions.—On making a determina-
6	tion described in subparagraph (B), the Sec-
7	retary shall establish the regions so that the more
8	stringent standards would achieve the maximum
9	level of energy savings that is technologically fea-
10	sible and economically justified.
11	"(D) Factors.—In determining the appro-
12	priateness of 1 or more regional standards for
13	furnaces, boilers, and central and commercial air
14	conditioning equipment, the Secretary shall con-
15	sider all of the factors described in paragraphs
16	(1) through (4) of section 325(o).
17	"(2) State petition.—After a determination
18	made by the Secretary under paragraph (1), a State
19	may petition the Secretary requesting a rule that a
20	State regulation that establishes a standard for fur-
21	naces, boilers, or central air conditioners become effec-
22	tive at a level determined by the Secretary to be ap-
23	propriate for the region that includes the State.
24	"(3) Rule.—Subject to paragraphs (4) through
25	(7), the Secretary may issue the rule during the pe-

1	riod described in paragraph (4) and after consider-
2	ation of the petition and the comments of interested
3	persons.
4	"(4) Procedure.—
5	"(A) Notice.—The Secretary shall provide
6	notice of any petition filed under paragraph (2)
7	and afford interested persons a reasonable oppor-
8	tunity to make written comments, including re-
9	buttal comments, on the petition.
10	"(B) Decision.—Except as provided in
11	subparagraph (C), during the 180-day period be-
12	ginning on the date on which the petition is
13	filed, the Secretary shall issue the requested rule
14	or deny the petition.
15	"(C) Extension.—The Secretary may pub-
16	lish in the Federal Register a notice—
17	"(i) extending the period to a specified
18	date, but not longer than 1 year after the
19	date on which the petition is filed; and
20	"(ii) describing the reasons for the
21	delay.
22	"(D) Denials.—If the Secretary denies a
23	petition under this subsection, the Secretary
24	shall publish in the Federal Register notice of,
25	and the reasons for, the denial.

1	"(5) Finding of significant burden on man-
2	UFACTURING, MARKETING, DISTRIBUTION, SALE, OR
3	SERVICING OF COVERED PRODUCT ON NATIONAL
4	BASIS.—
5	"(A) In General.—The Secretary may not
6	issue a rule under this subsection if the Secretary
7	finds (and publishes the finding) that interested
8	persons have established, by a preponderance of
9	the evidence, that the State regulation will sig-
10	nificantly burden manufacturing, marketing,
11	distribution, sale, or servicing of a covered prod-
12	uct on a national basis.
13	"(B) Factors.—In determining whether to
14	make a finding described in subparagraph (A),
15	the Secretary shall evaluate all relevant factors,
16	including—
17	"(i) the extent to which the State regu-
18	lation will increase manufacturing or dis-
19	tribution costs of manufacturers, distribu-
20	tors, and others;
21	"(ii) the extent to which the State reg-
22	ulation will disadvantage smaller manufac-
23	turers, distributors, or dealers or lessen com-
24	petition in the sale of the covered product in
25	the State; and

1	"(iii) the extent to which the State reg-
2	ulation would cause a burden to manufac-
3	turers to redesign and produce the covered
4	product type (or class), taking into consid-
5	eration the extent to which the regulation
6	would result in a reduction—
7	"(I) in the current models, or in
8	the projected availability of models,
9	that could be shipped on the effective
10	date of the regulation to the State and
11	within the United States; or
12	"(II) in the current or projected
13	sales volume of the covered product
14	type (or class) in the State and the
15	United States.
16	"(6) Application.—No State regulation shall
17	become effective under this subsection with respect to
18	any covered product manufactured before the date
19	specified in the determination made by the Secretary
20	under paragraph (1).
21	"(7) Petition to withdraw federal rule
22	FOLLOWING AMENDMENT OF FEDERAL STANDARD.—
23	"(A) In general.—If a State has issued a
24	rule under paragraph (3) with respect to a cov-
25	ered product and subsequently a Federal energy

1	conservation standard concerning the product is
2	amended pursuant to section 325, any person
3	subject to the State regulation may file a peti-
4	tion with the Secretary requesting the Secretary
5	to withdraw the rule issued under paragraph (3)
6	with respect to the product in the State.
7	"(B) Burden of proof.—The Secretary
8	shall consider the petition in accordance with
9	paragraph (5) and the burden shall be on the pe-
10	titioner to show by a preponderance of the evi-
11	dence that the rule received by the State under
12	paragraph (3) should be withdrawn as a result
13	of the amendment to the Federal standard.
14	"(C) WITHDRAWAL.—If the Secretary deter-
15	mines that the petitioner has shown that the rule
16	issued by the Secretary under paragraph (3)
17	should be withdrawn in accordance with sub-
18	paragraph (B), the Secretary shall withdraw the
19	rule.".
20	(b) Conforming Amendments.—
21	(1) Section 327 of the Energy Policy and Con-
22	servation Act (42 U.S.C. 6297) is amended—
23	(A) in subsection (b)—

1	(i) in paragraph (2), by striking "sub-
2	section (e)" and inserting "subsection (f)";
3	and
4	(ii) in paragraph (3)—
5	(I) by striking "subsection (f)(1)"
6	and inserting "subsection $(g)(1)$ "; and
7	(II) by striking "subsection (f)(2)"
8	and inserting "subsection $(g)(2)$ "; and
9	(B) in subsection $(c)(3)$, by striking "sub-
10	section $(f)(3)$ " and inserting "subsection $(g)(3)$ ".
11	(2) Section 345(b)(2) of the Energy Policy and
12	Conservation Act (42 U.S.C. 6316(b)(2)) is amended
13	by adding at the end the following:
14	"(E) Relationship to certain state
15	$REGULATIONS. {\color{blue}} Not with standing subparagraph$
16	(A), a standard prescribed or established under
17	section 342(a) with respect to the equipment
18	specified in subparagraphs (B), (C), (D), (H),
19	(I), and (J) of section 340 shall not supersede a
20	State regulation that is effective under the terms,
21	conditions, criteria, procedures, and other re-
22	quirements of section 327(e).".

1 SEC. 223. FURNACE FAN RULEMAKING.

2	Section $325(f)(3)$ of the Energy Policy and Conserva-
3	tion Act (42 U.S.C. 6295(f)(3)) is amended by adding at
4	the end the following:
5	"(E) Final rule.—
6	"(i) In General.—The Secretary shall
7	publish a final rule to carry out this sub-
8	section not later than December 31, 2014.
9	"(ii) Criteria.—The standards shall
10	meet the criteria established under sub-
11	section (o).".
12	SEC. 224. EXPEDITED RULEMAKINGS.
13	(a) Procedure for Prescribing New or Amended
14	STANDARDS.—Section 325(p) of the Energy Policy and
15	Conservation Act (42 U.S.C. 6295(p)) is amended by add-
16	ing at the end the following:
17	"(5) Direct final rules.—
18	"(A) In general.—On receipt of a state-
19	ment that is submitted jointly by interested per-
20	sons that are fairly representative of relevant
21	points of view (including representatives of man-
22	ufacturers of covered products, States, and effi-
23	ciency advocates), as determined by the Sec-
24	retary, and contains recommendations with re-
25	spect to an energy or water conservation
26	standard—

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—
23	"(i) solicit public comment with re-
24	spect to each direct final rule issued by the
25	Secretary under subparagraph $(A)(i)$: and

1	"(ii) publish a response to each com-
2	ment so received.
3	"(C) Withdrawal of direct final
4	RULES.—
5	"(i) In General.—Not later than 120
6	days after the date on which a direct final
7	$rule\ issued\ under\ subparagraph\ (A)(i)\ is$
8	published in the Federal Register, the Sec-
9	retary shall withdraw the direct final rule
10	if—
11	"(I) the Secretary receives 1 or
12	more adverse public comments relating
13	to the direct final rule under subpara-
14	graph (B)(i); and
15	"(II) based on the complete rule-
16	making record relating to the direct
17	final rule, the Secretary tentatively de-
18	termines that the adverse public com-
19	ments are relevant under subsection
20	(o), section $342(a)(6)(B)$, or any other
21	$applicable\ law.$
22	"(ii) Action on withdrawal.—On
23	withdrawal of a direct final rule under
24	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. 225. PERIODIC REVIEWS.
23	(a) Test Procedures.—Section 323(b)(1) of the En-
24	eray Policy and Conservation Act (42 U.S.C. 6293(b)(1))

1	is amended by striking "(1)" and all that follows through
2	the end of the paragraph and inserting the following:
3	"(1) Test procedures.—
4	"(A) Amendment.—At least once every 7
5	years, the Secretary shall review test procedures
6	for all covered products and—
7	"(i) amend test procedures with respect
8	to any covered product, if the Secretary de-
9	termines that amended test procedures
10	would more accurately or fully comply with
11	the requirements of paragraph (3); or
12	"(ii) publish notice in the Federal Reg-
13	ister of any determination not to amend a
14	test procedure.".
15	(b) Energy Conservation Standards.—Section
16	325(m) of the Energy Policy and Conservation Act (42
17	U.S.C. 6295(m)) is amended—
18	(1) by designating the first and second sentences
19	as paragraphs (1) and (4), respectively;
20	(2) by striking paragraph (1) (as so designated)
21	and inserting the following:
22	"(1) In general.—After issuance of the last
23	final rules required for a product under this part, the
24	Secretary shall, not later than 5 years after the date
25	of issuance of a final rule establishing or amending

1	a standard or determining not to amend a standard,
2	publish a final rule to determine whether standards
3	for the product should or should not be amended based
4	on the criteria in subsection $(n)(2)$.
5	"(2) Analysis.—Prior to publication of the de-
6	termination, the Secretary shall publish a notice of
7	availability describing the analysis of the Department
8	and provide opportunity for written comment.
9	"(3) Final rule.—Not later than 3 years after
10	a positive determination under paragraph (1), the
11	Secretary shall publish a final rule amending the
12	standard for the product."; and
13	(3) in paragraph (4) (as so designated), by strik-
14	ing "(4) An" and inserting the following:
15	"(4) Application of amendment.—An".
16	(c) Standards.—Section 342(a)(6) of the Energy Pol-
17	icy and Conservation Act (42 U.S.C. 6313(a)(6)) is amend-
18	ed by striking "(6)(A)(i)" and all that follows through the
19	end of subparagraph (A) and inserting the following:
20	"(6) Amended energy efficiency stand-
21	ARDS.—
22	"(A) In General.—
23	"(i) Analysis of potential energy
24	SAVINGS.—If ASHRAE/IES Standard 90.1
25	is amended with respect to any small com-

1 mercial package air conditioning and heat-2 ing equipment, large commercial package 3 air conditioning and heating equipment, 4 very large commercial package air condi-5 tioning and heating equipment, packaged 6 terminal air conditioners, packaged ter-7 minal heat pumps, warm-air furnaces, 8 packaged boilers, storage water heaters, in-9 stantaneous water heaters, or unfired hot 10 water storage tanks, not later than 180 days 11 after the amendment of the standard, the 12 Secretary shall publish in the Federal Reg-13 ister for public comment an analysis of the 14 energy savings potential of amended energy 15 efficiency standards. 16 "(ii) Amended uniform NATIONAL17 STANDARD FOR PRODUCTS.— 18 "(I) In general.—Except as pro-19 vided in subclause (II), not later than 20 18 months after the date of publication 21 of the amendment to the ASHRAE/ 22 IES Standard 90.1 for a product de-23 scribed in clause (i), the Secretary 24 shall establish an amended uniform

national standard for the product at

25

1	the minimum level specified in the
2	amended ASHRAE/IES Standard
3	90.1.
4	"(II) More stringent stand-
5	ARD.—Subclause (I) shall not apply if
6	the Secretary determines, by rule pub-
7	lished in the Federal Register, and
8	supported by clear and convincing evi-
9	dence, that adoption of a uniform na-
10	tional standard more stringent than
11	the amended ASHRAE/IES Standard
12	90.1 for the product would result in
13	significant additional conservation of
14	energy and is technologically feasible
15	and economically justified.
16	"(iii) Rule.—If the Secretary makes a
17	determination described in clause (ii)(II)
18	for a product described in clause (i), not
19	later than 30 months after the date of publi-
20	cation of the amendment to the ASHRAE/
21	IES Standard 90.1 for the product, the Sec-
22	retary shall issue the rule establishing the
23	amended standard.".
24	(d) Test Procedures.—Section 343(a) of the En-
25	eray Policy and Conservation Act (42 U.S.C. 6313(a)) is

1	amended by striking "(a)" and all that follows through the
2	end of paragraph (1) and inserting the following:
3	"(a) Prescription by Secretary; Require-
4	MENTS.—
5	"(1) Test procedures.—
6	"(A) Amendment.—At least once every 7
7	years, the Secretary shall conduct an evaluation
8	of each class of covered equipment and—
9	"(i) if the Secretary determines that
10	amended test procedures would more accu-
11	rately or fully comply with the requirements
12	of paragraphs (2) and (3), shall prescribe
13	test procedures for the class in accordance
14	with this section; or
15	"(ii) shall publish notice in the Federal
16	Register of any determination not to amend
17	a test procedure.".
18	(e) Effective Date.—The amendments made by sub-
19	sections (b) and (c) take effect on January 1, 2012.
20	SEC. 226. ENERGY EFFICIENCY LABELING FOR CONSUMER
21	ELECTRONIC PRODUCTS.
22	(a) In General.—Section 324(a) of the Energy Pol-
23	icy and Conservation Act (42 U.S.C. 6294(a)) is
24	amended—

1	(1) in paragraph (2), by adding at the end the
2	following:
3	"(H) Labeling requirements.—
4	"(i) In general.—Subject to clauses
5	(ii) through (iv), not later than 18 months
6	after the date of issuance of applicable De-
7	partment of Energy testing procedures, the
8	Commission, in consultation with the Sec-
9	retary and the Administrator of the Envi-
10	ronmental Protection Agency (acting
11	through the Energy Star program), shall,
12	by regulation, promulgate labeling or other
13	disclosure requirements for the energy use
14	of—
15	$``(I)\ televisions;$
16	$``(II)\ personal\ computers;$
17	"(III) cable or satellite set-top
18	boxes;
19	"(IV) stand-alone digital video re-
20	corder boxes; and
21	"(V) personal computer monitors.
22	"(ii) Alternate testing proce-
23	DURES.—In the absence of applicable test-
24	ing procedures described in clause (i) for
25	products described in subclauses (I) through

1	(V) of that clause, the Commission may by
2	regulation promulgate labeling requirements
3	for a consumer product category described
4	in clause (i) if the Commission—
5	"(I) identifies adequate non-De-
6	partment of Energy testing procedures
7	for those products; and
8	"(II) determines that labeling of
9	those products is likely to assist con-
10	sumers in making purchasing deci-
11	sions.
12	"(iii) Deadline and requirements
13	FOR LABELING.—
14	"(I) Deadline.—Not later than
15	18 months after the date of promulga-
16	tion of any requirements under clause
17	(i) or (ii), the Commission shall re-
18	quire labeling of electronic products de-
19	scribed in clause (i).
20	``(II) Requirements.—The re -
21	quirements promulgated under clause
22	(i) or (ii) may include specific require-
23	ments for each electronic product to be
24	labeled with respect to the placement,

1	size, and content of Energy Guide la-
2	bels.
3	"(iv) Determination of Feasi-
4	BILITY.—Clause (i) or (ii) shall not apply
5	in any case in which the Commission deter-
6	mines that labeling in accordance with this
7	subsection—
8	"(I) is not technologically or eco-
9	nomically feasible; or
10	"(II) is not likely to assist con-
11	sumers in making purchasing deci-
12	sions."; and
13	(2) by adding at the end the following:
14	"(6) Authority to include additional prod-
15	UCT CATEGORIES.—The Commission may require la-
16	beling in accordance with this subsection for any con-
17	sumer product not specified in this subsection or sec-
18	tion 322 if the Commission determines that labeling
19	for the product is likely to assist consumers in mak-
20	ing purchasing decisions.".
21	(b) Content of Label.—Section 324(c) of the En-
22	ergy Policy and Conservation Act (42 U.S.C. 6924(c)) is
23	amended by adding at the end the following:
24	"(9) Discretionary application.—The Com-
25	mission may apply paragraphs (1), (2), (3), (5), and

1	(6) of this subsection to the labeling of any product
2	covered by paragraph $(2)(H)$ or (6) of subsection
3	(a).".
4	SEC. 227. RESIDENTIAL BOILER EFFICIENCY STANDARDS.
5	Section 325(f) of the Energy Policy and Conservation
6	Act (42 U.S.C. 6295(f)) is amended—
7	(1) by redesignating paragraph (3) as para-
8	graph (4); and
9	(2) by inserting after paragraph (2) the fol-
10	lowing:
11	"(3) Boilers.—
12	"(A) In general.—Subject to subpara-
13	graphs (B) and (C), boilers manufactured on or
14	after September 1, 2012, shall meet the following
15	requirements:

Boiler Type	Minimum Annual Fuel Utili- zation Effi- ciency	Design Requirements
Gas Hot Water	82%	No Constant Burning Pilot, Automatic Means for Adjust- ing Water Temperature
Gas Steam	80%	No Constant Burning Pilot
Oil Hot Water	84%	Automatic Means for Adjusting Temperature
Oil Steam	82%	None
Electric Hot Water	None	Automatic Means for Adjusting Temperature
Electric Steam	None	None

1	"(B) Pilots.—The manufacturer shall not
2	equip gas hot water or steam boilers with con-
3	stant-burning pilot lights.
4	"(C) Automatic means for adjusting
5	WATER TEMPERATURE.—
6	"(i) In general.—The manufacturer
7	shall equip each gas, oil, and electric hot
8	water boiler (other than a boiler equipped
9	with tankless domestic water heating coils)
10	with an automatic means for adjusting the
11	temperature of the water supplied by the
12	boiler to ensure that an incremental change
13	in inferred heat load produces a cor-
14	responding incremental change in the tem-
15	perature of water supplied.
16	"(ii) Certain boilers.—For a boiler
17	that fires at 1 input rate, the requirements
18	of this subparagraph may be satisfied by
19	providing an automatic means that allows
20	the burner or heating element to fire only
21	when the means has determined that the in-
22	ferred heat load cannot be met by the resid-
23	ual heat of the water in the system.
24	"(iii) No inferred heat load.—
25	When there is no inferred heat load with re-

1	spect to a hot water boiler, the automatic
2	means described in clauses (i) and (ii) shall
3	limit the temperature of the water in the
4	boiler to not more than 140 degrees Fahr-
5	enheit.
6	"(iv) Operation.—A boiler described
7	in clause (i) or (ii) shall be operable only
8	when the automatic means described in
9	clauses (i), (ii), and (iii) is installed.".
10	SEC. 228. TECHNICAL CORRECTIONS.
11	(a) Definition of Fluorescent Lamp.—Section
12	321(30)(B)(viii) of the Energy Policy and Conservation Act
13	(42 U.S.C. 6291(30)(B)(viii)) is amended by striking "82"
14	and inserting "87".
15	(b) Standards for Commercial Package Air Con-
16	DITIONING AND HEATING EQUIPMENT.—Section 342(a)(1)
17	of the Energy Policy and Conservation Act (42 U.S.C.
18	6313(a)(1)) is amended in the matter preceding subpara-
19	graph (A) by striking "but before January 1, 2010,".
20	(c) Mercury Vapor Lamp Ballasts.—
21	(1) Definitions.—Section 321 of the Energy
22	Policy and Conservation Act (42 U.S.C. 6291) (as
23	amended by section 212(a)(2)) is amended—
24	(A) in paragraph $(46)(A)$ —

1	(i) in clause (i), by striking "bulb"
2	and inserting "the arc tube"; and
3	(ii) in clause (ii), by striking "has a
4	bulb" and inserting "wall loading is";
5	(B) in paragraph (47)(A), by striking "op-
6	erating at a partial" and inserting "typically
7	operating at a partial vapor";
8	(C) in paragraph (48), by inserting "in-
9	tended for general illumination" after "lamps";
10	and
11	(D) by adding at the end the following:
12	"(56) The term 'specialty application mercury
13	vapor lamp ballast' means a mercury vapor lamp
14	ballast that—
15	"(A) is designed and marketed for medical
16	use, optical comparators, quality inspection, in-
17	dustrial processing, or scientific use, including
18	fluorescent microscopy, ultraviolet curing, and
19	the manufacture of microchips, liquid crystal
20	displays, and printed circuit boards; and
21	"(B) in the case of a specialty application
22	mercury vapor lamp ballast, is labeled as a spe-
23	cialty application mercury vapor lamp ballast.".
24	(2) Standard setting authority.—Section
25	325(ee) of the Energy Policy and Conservation Act

1	(42 U.S.C. 6295(ee)) is amended by inserting "(other
2	than specialty application mercury vapor lamp bal-
3	lasts)" after "ballasts".
4	SEC. 229. ELECTRIC MOTOR EFFICIENCY STANDARDS.
5	(a) Definitions.—Section 340(13) of the Energy Pol-
6	icy and Conservation Act (42 U.S.C. 6311(13)) is amended
7	by striking subparagraph (A) and inserting the following:
8	"(A)(i) The term 'electric motor' means—
9	"(I) a general purpose electric motor—
10	$subtype\ I;\ and$
11	"(II) a general purpose electric motor—
12	$subtype\ II.$
13	"(ii) The term 'general purpose electric motor—
14	subtype I' means any motor that is considered a gen-
15	eral purpose motor under section 431.12 of title 10,
16	Code of Federal Regulations (or successor regula-
17	tions).
18	"(iii) The term 'general purpose electric motor—
19	subtype II' means a motor that, in addition to the de-
20	sign elements for a general purpose electric motor—
21	subtype I, incorporates the design elements (as estab-
22	lished in National Electrical Manufacturers Associa-
23	tion MG-1 (2006)) for any of the following:
24	"(I) A U - $Frame\ Motor.$
25	"(II) A Design C Motor.

1	"(III) A close-coupled pump motor.
2	"(IV) A footless motor.
3	"(V) A vertical solid shaft normal thrust
4	(tested in a horizontal configuration).
5	"(VI) An 8-pole motor.
6	"(VII) A poly-phase motor with voltage of
7	not more than 600 volts (other than 230 or 460
8	volts).".
9	(b) Standards.—Section 342(b) of the Energy Policy
10	and Conservation Act (42 U.S.C. 6313(13)) is amended by
11	striking paragraph (1) and inserting the following:
12	"(1) Standards.—
13	"(A) General purpose electric mo-
14	TORS—SUBTYPE I.—
15	"(i) In general.—Except as otherwise
16	provided in this subparagraph, a general
17	purpose electric motor—subtype I with a
18	power rating of not less than 1, and not
19	more than 200, horsepower manufactured
20	(alone or as a component of another piece
21	of equipment) after the 3-year period begin-
22	ning on the date of enactment of this sub-
23	paragraph, shall have a nominal full load
24	efficiency established in Table 12–12 of Na-
2.5	tional Electrical Manufacturers Association

1	(referred to in this paragraph as 'NEMA')
2	MG-1 (2006).
3	"(ii) Fire pump motors.—A fire
4	pump motor shall have a nominal full load
5	efficiency established in Table 12–11 of
6	NEMA MG-1 (2006).
7	"(B) General purpose electric mo-
8	TORS—SUBTYPE II.—A general purpose electric
9	motor—subtype II with a power rating of not
10	less than 1, and not more than 200, horsepower
11	manufactured (alone or as a component of an-
12	other piece of equipment) after the 3-year period
13	beginning on the date of enactment of this sub-
14	paragraph, shall have a nominal full load effi-
15	ciency established in Table 12–11 of NEMA MG-
16	1 (2006).
17	"(C) Design B, General purpose elec-
18	TRIC MOTORS.—A NEMA Design B, general pur-
19	pose electric motor with a power rating of not
20	less than 201, and not more than 500, horse-
21	power manufactured (alone or as a component of
22	another piece of equipment) after the 3-year pe-
23	riod beginning on the date of the enactment of
24	this subparagraph shall have a nominal full load

1	efficiency established in Table 12–11 of NEMA
2	MG-1 (2006).".
3	(c) Effective Date.—The amendments made by this
4	section take effect on the date that is 3 years after the date
5	of enactment of this Act.
6	SEC. 230. ENERGY STANDARDS FOR HOME APPLIANCES.
7	(a) Definition of Energy Conservation Stand-
8	ARD.—Section 321(6)(A) of the Energy Policy and Con-
9	servation Act (42 U.S.C. 6291(6)(A)) is amended by strik-
10	ing "or, in the case of" and inserting "and, in the case
11	$of\ residential\ clothes\ washers,\ residential\ dishwashers,".$
12	(b) Refrigerators, Refrigerator-Freezers, and
13	Freezers.—Section 325(b) of the Energy Policy and Con-
14	servation Act (42 U.S.C. 6295(b)) is amended by adding
15	at the end the following:
16	"(4) Refrigerators, refrigerator-freez-
17	ERS, AND FREEZERS MANUFACTURED ON OR AFTER
18	JANUARY 1, 2014.—Not later than December 31, 2010,
19	the Secretary shall publish a final rule determining
20	whether to amend the standards in effect for refrig-
21	erators, refrigerator-freezers, and freezers manufac-
22	tured on or after January 1, 2014, and including any
23	amended standards.".
24	(c) Residential Clothes Washers and Dish-
25	Washers.—Section 325(g)(4) of the Energy Policy and

1	Conservation Act (42 U.S.C. $6295(g)(4)$) is amended by
2	adding at the end the following:
3	"(D) Clothes Washers.—
4	"(i) Clothes Washers Manufac-
5	Tured on or after January 1, 2011.—A
6	residential clothes washer manufactured on
7	or after January 1, 2011, shall have—
8	"(I) a modified energy factor of at
9	least 1.26; and
10	"(II) a water factor of not more
11	than 9.5 .
12	"(ii) Clothes washers manufac-
13	Tured on or after January 1, 2015.—Not
14	later than January 1, 2015, the Secretary
15	shall publish a final rule determining
16	whether to amend the standards in effect for
17	residential clothes washers manufactured on
18	or after January 1, 2015, and including
19	any amended standards.
20	"(E) Dishwashers.—
21	"(i) Dishwashers manufactured on
22	OR AFTER JANUARY 1, 2010.—A dishwasher
23	manufactured on or after January 1, 2010,
24	shall use not more than—

1	"(I) in the case of a standard-size
2	dishwasher, 355 kWh per year or 6.5
3	gallons of water per cycle; and
4	"(II) in the case of a compact-size
5	dishwasher, 260 kWh per year or 4.5
6	gallons of water per cycle.
7	"(ii) Dishwashers manufactured
8	ON OR AFTER JANUARY 1, 2018.—Not later
9	than January 1, 2015, the Secretary shall
10	publish a final rule determining whether to
11	amend the standards for dishwashers manu-
12	factured on or after January 1, 2018, and
13	including any amended standards.".
14	(d) Dehumidifiers.—Section 325(cc) of the Energy
15	Policy and Conservation Act (42 U.S.C. 6295(cc)) is
16	amended—
17	(1) in paragraph (1), by inserting "and before
18	October 1, 2012," after "2007,"; and
19	(2) by striking paragraph (2) and inserting the
20	following:
21	"(2) Dehumidifiers manufactured on or
22	AFTER OCTOBER 1, 2012.—Dehumidifiers manufac-
23	tured on or after October 1, 2012, shall have an En-
24	ergy Factor that meets or exceeds the following values:

Product Capacity (pints/day):	Minimum Energy Factor li- ters/kWh
Up to 35.00	1.35
35.01-45.00	1.50
45.01-54.00	1.60
54.01-75.00	1.70
Greater than 75.00	2.5.".

1 (e) Energy Star Program.—Section 324A(d)(2) of the Energy Policy and Conservation Act (42 U.S.C. 6294a(d)(2)) is amended by striking "2010" and inserting "2009". 4 5 SEC. 231. IMPROVED ENERGY EFFICIENCY FOR APPLIANCES 6 AND BUILDINGS IN COLD CLIMATES. 7 (a) Research.—Section 911(a)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16191(a)(2)) is amended— (1) in subparagraph (C), by striking "and" at 9 10 the end: 11 (2) in subparagraph (D), by striking the period at the end and inserting "; and"; and 12 13 (3) by adding at the end the following: 14 "(E) technologies to improve the energy effi-15 ciency of appliances and mechanical systems for 16 buildings in cold climates, including combined 17 heat and power units and increased use of re-18 newable resources, including fuel.". 19 (b) Rebates.—Section 124 of the Energy Policy Act 20 of 2005 (42 U.S.C. 15821) is amended—

1	(1) in subsection (b)(1), by inserting ", or prod-
2	ucts with improved energy efficiency in cold cli-
3	mates," after "residential Energy Star products"; and
4	(2) in subsection (e), by inserting "or product
5	with improved energy efficiency in a cold climate"
6	after "residential Energy Star product" each place it
7	appears.
8	SEC. 232. DEPLOYMENT OF NEW TECHNOLOGIES FOR HIGH-
9	EFFICIENCY CONSUMER PRODUCTS.
10	(a) Definitions.—In this section:
11	(1) Energy savings.—The term "energy sav-
12	ings" means megawatt-hours of electricity or million
13	British thermal units of natural gas saved by a prod-
14	uct, in comparison to projected energy consumption
15	under the energy efficiency standard applicable to the
16	product.
17	(2) High-efficiency consumer product.—
18	The term "high-efficiency consumer product" means a
19	product that exceeds the energy efficiency of com-
20	parable products available in the market by a per-
21	centage determined by the Secretary to be an appro-
22	priate benchmark for the consumer product category
23	competing for an award under this section.
24	(b) Financial Incentives Program.—Effective be-

25 ginning October 1, 2007, the Secretary shall competitively

1	award financial incentives under this section for the manu-
2	facture of high-efficiency consumer products.
3	(c) Requirements.—
4	(1) In general.—The Secretary shall make
5	awards under this section to manufacturers of high-
6	efficiency consumer products, based on the bid of each
7	manufacturer in terms of dollars per megawatt-hour
8	or million British thermal units saved.
9	(2) Acceptance of bids.—In making awards
0	under this section, the Secretary shall—
1	(A) solicit bids for reverse auction from ap-
12	propriate manufacturers, as determined by the
13	Secretary; and
14	(B) award financial incentives to the man-
15	ufacturers that submit the lowest bids that meet
16	the requirements established by the Secretary.
17	(d) Forms of Awards.—An award for a high-effi-
8	ciency consumer product under this section shall be in the
9	form of a lump sum payment in an amount equal to the
20	product obtained by multiplying—
21	(1) the amount of the bid by the manufacturer
22	of the high-efficiency consumer product; and
23	(2) the energy savings during the projected useful
24	life of the high-efficiency consumer product, not to ex-

1	ceed 10 years, as determined under regulations issued
2	by the Secretary.
3	SEC. 233. INDUSTRIAL EFFICIENCY PROGRAM.
4	(a) Definitions.—In this section:
5	(1) Eligible entity.—The term eligible entity
6	means—
7	(A) an institution of higher education
8	under contract or in partnership with a non-
9	profit or for-profit private entity acting on be-
10	half of an industrial or commercial sector or
11	subsector;
12	(B) a nonprofit or for-profit private entity
13	acting on behalf on an industrial or commercial
14	sector or subsector; or
15	(C) a consortia of entities acting on behalf
16	of an industrial or commercial sector or sub-
17	sector.
18	(2) Energy-intensive commercial applica-
19	tions.—The term "energy-intensive commercial ap-
20	plications" means processes and facilities that use
21	significant quantities of energy as part of the pri-
22	mary economic activities of the processes and facili-
23	ties, including—
24	(A) information technology data centers;
2.5	(R) product manufacturing and

1	(C) food processing.
2	(3) FEEDSTOCK.—The term "feedstock" means
3	the raw material supplied for use in manufacturing,
4	chemical, and biological processes.
5	(4) Materials manufacturers.—The term
6	"materials manufacturers" means the energy-inten-
7	sive primary manufacturing industries, including the
8	aluminum, chemicals, forest and paper products,
9	glass, metal casting, and steel industries.
10	(5) Partnership.—The term "partnership"
11	means an energy efficiency and utilization partner-
12	$ship\ established\ under\ subsection\ (c)(1)(A).$
13	(6) Program.—The term "program" means the
14	industrial efficiency program established under sub-
15	section (b).
16	(b) Establishment of Program.—The Secretary
17	shall establish a program under which the Secretary, in co-
18	operation with materials manufacturers, companies en-
19	gaged in energy-intensive commercial applications, and na-
20	tional industry trade associations representing the manu-
21	factures and companies, shall support, develop, and pro-
22	mote the use of new materials manufacturing and indus-
23	trial and commercial processes, technologies, and techniques
24	to optimize energy efficiency and the economic competitive-
25	ness of the United States.

1	(c) Partnerships.—
2	(1) In general.—As part of the program, the
3	Secretary shall—
4	(A) establish energy efficiency and utiliza-
5	tion partnerships between the Secretary and eli-
6	gible entities to conduct research on, develop, and
7	demonstrate new processes, technologies, and op-
8	erating practices and techniques to significantly
9	improve energy efficiency and utilization by ma-
10	terials manufacturers and in energy-intensive
11	commercial applications, including the conduct
12	of activities to—
13	(i) increase the energy efficiency of in-
14	dustrial and commercial processes and fa-
15	cilities in energy-intensive commercial ap-
16	$plication\ sectors;$
17	(ii) research, develop, and demonstrate
18	advanced technologies capable of energy in-
19	tensity reductions and increased environ-
20	mental performance in energy-intensive
21	commercial application sectors; and
22	(iii) promote the use of the processes,
23	technologies, and techniques described in
24	clauses (i) and (ii); and

1	(B) pay the Federal share of the cost of any
2	eligible partnership activities for which a pro-
3	posal has been submitted and approved in ac-
4	$cordance\ with\ paragraph\ (3)(B).$
5	(2) Eligible activities.—Partnership activi-
6	ties eligible for financial assistance under this sub-
7	section include—
8	(A) feedstock and recycling research, devel-
9	opment, and demonstration activities to identify
10	and promote—
11	(i) opportunities for meeting manufac-
12	turing feedstock requirements with more en-
13	ergy efficient and flexible sources of feed-
14	stock or energy supply;
15	(ii) strategies to develop and deploy
16	technologies that improve the quality and
17	quantity of feedstocks recovered from process
18	and waste streams; and
19	(iii) other methods using recycling,
20	reuse, and improved industrial materials;
21	(B) industrial and commercial energy effi-
22	ciency and sustainability assessments to—
23	(i) assist individual industrial and
24	commercial sectors in developing tools, tech-
25	niques, and methodologies to assess—

1	(I) the unique processes and fa-
2	cilities of the sectors;
3	(II) the energy utilization require-
4	ments of the sectors; and
5	(III) the application of new, more
6	energy efficient technologies; and
7	(ii) conduct energy savings assess-
8	ments;
9	(C) the incorporation of technologies and
10	innovations that would significantly improve the
11	energy efficiency and utilization of energy-inten-
12	sive commercial applications; and
13	(D) any other activities that the Secretary
14	determines to be appropriate.
15	(3) Proposals.—
16	(A) In general.—To be eligible for finan-
17	cial assistance under this subsection, a partner-
18	ship shall submit to the Secretary a proposal
19	that describes the proposed research, develop-
20	ment, or demonstration activity to be conducted
21	by the partnership.
22	(B) Review.—After reviewing the scientific,
23	technical, and commercial merit of a proposals
24	submitted under subparagraph (A), the Secretary
25	shall approve or disapprove the proposal.

1	(C) Competitive Awards.—The provision
2	of financial assistance under this subsection shall
3	be on a 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) Authorization of Appropriations.—
9	(1) In general.—There are authorized to be ap-
10	propriated to the Secretary to carry out this section—
11	(A) \$184,000,000 for fiscal year 2008;
12	(B) \$190,000,000 for fiscal year 2009;
13	(C) \$196,000,000 for fiscal year 2010;
14	(D) \$202,000,000 for fiscal year 2011;
15	(E) \$208,000,000 for fiscal year 2012; and
16	(F) such sums as are necessary for fiscal
17	year 2013 and each fiscal year thereafter.
18	(2) Partnership activities.—Of the amounts
19	made available under paragraph (1), not less than 50
20	percent shall be used to pay the Federal share of part-
21	nership activities under subsection (c).

1	Subtitle C—Promoting High Effi-
2	ciency Vehicles, Advanced Bat-
3	teries, and Energy Storage
4	SEC. 241. LIGHTWEIGHT MATERIALS RESEARCH AND DE-
5	VELOPMENT.
6	(a) In General.—As soon as practicable after the
7	date of enactment of this Act, the Secretary shall establish
8	a research and development program to determine ways in
9	which—
10	(1) the weight of vehicles may be reduced to im-
11	prove fuel efficiency without compromising passenger
12	safety; and
13	(2) the cost of lightweight materials (such as steel
14	alloys, fiberglass, and carbon composites) required for
15	the construction of lighter-weight vehicles may be re-
16	duced.
17	(b) Authorization of Appropriations.—There is
18	authorized to be appropriated to carry out this section
19	\$60,000,000 for each of fiscal years 2007 through 2012.
20	SEC. 242. LOAN GUARANTEES FOR FUEL-EFFICIENT AUTO-
21	MOBILE PARTS MANUFACTURERS.
22	(a) In General.—Section 712(a) of the Energy Pol-
23	icy Act of 2005 (42 U.S.C. 16062(a)) is amended in the
24	second sentence by striking "grants to automobile manufac-

1	turers" and inserting "grants and loan guarantees under
2	section 1703 to automobile manufacturers and suppliers".
3	(b) Conforming Amendment.—Section 1703(b) of
4	the Energy Policy Act of 2005 (42 U.S.C. 16513(b)) is
5	amended by striking paragraph (8) and inserting the fol-
6	lowing:
7	"(8) Production facilities for the manufacture of
8	fuel efficient vehicles or parts of those vehicles, includ-
9	ing electric drive vehicles and advanced diesel vehi-
10	cles.".
11	SEC. 243. ADVANCED TECHNOLOGY VEHICLES MANUFAC
12	TURING INCENTIVE PROGRAM.
13	(a) Definitions.—In this section:
13	(a) Definitions.—In this section:
13 14	(a) Definitions.—In this section: (1) Adjusted average fuel economy.—The
131415	(a) DEFINITIONS.—In this section: (1) ADJUSTED AVERAGE FUEL ECONOMY.—The term "adjusted average fuel economy" means the aver-
13 14 15 16	(a) Definitions.—In this section: (1) Adjusted average fuel economy" means the average fuel economy of a manufacturer for all light duty
13 14 15 16 17	(a) DEFINITIONS.—In this section: (1) ADJUSTED AVERAGE FUEL ECONOMY.—The term "adjusted average fuel economy" means the average fuel economy of a manufacturer for all light duty vehicles produced by the manufacturer, adjusted such
13 14 15 16 17 18	(a) Definitions.—In this section: (1) Adjusted average fuel economy" means the average fuel economy of a manufacturer for all light duty vehicles produced by the manufacturer, adjusted such that the fuel economy of each vehicle that qualifies for
13 14 15 16 17 18	(a) Definitions.—In this section: (1) Adjusted average fuel economy" means the average fuel economy of a manufacturer for all light duty vehicles produced by the manufacturer, adjusted such that the fuel economy of each vehicle that qualifies for an award shall be considered to be equal to the aver-
13 14 15 16 17 18 19 20	(a) Definitions.—In this section: (1) Adjusted average fuel economy" means the average fuel economy of a manufacturer for all light duty vehicles produced by the manufacturer, adjusted such that the fuel economy of each vehicle that qualifies for an award shall be considered to be equal to the average fuel economy for vehicles of a similar footprint for
13 14 15 16 17 18 19 20 21	(a) DEFINITIONS.—In this section: (1) ADJUSTED AVERAGE FUEL ECONOMY.—The term "adjusted average fuel economy" means the average fuel economy of a manufacturer for all light duty vehicles produced by the manufacturer, adjusted such that the fuel economy of each vehicle that qualifies for an award shall be considered to be equal to the average fuel economy for vehicles of a similar footprint for model year 2005.

1	(A) the Bin 5 Tier II emission standard es-
2	tablished in regulations issued by the Adminis-
3	trator of the Environmental Protection Agency
4	under section 202(i) of the Clean Air Act (42
5	U.S.C. 7521(i)), or a lower-numbered Bin emis-
6	sion standard;
7	(B) any new emission standard for fine
8	particulate matter prescribed by the Adminis-
9	trator under that Act (42 U.S.C. 7401 et seq.);
10	and
11	(C) at least 125 percent of the average base
12	year combined fuel economy, calculated on an
13	energy-equivalent basis, for vehicles of a substan-
14	tially similar footprint.
15	(3) Combined fuel economy.—The term "com-
16	bined fuel economy" means—
17	(A) the combined city/highway miles per
18	gallon values, as reported in accordance with sec-
19	tion 32908 of title 49, United States Code; and
20	(B) in the case of an electric drive vehicle
21	with the ability to recharge from an off-board
22	source, the reported mileage, as determined in a
23	manner consistent with the Society of Auto-
24	motive Engineers recommended practice for that
25	configuration or a similar practice recommended

1	by the Secretary, using a petroleum equivalence
2	factor for the off-board electricity (as defined in
3	section 474 of title 10, Code of Federal Regula-
4	tions).
5	(4) Engineering integration costs.—The
6	term "engineering integration costs" includes the cost
7	of engineering tasks relating to—
8	(A) incorporating qualifying components
9	into the design of advanced technology vehicles;
10	and
11	(B) designing new tooling and equipment
12	and developing new manufacturing processes
13	and material suppliers for production facilities
14	that produce qualifying components or advanced
15	technology vehicles.
16	(5) QUALIFYING COMPONENTS.—The term
17	"qualifying components" means components that the
18	Secretary determines to be—
19	(A) specially designed for advanced tech-
20	nology vehicles; and
21	(B) installed for the purpose of meeting the
22	performance requirements of advanced technology
23	vehicles.
24	(b) Advanced Vehicles Manufacturing Facil-
25	ITY.—The Secretary shall provide facility funding awards

1	under this section to automobile manufacturers and compo-
2	nent suppliers to pay not more than 30 percent of the cost
3	of—
4	(1) reequipping, expanding, or establishing a
5	manufacturing facility in the United States to
6	produce—
7	(A) qualifying advanced technology vehicles;
8	or
9	(B) qualifying components; and
10	(2) engineering integration performed in the
11	United States of qualifying vehicles and qualifying
12	components.
13	(c) Period of Availability.—An award under sub-
14	section (b) shall apply to—
15	(1) facilities and equipment placed in service be-
16	fore December 30, 2017; and
17	(2) engineering integration costs incurred during
18	the period beginning on the date of enactment of this
19	Act and ending on December 30, 2017.
20	(d) Improvement.—The Secretary shall issue regula-
21	tions that require that, in order for an automobile manufac-
22	turer to be eligible for an award under this section during
23	a particular year, the adjusted average fuel economy of the
24	manufacturer for light duty vehicles produced by the manu-
25	facturer during the most recent year for which data are

1	available shall be not less than the average fuel economy
2	for all light duty vehicles of the manufacturer for model
3	year 2005.
4	(e) Set Aside for Small Automobile Manufac-
5	Turers and Component Suppliers.—
6	(1) Definition of covered firm.—In this sub-
7	section, the term "covered firm" means a firm that—
8	(A) employs less than 500 individuals; and
9	(B) manufactures automobiles or compo-
10	nents of automobiles.
11	(2) Set aside.—Of the amount of funds that
12	are used to provide awards for each fiscal year under
13	this section, the Secretary shall use not less than 30
14	percent of the amount to provide awards to covered
15	firms or consortia led by a covered firm.
16	SEC. 244. ENERGY STORAGE COMPETITIVENESS.
17	(a) Short Title.—This section may be cited as the
18	"United States Energy Storage Competitiveness Act of
19	2007".
20	(b) Energy Storage Systems for Motor Trans-
21	PORTATION AND ELECTRICITY TRANSMISSION AND DIS-
22	TRIBUTION.—
23	(1) Definitions.—In this subsection:

1	(A) Council.—The term "Council" means
2	the Energy Storage Advisory Council established
3	under paragraph (3).
4	(B) Compressed air energy storage.—
5	The term "compressed air energy storage"
6	means, in the case of an electricity grid applica-
7	tion, the storage of energy through the compres-
8	sion of air.
9	(C) Department.—The term "Depart-
10	ment" means the Department of Energy.
11	(D) Flywheel.—The term "flywheel"
12	means, in the case of an electricity grid applica-
13	tion, a device used to store rotational kinetic en-
14	ergy.
15	(E) $ULTRACAPACITOR.$ — The $term$
16	"ultracapacitor" means an energy storage device
17	that has a power density comparable to conven-
18	tional capacitors but capable of exceeding the en-
19	ergy density of conventional capacitors by sev-
20	eral orders of magnitude.
21	(2) Program.—The Secretary shall carry out a
22	research, development, and demonstration program to
23	support the ability of the United States to remain
24	globally competitive in energy storage systems for

1	motor transportation and electricity transmission
2	and distribution.
3	(3) Energy storage advisory council.—
4	(A) Establishment.—Not later than 90
5	days after the date of enactment of this Act, the
6	Secretary shall establish an Energy Storage Ad-
7	visory Council.
8	(B) Composition.—
9	(i) In general.—Subject to clause
10	(ii), the Council shall consist of not less
11	than 15 individuals appointed by the Sec-
12	retary, based on recommendations of the
13	National Academy of Sciences.
14	(ii) Energy storage industry.—The
15	Council shall consist primarily of represent-
16	atives of the energy storage industry of the
17	United States.
18	(iii) Chairperson.—The Secretary
19	shall select a Chairperson for the Council
20	from among the members appointed under
21	clause (i).
22	(C) Meetings.—
23	(i) In general.—The Council shall
24	meet not less than once a year.

1	(ii) Federal advisory committee
2	ACT.—The Federal Advisory Committee Act
3	(5 U.S.C. App. 2) shall apply to a meeting
4	of the Council.
5	(D) Plans.—No later than 1 year after the
6	date of enactment of this Act, in conjunction
7	with the Secretary, the Council shall develop 5-
8	year plans for integrating basic and applied re-
9	search so that the United States retains a glob-
10	ally competitive domestic energy storage indus-
11	try for motor transportation and electricity
12	transmission and distribution.
13	(E) Review.—The Council shall—
14	(i) assess the performance of the De-
15	partment in meeting the goals of the plans
16	developed under subparagraph (D); and
17	(ii) make specific recommendations to
18	the Secretary on programs or activities that
19	should be established or terminated to meet
20	$those\ goals.$
21	(4) Basic research program.—
22	(A) BASIC RESEARCH.—The Secretary shall
23	conduct a basic research program on energy stor-
24	age systems to support motor transportation and

1	electricity transmission and distribution
2	including—
3	(i) materials design;
4	(ii) materials synthesis and character
5	ization;
6	(iii) electrode-active materials, include
7	ing electrolytes and bioelectrolytes;
8	(iv) surface and interface dynamics;
9	(v) modeling and simulation; and
10	(vi) thermal behavior and life degrade
11	tion mechanisms; and
12	(vii) thermal behavior and life deg
13	$radation\ mechanisms.$
14	(B) Nanoscience centers.—The Sec
15	retary, in cooperation with the Council, shall co
16	ordinate the activities of the nanoscience center
17	of the Department to help the nanoscience center
18	of the Department maintain a globally compete
19	tive posture in energy storage systems for motor
20	transportation and electricity transmission an
21	distribution.
22	(5) Applied research program.—The Sec
23	retary shall conduct an applied research program o
24	energy storage systems to support motor transport

1	tation and electricity transmission and distribution
2	technologies, including—
3	$(A)\ ultracapacitors;$
4	(B) flywheels;
5	(C) batteries and battery systems (including
6	flow batteries);
7	(D) compressed air energy systems;
8	$(E)\ power\ conditioning\ electronics;$
9	(F) manufacturing technologies for energy
10	storage systems; and
11	(G) thermal management systems.
12	(6) Energy storage research centers.—
13	(A) In general.—The Secretary shall es-
14	tablish, through competitive bids, not more than
15	4 energy storage research centers to translate
16	basic research into applied technologies to ad-
17	vance the capability of the United States to
18	maintain a globally competitive posture in en-
19	ergy storage systems for motor transportation
20	and electricity transmission and distribution.
21	(B) Program management.—The centers
22	shall be jointly managed by the Under Secretary
23	for Science of the Department.
24	(C) Participation agreements.—As a
25	condition of participating in a center, a partici-

1	pant shall enter into a participation agreement
2	with the center that requires that activities con-
3	ducted by the participant for the center promote
4	the goal of enabling the United States to compete
5	successfully in global energy storage markets.
6	(D) Plans.—A center shall conduct activi-
7	ties that promote the achievement of the goals of
8	the plans of the Council under paragraph $(3)(D)$.
9	(E) Cost sharing.—In carrying out this
10	paragraph, the Secretary shall require cost-shar-
11	ing in accordance with section 988 of the Energy
12	Policy Act of 2005 (42 U.S.C. 16352).
13	(F) National Laboratories.—A national
14	laboratory (as defined in section 2 of the Energy
15	Policy Act of 2005 (42 U.S.C. 15801)) may par-
16	ticipate in a center established under this para-
17	graph, including a cooperative research and de-
18	velopment agreement (as defined in section 12(d)
19	of the Stevenson-Wydler Technology Innovation
20	Act of 1980 (15 U.S.C. 3710a(d))).
21	(7) Disclosure.—Section 623 of the Energy
22	Policy Act of 1992 (42 U.S.C. 13293) may apply to
23	any project carried out through a grant, contract, or

cooperative agreement under this section.

24

1	(8) Intellectual property.—In accordance
2	with section 202(a)(ii) of title 35, United States Code,
3	section 152 of the Atomic Energy Act of 1954 (42
4	U.S.C. 2182), and section 9 of the Federal Nonnuclear
5	Research and Development Act of 1974 (42 U.S.C.
6	5908), the Secretary may require, for any new inven-
7	tion developed under paragraph (6)—
8	(A) that any industrial participant that is
9	active in a Energy Storage Research Center es-
10	tablished under paragraph (6) related to the ad-
11	vancement of energy storage technologies carried
12	out, in whole or in part, with Federal funding,
13	be granted the first option to negotiate with the
14	invention owner, at least in the field of energy
15	storage technologies, nonexclusive licenses and
16	royalties on terms that are reasonable, as deter-
17	mined by the Secretary;
18	(B) that, during a 2-year period beginning
19	on the date on which an invention is made, the
20	patent holder shall not negotiate any license or
21	royalty agreement with any entity that is not an
22	industrial participant under paragraph (6);
23	(C) that, during the 2-year period described
24	in subparagraph (B), the patent holder shall ne-

gotiate nonexclusive licenses and royalties in

25

1	good faith with any interested industrial partici-
2	pant under paragraph (6); and
3	(D) such other terms as the Secretary deter-
4	mines to be necessary to promote the accelerated
5	commercialization of inventions made under
6	paragraph (6) to advance the capability of the
7	United States to successfully compete in global
8	energy storage markets.
9	(9) Review by National Academy of
10	SCIENCES.—Not later than 3 years after the date of
11	enactment of this Act, the Secretary shall offer to
12	enter into an arrangement with the National Acad-
13	emy of Sciences to assess the performance of the De-
14	partment in carrying out this section.
15	(10) Authorization of appropriations.—
16	There are authorized to be appropriated to carry
17	out—
18	(A) the basic research program under para-
19	graph (4) \$50,000,000 for each of fiscal years
20	2008 through 2017;
21	(B) the applied research program under
22	paragraph (5) \$80,000,000 for each of fiscal
23	years 2008 through 2017; and;

1	(C) the energy storage research center pro-
2	gram under paragraph (6) \$100,000,000 for each
3	of fiscal years 2008 through 2017.
4	SEC. 245. ADVANCED TRANSPORTATION TECHNOLOGY PRO-
5	GRAM.
6	(a) Electric Drive Vehicle Demonstration Pro-
7	GRAM.—
8	(1) Definitions.—In this subsection—
9	(A) Battery.—The term "battery" means
10	an electrochemical energy storage device powered
11	directly by electrical current.
12	(B) Plug-in electric drive vehicle.—
13	The term "plug-in electric drive vehicle" means
14	a precommercial vehicle that—
15	(i) draws motive power from a battery
16	with a capacity of at least 4 kilowatt-hours;
17	(ii) can be recharged from an external
18	source of electricity for motive power; and
19	(iii) is a light-, medium-, or heavy-
20	duty onroad or nonroad vehicle.
21	(2) Program.—The Secretary shall establish a
22	competitive program to provide grants for demonstra-
23	tions of plug-in electric drive vehicles.
24	(3) Eligibility.—

1	(A) In General.—A State government,
2	local government, metropolitan transportation
3	authority, air pollution control district, private
4	entity, and nonprofit entity shall be eligible to
5	receive a grant under this subsection.
6	(B) Certain applicants.—A battery man-
7	ufacturer that proposes to supply to an appli-
8	cant for a grant under this section a battery
9	with a capacity of greater than 1 kilowatt-hour
10	for use in a plug-in electric drive vehicle shall—
11	(i) ensure that the applicant includes
12	in the application a description of the price
13	of the battery per kilowatt-hour;
14	(ii) on approval by the Secretary of the
15	application, publish, or permit the Sec-
16	retary to publish, the price described in
17	clause (i); and
18	(iii) for any order received by the bat-
19	tery manufacturer for at least 1,000 bat-
20	teries, offer the batteries at that price.
21	(4) Priority.—In making grants under this
22	subsection, the Secretary shall give priority to pro-
23	posals that—

1	(A) are likely to contribute to the commer-
2	cialization and production of plug-in electric
3	drive vehicles in the United States; and
4	(B) reduce petroleum usage.
5	(5) Scope of Demonstrations.—The Secretary
6	shall ensure, to the extent practicable, that the pro-
7	gram established under this subsection includes a va-
8	riety of applications, manufacturers, and end-uses.
9	(6) Reporting.—The Secretary shall require a
10	grant recipient under this subsection to submit to the
11	Secretary, on an annual basis, data relating to vehi-
12	cle, performance, life cycle costs, and emissions of ve-
13	hicles demonstrated under the grant, including emis-
14	sions of greenhouse gases.
15	(7) Cost sharing.—Section 988 of the Energy
16	Policy Act of 2005 (42 U.S.C. 16352) shall apply to
17	a grant made under this subsection.
18	(8) Authorizations of appropriations.—
19	There are authorized to be appropriated to carry out
20	this subsection \$60,000,000 for each of fiscal years
21	2008 through 2012, of which not less than
22	\$20,000,000 shall be available each fiscal year only to
23	make grants local and municipal governments.
24	(b) Near-Term Electric Drive Transportation
25	Deployment Program.—

1	(1) Definition of qualified electric trans-
2	PORTATION PROJECT.—
3	(A) In General.—In this subsection, the
4	term "qualified electric transportation project"
5	means a project that would simultaneously re-
6	duce emissions of criteria pollutants, greenhouse
7	gas emissions, and petroleum usage by at least
8	40 percent as compared to commercially avail-
9	able, petroleum-based technologies.
10	(B) Inclusions.—In this subsection, the
11	term "qualified electric transportation project"
12	includes a project relating to—
13	(i) shipside or shoreside electrification
14	for vessels;
15	(ii) truck-stop electrification;
16	(iii) electric truck refrigeration units;
17	(iv) battery powered auxiliary power
18	units for trucks;
19	(v) electric airport ground support
20	equipment;
21	(vi) electric material and cargo han-
22	$dling\ equipment;$
23	(vii) electric or dual-mode electric
24	$freight\ rail;$

1	(viii) any distribution upgrades needed
2	to supply electricity to the project; and
3	(ix) any ancillary infrastructure, in-
4	cluding panel upgrades, battery chargers,
5	in-situ transformers, and trenching.
6	(2) Establishment.—Not later than 1 year
7	after the date of enactment of this Act, the Secretary,
8	in consultation with the Secretary of Transportation
9	and the Administrator of the Environmental Protec-
10	tion Agency, shall establish a program to provide
11	grants and loans to eligible entities for the conduct of
12	qualified electric transportation projects.
13	(3) Grants.—
14	(A) In General.—Of the amounts made
15	available for grants under paragraph (2)—
16	(i) 2/3 shall be made available by the
17	Secretary on a competitive basis for quali-
18	fied electric transportation projects based on
19	the overall cost-effectiveness of a qualified
20	electric transportation project in reducing
21	emissions of criteria pollutants, emissions of
22	greenhouse gases, and petroleum usage; and
23	(ii) 1/3 shall be made available by the
24	Secretary for qualified electric transpor-
25	tation projects in the order that the grant

1	applications are received, if the qualified
2	electric transportation projects meet the
3	minimum standard for the reduction of
4	emissions of criteria pollutants, emissions of
5	greenhouse gases, and petroleum usage de-
6	scribed in paragraph $(1)(A)$.
7	(B) Priority.—In providing grants under
8	this paragraph, the Secretary shall give priority
9	to large-scale projects and large-scale aggregators
10	$of\ projects.$
11	(C) Cost sharing.—Section 988 of the En-
12	ergy Policy Act of 2005 (42 U.S.C. 16352) shall
13	apply to a grant made under this paragraph.
14	(4) Revolving loan program.—
15	(A) In general.—The Secretary shall es-
16	tablish a revolving loan program to provide
17	loans to eligible entities for the conduct of quali-
18	fied electric transportation projects under para-
19	graph(2).
20	(B) Criteria.—The Secretary shall estab-
21	lish criteria for the provision of loans under this
22	paragraph.
23	(C) Funding.—Of amounts made available
24	to carry out this subsection, the Secretary shall
25	use any amounts not used to provide grants

1	under paragraph (3) to carry out the revolving
2	loan program under this paragraph.
3	(c) Market Assessment Program.—The Adminis-
4	trator of the Environmental Protection Agency, in consulta-
5	tion with the Secretary and private industry, shall carry
6	out a program—
7	(1) to inventory and analyze existing electric
8	drive transportation technologies and hybrid tech-
9	nologies and markets; and
10	(2) to identify and implement methods of remov-
11	ing barriers for existing and emerging applications of
12	electric drive transportation technologies and hybrid
13	$transportation\ technologies.$
14	(d) Electricity Usage Program.—
15	(1) In General.—The Secretary, in consultation
16	with the Administrator of the Environmental Protec-
17	tion Agency and private industry, shall carry out a
18	program—
19	(A) to work with utilities to develop low-
20	cost, simple methods of—
21	(i) using off-peak electricity; or
22	(ii) managing on-peak electricity use;
23	(B) to develop systems and processes—

1	(i) to enable plug-in electric vehicles to
2	enhance the availability of emergency back-
3	up power for consumers;
4	(ii) to study and demonstrate the po-
5	tential value to the electric grid to use the
6	energy stored in the on-board storage sys-
7	tems to improve the efficiency and reli-
8	ability of the grid generation system; and
9	(iii) to work with utilities and other
10	interested stakeholders to study and dem-
11	onstrate the implications of the introduction
12	of plug-in electric vehicles and other types
13	of electric transportation on the production
14	of electricity from renewable resources.
15	(2) Off-peak electricity usage grants.—In
16	carrying out the program under paragraph (1), the
17	Secretary shall provide grants to assist eligible public
18	and private electric utilities for the conduct of pro-
19	grams or activities to encourage owners of electric
20	drive transportation technologies—
21	(A) to use off-peak electricity; or
22	(B) to have the load managed by the utility.
23	(e) Authorization of Appropriations.—There is
24	authorized to be appropriated to carry out subsections (b),

1	(c), and (d) \$125,000,000 for each of fiscal years 2008
2	through 2013.
3	(f) Electric Drive Transportation Tech-
4	NOLOGIES.—
5	(1) Definitions.—In this subsection:
6	(A) Battery.—The term "battery" means
7	an electrochemical energy storage device powered
8	directly by electrical current.
9	(B) Electric drive transportation
10	TECHNOLOGY.—The term "electric drive trans-
11	portation technology" means—
12	(i) technology used in vehicles that use
13	an electric motor for all or part of the mo-
14	tive power of the vehicles, including battery
15	electric, hybrid electric, plug-in hybrid elec-
16	tric, fuel cell, and plug-in fuel cell vehicles,
17	or rail transportation; or
18	(ii) equipment relating to transpor-
19	tation or mobile sources of air pollution
20	that use an electric motor to replace an in-
21	ternal combustion engine for all or part of
22	the work of the equipment, including—
23	(I) corded electric equipment
24	linked to transportation or mobile
25	sources of air pollution; and

1	(II) electrification technologies at
2	airports, ports, truck stops, and mate-
3	rial-handling facilities.
4	(C) Energy storage device.—
5	(i) In general.—The term "energy
6	storage device" means the onboard device
7	used in an on-road or nonroad vehicle to
8	store energy, or a battery, ultracapacitor,
9	compressed air energy storage system, or
10	flywheel used to store energy in a stationary
11	application.
12	(ii) Inclusions.—The term "energy
13	storage device" includes—
14	(I) in the case of an electric or
15	hybrid electric or fuel cell vehicle, a
16	battery, ultracapacitor, or similar de-
17	$vice;\ and$
18	(II) in the case of a hybrid hy-
19	draulic vehicle, an accumulator or
20	$similar\ device.$
21	(D) Engine dominant hybrid vehicle.—
22	The term "engine dominant hybrid vehicle"
23	means an on-road or nonroad vehicle that—
24	(i) is propelled by an internal combus-
25	tion engine or heat engine using—

1	(I) any combustible fuel; and
2	(II) an on-board, rechargeable en-
3	ergy storage device; and
4	(ii) has no means of using an off-board
5	source of energy.
6	(E) Nonroad vehicle.—The term
7	"nonroad vehicle" means a vehicle—
8	(i) powered by—
9	(I) a nonroad engine, as that term
10	is defined in section 216 of the Clean
11	Air Act (42 U.S.C. 7550); or
12	(II) fully or partially by an elec-
13	tric motor powered by a fuel cell, a
14	battery, or an off-board source of elec-
15	tricity; and
16	(ii) that is not a motor vehicle or a ve-
17	hicle used solely for competition.
18	(F) Plug-in electric drive vehicle.—
19	In this section, the term "plug-in electric drive
20	vehicle" means a precommercial vehicle that—
21	(i) draws motive power from a battery
22	with a capacity of at least 4 kilowatt-hours;
23	(ii) can be recharged from an external
24	source of electricity for motive power; and

1	(iii) is a light-, medium-, or heavy-
2	duty onroad or nonroad vehicle.
3	(2) Evaluation of plug-in electric drive
4	TRANSPORTATION TECHNOLOGY BENEFITS.—
5	(A) In General.—The Secretary, in co-
6	operation with the Administrator of the Envi-
7	ronmental Protection Agency, the heads of other
8	appropriate Federal agencies, and appropriate
9	interested stakeholders, shall evaluate and, as ap-
10	propriate, modify existing test protocols for fuel
11	economy and emissions to ensure that any proto-
12	cols for electric drive transportation technologies,
13	including plug-in electric drive vehicles, accu-
14	rately measure the fuel economy and emissions
15	performance of the electric drive transportation
16	technologies.
17	(B) Requirements.—Test protocols (in-
18	cluding any modifications to test protocols) for
19	electric drive transportation technologies under
20	subparagraph (A) shall—
21	(i) be designed to assess the full poten-
22	tial of benefits in terms of reduction of
23	emissions of criteria pollutants, reduction of
24	energy use, and petroleum reduction; and
25	(ii) consider—

1	(I) the vehicle and fuel as a sys-
2	tem, not just an engine;
3	(II) nightly off-board charging, as
4	applicable; and
5	(III) different engine-turn on
6	$speed\ control\ strategies.$
7	(3) Plug-in electric drive vehicle re-
8	SEARCH AND DEVELOPMENT.—The Secretary shall
9	conduct an applied research program for plug-in elec-
10	tric drive vehicle technology and engine dominant hy-
11	brid vehicle technology, including—
12	(A) high-capacity, high-efficiency energy
13	storage devices that, as compared to existing
14	technologies that are in commercial service, have
15	improved life, energy storage capacity, and
16	power delivery capacity;
17	(B) high-efficiency on-board and off-board
18	charging components;
19	(C) high-power and energy-efficient
20	drivetrain systems for passenger and commercial
21	vehicles and for nonroad vehicles;
22	(D) development and integration of control
23	systems and power trains for plug-in electric ve-
24	hicles, plug-in hybrid fuel cell vehicles, and en-
25	aine dominant hubrid vehicles includina—

1	(i) development of efficient cooling sys-
2	tems;
3	(ii) analysis and development of con-
4	trol systems that minimize the emissions
5	profile in cases in which clean diesel en-
6	gines are part of a plug-in hybrid drive sys-
7	tem; and
8	(iii) development of different control
9	systems that optimize for different goals,
10	including—
11	(I) prolonging energy storage de-
12	vice life;
13	(II) reduction of petroleum con-
14	sumption; and
15	(III) reduction of greenhouse gas
16	emissions;
17	(E) application of nanomaterial technology
18	to energy storage devices and fuel cell systems;
19	and
20	(F) use of smart vehicle and grid inter-
21	connection devices and software that enable com-
22	munications between the grid of the future and
23	electric drive transportation technology vehicles.
24	(4) Education program.—

1	(A) IN GENERAL.—The Secretary shall de-
2	velop a nationwide electric drive transportation
3	technology education program under which the
4	Secretary shall provide—
5	(i) teaching materials to secondary
6	schools and high schools; and
7	(ii) assistance for programs relating to
8	electric drive system and component engi-
9	neering to institutions of higher education.
10	(B) Electric vehicle competition.—The
11	program established under subparagraph (A)
12	shall include a plug-in hybrid electric vehicle
13	competition for institutions of higher education,
14	which shall be known as the "Dr. Andrew Frank
15	Plug-In Electric Vehicle Competition".
16	(C) Engineers.—In carrying out the pro-
17	gram established under subparagraph (A), the
18	Secretary shall provide financial assistance to
19	institutions of higher education to create new, or
20	support existing, degree programs to ensure the
21	availability of trained electrical and mechanical
22	engineers with the skills necessary for the ad-
23	vancement of—
24	(i) plug-in electric drive vehicles; and

1	(ii) other forms of electric drive trans-
2	portation technology vehicles.
3	(5) Authorization of Appropriations.—
4	There are authorized to be appropriated for each of
5	fiscal years 2008 through 2013—
6	(A) to carry out paragraph (3)
7	\$200,000,000; and
8	(B) to carry out paragraph (4) \$5,000,000.
9	(g) Collaboration and Merit Review.—
10	(1) Collaboration with national labora-
11	tories.—To the maximum extent practicable, Na-
12	tional Laboratories shall collaborate with the public,
13	private, and academic sectors and with other Na-
14	tional Laboratories in the design, conduct, and dis-
15	semination of the results of programs and activities
16	authorized under this section.
17	(2) Collaboration with mobile energy
18	Storage program.—To the maximum extent prac-
19	ticable, the Secretary shall seek to coordinate the sta-
20	tionary and mobile energy storage programs of the
21	Department of the Energy with the programs and ac-
22	tivities authorized under this section
23	(3) Merit review.—Notwithstanding section
24	989 of the Energy Policy Act of 2005 (42 U.S.C.
25	16353), of the amounts made available to carry out

1	this section, not more than 30 percent shall be pro-
2	vided to National Laboratories.
3	SEC. 246. INCLUSION OF ELECTRIC DRIVE IN ENERGY POL-
4	ICY ACT OF 1992.
5	Section 508 of the Energy Policy Act of 1992 (42
6	U.S.C. 13258) is amended—
7	(1) by redesignating subsections (a) through (d)
8	as subsections (b) through (e), respectively;
9	(2) by inserting before subsection (b) the fol-
10	lowing:
11	"(a) Definitions.—In this section:
12	"(1) Fuel cell electric vehicle.—The term
13	'fuel cell electric vehicle' means an on-road or
14	nonroad vehicle that uses a fuel cell (as defined in sec-
15	tion 803 of the Spark M. Matsunaga Hydrogen Act
16	of 2005 (42 U.S.C. 16152)).
17	"(2) Hybrid electric vehicle.—The term
18	'hybrid electric vehicle' means a new qualified hybrid
19	motor vehicle (as defined in section $30B(d)(3)$ of the
20	Internal Revenue Code of 1986).
21	"(3) Medium- or heavy-duty electric vehi-
22	CLE.—The term 'medium- or heavy-duty electric vehi-
23	cle' means an electric, hybrid electric, or plug-in hy-
24	brid electric vehicle with a gross vehicle weight of
25	more than 8,501 pounds.

1	"(4) Neighborhood electric vehicle.—The
2	term 'neighborhood electric vehicle' means a 4-wheeled
3	on-road or nonroad vehicle that—
4	"(A) has a top attainable speed in 1 mile
5	of more than 20 mph and not more than 25 mph
6	on a paved level surface; and
7	"(B) is propelled by an electric motor and
8	on-board, rechargeable energy storage system that
9	is rechargeable using an off-board source of elec-
10	tricity.
11	"(5) Plug-in hybrid electric vehicle.—The
12	term 'plug-in hybrid electric vehicle' means a light-
13	duty, medium-duty, or heavy-duty on-road or
14	nonroad vehicle that is propelled by any combination
15	of—
16	"(A) an electric motor and on-board, re-
17	chargeable energy storage system capable of oper-
18	ating the vehicle in intermittent or continuous
19	all-electric mode and which is rechargeable using
20	an off-board source of electricity; and
21	"(B) an internal combustion engine or heat
22	engine using any combustible fuel.";
23	(3) in subsection (b) (as redesignated by para-
24	graph (1))—

1	(A) by striking "The Secretary" and insert-
2	ing the following:
3	"(1) Allocation.—The Secretary"; and
4	(B) by adding at the end the following:
5	"(2) Electric vehicles.—Not later than Jan-
6	uary 31, 2009, the Secretary shall—
7	"(A) allocate credit in an amount to be de-
8	termined by the Secretary for—
9	"(i) acquisition of—
10	"(I) a hybrid electric vehicle;
11	"(II) a plug-in hybrid electric ve-
12	hicle;
13	"(III) a fuel cell electric vehicle;
14	"(IV) a neighborhood electric vehi-
15	$cle;\ or$
16	"(V) a medium- or heavy-duty
17	electric vehicle; and
18	"(ii) investment in qualified alter-
19	native fuel infrastructure or nonroad equip-
20	ment, as determined by the Secretary; and
21	"(B) allocate more than 1, but not to exceed
22	5, credits for investment in an emerging tech-
23	nology relating to any vehicle described in sub-
24	paragraph (A) to encourage—
25	"(i) a reduction in petroleum demand;

1	"(ii) technological advancement; and
2	"(iii) a reduction in vehicle emis-
3	sions.";
4	(4) in subsection (c) (as redesignated by para-
5	graph (1)), by striking "subsection (a)" and inserting
6	"subsection (b)"; and
7	(5) by adding at the end the following:
8	"(e) Authorization of Appropriations.—There are
9	authorized to be appropriated such sums as are necessary
10	to carry out this section for each of fiscal years 2008
11	through 2013.".
12	SEC. 247. COMMERCIAL INSULATION DEMONSTRATION
13	PROGRAM.
14	(a) Definitions.—In this section:
15	(1) Advanced insulation.—The term "ad-
15 16	(1) Advanced insulation" means insulation that has an R
16	vanced insulation" means insulation that has an R
16 17	vanced insulation" means insulation that has an R value of not less than R35 per inch.
16 17 18	vanced insulation" means insulation that has an R value of not less than R35 per inch. (2) COVERED REFRIGERATION UNIT.—The term
16 17 18 19	vanced insulation" means insulation that has an R value of not less than R35 per inch. (2) COVERED REFRIGERATION UNIT.—The term "covered refrigeration unit" means any—
16 17 18 19 20	vanced insulation" means insulation that has an R value of not less than R35 per inch. (2) Covered refrigeration unit" means any— (A) commercial refrigerated truck;
16 17 18 19 20 21	vanced insulation" means insulation that has an R value of not less than R35 per inch. (2) COVERED REFRIGERATION UNIT.—The term "covered refrigeration unit" means any— (A) commercial refrigerated truck; (B) commercial refrigerated trailer; and
16 17 18 19 20 21 22	vanced insulation" means insulation that has an R value of not less than R35 per inch. (2) COVERED REFRIGERATION UNIT.—The term "covered refrigeration unit" means any— (A) commercial refrigerated truck; (B) commercial refrigerated trailer; and (C) commercial refrigerator, freezer, or re-

1	(b) Report.—Not later than 90 days after the date
2	of enactment of this Act, the Secretary shall submit to Con-
3	gress a report that includes an evaluation of—
4	(1) the state of technological advancement of ad-
5	vanced insulation; and
6	(2) the projected amount of cost savings that
7	would be generated by implementing advanced insula-
8	tion into covered refrigeration units.
9	(c) Demonstration Program.—
10	(1) Establishment.—If the Secretary deter-
11	mines in the report described in subsection (b) that
12	the implementation of advanced insulation into cov-
13	ered refrigeration units would generate an economi-
14	cally justifiable amount of cost savings, the Secretary,
15	in cooperation with manufacturers of covered refrig-
16	eration units, shall establish a demonstration pro-
17	gram under which the Secretary shall demonstrate the
18	cost-effectiveness of advanced insulation.
19	(2) Disclosure.—Section 623 of the Energy
20	Policy Act of 1992 (42 U.S.C. 13293) may apply to
21	any project carried out under this subsection.
22	(3) Cost-sharing.—Section 988 of the Energy
23	Policy Act of 2005 (42 U.S.C. 16352) shall apply to

any project carried out under this subsection.

24

1	(d) Authorization of Appropriations.—Of the
2	funds authorized under section 911(b) of Public Law 109-
3	58, the Energy Policy Act of 2005, such sums shall be allo-
4	cated to carry out this program.
5	Subtitle D—Setting Energy
6	Efficiency Goals
7	SEC. 251. OIL SAVINGS PLAN AND REQUIREMENTS.
8	(a) OIL SAVINGS TARGET AND ACTION PLAN.—Not
9	later than 270 days after the date of enactment of this Act,
10	the Director of the Office of Management and Budget (re-
11	ferred to in this section as the "Director") shall publish in
12	the Federal Register an action plan consisting of—
13	(1) a list of requirements proposed or to be pro-
14	posed pursuant to subsection (b) that are authorized
15	to be issued under law in effect on the date of enact-
16	ment of this Act, and this Act, that will be sufficient,
17	when taken together, to save from the baseline deter-
18	mined under subsection (e)—
19	(A) 2,500,000 barrels of oil per day on aver-
20	age during calendar year 2016;
21	(B) 7,000,000 barrels of oil per day on av-
22	erage during calendar year 2026; and
23	(C) 10,000,000 barrels per day on average
24	during calendar year 2031; and

1	(2) a Federal Government-wide analysis
2	demonstrating—
3	(A) the expected oil savings from the base-
4	line to be accomplished by each requirement; and
5	(B) that all such requirements, taken to-
6	gether, will achieve the oil savings specified in
7	this subsection.
8	(b) Standards and Requirements.—
9	(1) In general.—On or before the date of publi-
10	cation of the action plan under subsection (a), the
11	Secretary of Energy, the Secretary of Transportation,
12	the Secretary of Defense, the Secretary of Agriculture,
13	the Secretary of the Treasury, the Administrator of
14	the Environmental Protection Agency, and the head
15	of any other agency the President determines appro-
16	priate shall each propose, or issue a notice of intent
17	to propose, regulations establishing each standard or
18	other requirement listed in the action plan that is
19	under the jurisdiction of the respective agency using
20	authorities described in paragraph (2).
21	(2) AUTHORITIES.—The head of each agency de-
22	scribed in paragraph (1) shall use to carry out this
23	subsection—

1	(A) any authority in existence on the date
2	of enactment of this Act (including regulations);
3	and
4	(B) any new authority provided under this
5	Act (including an amendment made by this Act).
6	(3) Final regulations.—Not later than 18
7	months after the date of enactment of this Act, the
8	head of each agency described in paragraph (1) shall
9	promulgate final versions of the regulations required
10	under this subsection.
11	(4) Content of regulations.—Each proposed
12	and final regulation promulgated under this sub-
13	section shall—
14	(A) be sufficient to achieve at least the oil
15	savings resulting from the regulation under the
16	action plan published under subsection (a); and
17	(B) be accompanied by an analysis by the
18	applicable agency demonstrating that the regula-
19	tion will achieve the oil savings from the baseline
20	determined under subsection (e).
21	(c) Initial Evaluation.—
22	(1) In general.—Not later than 2 years after
23	the date of enactment of this Act, the Director shall—
24	(A) publish in the Federal Register a Fed-
25	eral Government-wide analysis of—

1	(i) the oil savings achieved from the
2	baseline established under subsection (e);
3	and
4	(ii) the expected oil savings under the
5	standards and requirements of this Act (and
6	amendments made by this Act); and
7	(B) determine whether oil savings will meet
8	the targets established under subsection (a).
9	(2) Insufficient oil savings.—If the oil sav-
10	ings are less than the targets established under sub-
11	section (a), simultaneously with the analysis required
12	under paragraph (1)—
13	(A) the Director shall publish a revised ac-
14	tion plan that is sufficient to achieve the targets;
15	and
16	(B) the head of each agency referred to in
17	subsection (b)(1) shall propose new or revised
18	regulations that are sufficient to achieve the tar-
19	gets under paragraphs (1), (2), and (3), respec-
20	tively, of subsection (b).
21	(3) Final regulations.—Not later than 180
22	days after the date on which regulations are proposed
23	under paragraph (2)(B), the head of each agency re-
24	ferred to in subsection (b)(1) shall promulaate final

1	versions of those regulations that comply with sub-
2	section (b)(1).
3	(d) Review and Update of Action Plan.—
4	(1) Review.—Not later than January 1, 2011,
5	and every 3 years thereafter, the Director shall submit
6	to Congress, and publish, a report that—
7	(A) evaluates the progress achieved in im-
8	plementing the oil savings targets established
9	under subsection (a);
10	(B) analyzes the expected oil savings under
11	the standards and requirements established
12	under this Act and the amendments made by this
13	Act; and
14	(C)(i) analyzes the potential to achieve oil
15	savings that are in addition to the savings re-
16	quired by subsection (a); and
17	(ii) if the President determines that it is in
18	the national interest, establishes a higher oil sav-
19	ings target for calendar year 2017 or any subse-
20	quent calendar year.
21	(2) Insufficient oil savings.—If the oil sav-
22	ings are less than the targets established under sub-
23	section (a), simultaneously with the report required
24	under paragraph (1)—

1	(A) the Director shall publish a revised ac-
2	tion plan that is sufficient to achieve the targets;
3	and
4	(B) the head of each agency referred to in
5	subsection (b)(1) shall propose new or revised
6	regulations that are sufficient to achieve the tar-
7	gets under paragraphs (1), (2), and (3), respec-
8	tively, of subsection (b).
9	(3) Final regulations.—Not later than 180
10	days after the date on which regulations are proposed
11	under paragraph (2)(B), the head of each agency re-
12	ferred to in subsection (b)(1) shall promulgate final
13	versions of those regulations that comply with sub-
14	section (b)(1).
15	(e) Baseline and Analysis Requirements.—In
16	performing the analyses and promulgating proposed or
17	final regulations to establish standards and other require-
18	ments necessary to achieve the oil savings required by this
19	section, the Secretary of Energy, the Secretary of Transpor-
20	tation, the Secretary of Defense, the Secretary of Agri-
21	culture, the Administrator of the Environmental Protection
22	Agency, and the head of any other agency the President de-
23	termines to be appropriate shall—
24	(1) determine oil savings as the projected reduc-
25	tion in oil consumption from the baseline established

1	by the reference case contained in the report of the
2	Energy Information Administration entitled "Annual
3	Energy Outlook 2005";
4	(2) determine the oil savings projections required
5	on an annual basis for each of calendar years 2009
6	through 2026; and
7	(3) account for any overlap among the standards
8	and other requirements to ensure that the projected oil
9	savings from all the promulgated standards and re-
10	quirements, taken together, are as accurate as prac-
11	ticable.
12	(f) Nonregulatory Measures.—The action plan re-
13	quired under subsection (a) and the revised action plans
14	required under subsections (c) and (d) shall include—
15	(1) a projection of the barrels of oil displaced by
16	efficiency and sources of energy other than oil, includ-
17	ing biofuels, electricity, and hydrogen; and
18	(2) a projection of the barrels of oil saved
19	through enactment of this Act and the Energy Policy
20	Act of 2005 (42 U.S.C. 15801 et seq.).
21	SEC. 252. NATIONAL ENERGY EFFICIENCY IMPROVEMENT
22	GOALS.
23	(a) Goals.—The goals of the United States are—
24	(1) to achieve an improvement in the overall en-
25	ergy productivity of the United States (measured in

1	gross domestic product per unit of energy input) of at
2	least 2.5 percent per year by the year 2012; and
3	(2) to maintain that annual rate of improve-
4	ment each year through 2030.
5	(b) Strategic Plan.—
6	(1) In general.—Not later than 1 year after
7	the date of enactment of this Act, the Secretary, in co-
8	operation with the Administrator of the Environ-
9	mental Protection Agency and the heads of other ap-
10	propriate Federal agencies, shall develop a strategic
11	plan to achieve the national goals for improvement in
12	energy productivity established under subsection (a).
13	(2) Public input and comment.—The Sec-
14	retary shall develop the plan in a manner that pro-
15	vides appropriate opportunities for public input and
16	comment.
17	(c) Plan Contents.—The strategic plan shall—
18	(1) establish future regulatory, funding, and pol-
19	icy priorities to ensure compliance with the national
20	goals;
21	(2) include energy savings estimates for each sec-
22	tor; and
23	(3) include data collection methodologies and
24	compilations used to establish baseline and energy
25	savings data.

1	(d) Plan Updates.—
2	(1) In general.—The Secretary shall—
3	(A) update the strategic plan biennially;
4	and
5	(B) include the updated strategic plan in
6	the national energy policy plan required by sec-
7	tion 801 of the Department of Energy Organiza-
8	tion Act (42 U.S.C. 7321).
9	(2) Contents.—In updating the plan, the Sec-
10	retary shall—
11	(A) report on progress made toward imple-
12	menting efficiency policies to achieve the na-
13	tional goals established under subsection (a); and
14	(B) verify, to the maximum extent prac-
15	ticable, energy savings resulting from the poli-
16	cies.
17	(e) Report to Congress and Public.—The Sec-
18	retary shall submit to Congress, and make available to the
19	public, the initial strategic plan developed under subsection
20	(b) and each updated plan.
21	SEC. 253. NATIONAL MEDIA CAMPAIGN.
22	(a) In General.—The Secretary, acting through the
23	Assistant Secretary for Energy Efficiency and Renewable
24	Energy (referred to in this section as the "Secretary"), shall
25	develop and conduct a national media campaign—

1	(1) to increase energy efficiency throughout the
2	economy of the United States over the next decade;
3	(2) to promote the national security benefits as-
4	sociated with increased energy efficiency; and
5	(3) to decrease oil consumption in the United
6	States over the next decade.
7	(b) Contract With Entity.—The Secretary shall
8	carry out subsection (a) directly or through—
9	(1) competitively bid contracts with 1 or more
10	nationally recognized media firms for the development
11	and distribution of monthly television, radio, and
12	newspaper public service announcements; or
13	(2) collective agreements with 1 or more nation-
14	ally recognized institutes, businesses, or nonprofit or-
15	ganizations for the funding, development, and dis-
16	tribution of monthly television, radio, and newspaper
17	public service announcements.
18	(c) Use of Funds.—
19	(1) In general.—Amounts made available to
20	carry out this section shall be used for the following:
21	(A) Advertising costs.—
22	(i) The purchase of media time and
23	space.
24	(ii) Creative and talent costs.

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

1	ner consistent with the overall strategy and focus of
2	$the \ campaign;$
3	(3) plans to purchase advertising time and
4	space;
5	(4) policies and practices implemented to ensure
6	that Federal funds are used responsibly to purchase
7	advertising time and space and eliminate the poten-
8	tial for waste, fraud, and abuse; and
9	(5) all contracts or cooperative agreements en-
10	tered into with a corporation, partnership, or indi-
11	vidual working on behalf of the national media cam-
12	paign.
13	(e) Authorization of Appropriations.—
14	(1) In general.—There is authorized to be ap-
15	propriated to carry out this section \$5,000,000 for
16	each of fiscal years 2008 through 2012.
17	(2) Decreased oil consumption.—The Sec-
18	retary shall use not less than 50 percent of the
19	amount that is made available under this section for
20	each fiscal year to develop and conduct a national
21	media campaign to decrease oil consumption in the
22	United States over the next decade.
23	SEC. 254. MODERNIZATION OF ELECTRICITY GRID SYSTEM.
24	(a) Statement of Policy.—It is the policy of the
25	United States that developing and deploying advanced tech-

1	nology to modernize and increase the efficiency of the elec-
2	tricity grid system of the United States is essential to main-
3	tain a reliable and secure electricity transmission and dis-
4	tribution infrastructure that can meet future demand
5	growth.
6	(b) Programs.—The Secretary, the Federal Energy
7	Regulatory Commission, and other Federal agencies, as ap-
8	propriate, shall carry out programs to support the use, de-
9	velopment, and demonstration of advanced transmission
10	and distribution technologies, including real-time moni-
11	toring and analytical software—
12	(1) to maximize the capacity and efficiency of
13	electricity networks;
14	(2) to enhance grid reliability;
15	(3) to reduce line losses;
16	(4) to facilitate the transition to real-time elec-
17	tricity pricing;
18	(5) to allow grid incorporation of more onsite re-
19	newable energy generators;
20	(6) to enable electricity to displace a portion of
21	the petroleum used to power the national transpor-
22	tation system of the United States; and
23	(7) to enable broad deployment of distributed
24	generation and demand side management technology.

1 SEC. 255. SMART GRID SYSTEM REPORT.

2	(a) In General.—The Secretary, acting through the
3	Director of the Office of Electricity Delivery and Energy
4	Reliability (referred to in this section as the "Secretary"),
5	shall, after consulting with any interested individual or en-
6	tity as appropriate, no later than one year after enactment,
7	report to Congress concerning the status of smart grid de-
8	ployments nationwide and any regulatory or government
9	barriers to continued deployment.
10	SEC. 256. SMART GRID TECHNOLOGY RESEARCH, DEVELOP-
11	MENT, AND DEMONSTRATION.
12	(a) Power Grid Digital Information Tech-
13	NOLOGY.—The Secretary, in consultation with the Federal
14	Energy Regulatory Commission and other appropriate
15	agencies, electric utilities, the States, and other stakeholders,
16	shall carry out a program—
17	(1) to develop advanced techniques for measuring
18	peak load reductions and energy-efficiency savings
19	from smart metering, demand response, distributed
20	generation, and electricity storage systems;
21	(2) to investigate means for demand response,
22	distributed generation, and storage to provide ancil-
23	lary services;
24	(3) to conduct research to advance the use of
25	wide-area measurement and control networks, includ-
26	ing data mining, visualization, advanced computing,

1	and secure and dependable communications in a
2	$highly-distributed\ environment;$
3	(4) to test new reliability technologies in a grid
4	control room environment against a representative set
5	of local outage and wide area blackout scenarios;
6	(5) to investigate the feasibility of a transition
7	to time-of-use and real-time electricity pricing;
8	(6) to develop algorithms for use in electric
9	$transmission\ system\ software\ applications;$
10	(7) to promote the use of underutilized electricity
11	generation capacity in any substitution of electricity
12	for liquid fuels in the transportation system of the
13	United States; and
14	(8) in consultation with the Federal Energy Reg-
15	ulatory Commission, to propose interconnection pro-
16	tocols to enable electric utilities to access electricity
17	stored in vehicles to help meet peak demand loads.
18	(b) Smart Grid Regional Demonstration Initia-
19	TIVE.—
20	(1) In general.—The Secretary shall establish
21	a smart grid regional demonstration initiative (re-
22	ferred to in this subsection as the "Initiative") com-
23	posed of demonstration projects specifically focused on
24	advanced technologies for use in power grid sensing,
25	communications, analysis, and power flow control.

1	The Secretary shall seek to leverage existing smart
2	grid deployments.
3	(2) GOALS.—The goals of the Initiative shall
4	be—
5	(A) to demonstrate the potential benefits of
6	concentrated investments in advanced grid tech-
7	nologies on a regional grid;
8	(B) to facilitate the commercial transition
9	from the current power transmission and dis-
10	tribution system technologies to advanced tech-
11	nologies;
12	(C) to facilitate the integration of advanced
13	technologies in existing electric networks to im-
14	prove system performance, power flow control,
15	and reliability;
16	(D) to demonstrate protocols and standards
17	that allow for the measurement and validation of
18	the energy savings and fossil fuel emission reduc-
19	tions associated with the installation and use of
20	energy efficiency and demand response tech-
21	nologies and practices; and
22	(E) to investigate differences in each region
23	and regulatory environment regarding best prac-
24	tices in implementing smart grid technologies.
25	(3) Demonstration projects.—

	(A) In general.—In carrying out the ini-
2	tiative, the Secretary shall carry out smart grid
3	demonstration projects in up to 5 electricity con-
1	trol areas, including rural areas and at least 1
5	area in which the majority of generation and
5	transmission assets are controlled by a tax-ex-
7	empt entity.
3	(B) Cooperation.—A demonstration

- (B) Cooperation.—A demonstration project under subparagraph (A) shall be carried out in cooperation with the electric utility that owns the grid facilities in the electricity control area in which the demonstration project is carried out.
- (C) Federal share of cost of tech-Nology investments.—The Secretary shall provide to an electric utility described in subparagraph (B) financial assistance for use in paying an amount equal to not more than 50 percent of the cost of qualifying advanced grid technology investments made by the electric utility to carry out a demonstration project.
- (4) AUTHORIZATION OF APPROPRIATIONS.—

 There are authorized to be appropriated—

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1	(A) to carry out subsection (a), such sums
2	as are necessary for each of fiscal years 2008
3	through 2012; and
4	(B) to carry out subsection (b),
5	\$100,000,000 for each of fiscal years 2008
6	through 2012.
7	SEC. 257. SMART GRID INTEROPERABILITY FRAMEWORK.
8	(a) Interoperability Framework.—The Federal
9	Energy Regulatory Commission (referred to in this section
10	as the "Commission"), in cooperation with other relevant
11	federal agencies, shall coordinate with smart grid stake-
12	holders to develop protocols for the establishment of a flexi-
13	ble framework for the connection of smart grid devices and
14	systems that would align policy, business, and technology
15	approaches in a manner that would enable all electric re-
16	sources, including demand-side resources, to contribute to
17	an efficient, reliable electricity network.
18	(c) Scope of Framework.—The framework developed
19	under subsection (b) shall be designed—
20	(1) to accommodate traditional, centralized gen-
21	eration and transmission resources and consumer dis-
22	tributed resources, including distributed generation,
23	renewable generation, energy storage, energy effi-
24	ciency, and demand response and enabling devices
25	and systems;

1	(2) to be flexible to incorporate—
2	(A) regional and organizational differences;
3	and
4	(B) technological innovations; and
5	(3) to consider include voluntary uniform stand-
6	ards for certain classes of mass-produced electric ap-
7	pliances and equipment for homes and businesses that
8	enable customers, at their election and consistent with
9	applicable State and federal laws, and are manufac-
10	tured with the ability to respond to electric grid emer-
11	gencies and demand response signals by curtailing
12	all, or a portion of, the electrical power consumed by
13	the appliances or equipment in response to an emer-
14	gency or demand response signal, including
15	through—
16	(A) load reduction to reduce total electrical
17	demand;
18	(B) adjustment of load to provide grid an-
19	cillary services; and
20	(C) in the event of a reliability crisis that
21	threatens an outage, short-term load shedding to
22	help preserve the stability of the grid.
23	(4) Such voluntary standards should incorporate
24	appropriate manufacturer lead time.

1 SEC. 258. STATE CONSIDERATION OF SMART GRID.

2	Section 111(d) of the Public Utility Regulatory Poli-
3	cies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding
4	at the end the following:
5	"(16) Consideration of smart grid in-
6	vestments.—Each State shall consider requir-
7	ing that, prior to undertaking investments in
8	nonadvanced grid technologies, an electric utility
9	of the State demonstrate to the State that the
10	electric utility considered an investment in a
11	qualified smart grid system based on appro-
12	priate factors, including—
13	$\it ``(i) total costs;$
14	$``(ii)\ cost\-effectiveness;$
15	$``(iii)\ improved\ reliability;$
16	$"(iv) \ security;$
17	"(v) system performance; and
18	"(vi) societal benefit.
19	"(B) Rate recovery.—Each State shall
20	consider authorizing each electric utility of the
21	State to recover from ratepayers any capital, op-
22	erating expenditure, or other costs of the electric
23	utility relating to the deployment of a qualified
24	smart grid system, including a reasonable rate of
25	return on the capital expenditures of the electric

1	utility for the deployment of the qualified smarr
2	$grid\ system.$
3	"(C) Obsolete equipment.—Each State
4	shall consider authorizing any electric utility or
5	other party of the State to deploy a qualified
6	smart grid system to recover in a timely manner
7	the remaining book-value costs of any equipment
8	rendered obsolete by the deployment of the quali-
9	fied smart grid system, based on the remaining
10	depreciable life of the obsolete equipment.".
11	SEC. 259. SUPPORT FOR ENERGY INDEPENDENCE OF THE
12	UNITED STATES.
13	It is the policy of the United States to provide support
14	for projects and activities to facilitate the energy independ-
15	ence of the United States so as to ensure that all but 10
16	percent of the energy needs of the United States are supplied
17	by domestic energy sources.
18	SEC. 260. ENERGY POLICY COMMISSION.
19	(a) Establishment.—
20	(1) In general.—There is established a com-
21	mission, to be known as the "National Commission on
22	Energy Independence" (referred to in this section as
23	$the\ "Commission").$
24	(2) Membership.—The Commission shall be
25	composed of 15 members, of whom—

1	(A) 3 shall be appointed by the President;
2	(B) 3 shall be appointed by the majority
3	leader of the Senate;
4	(C) 3 shall be appointed by the minority
5	leader of the Senate;
6	(D) 3 shall be appointed by the Speaker of
7	the House of Representatives; and
8	(E) 3 shall be appointed by the minority
9	leader of the House of Representatives.
10	(3) Co-chairpersons.—
11	(A) In general.—The President shall des-
12	ignate 2 co-chairpersons from among the mem-
13	bers of the Commission appointed.
14	(B) Political Affiliation.—The co-chair-
15	persons designated under subparagraph (A) shall
16	not both be affiliated with the same political
17	party.
18	(4) Deadline for appointment.—Members of
19	the Commission shall be appointed not later than 90
20	days after the date of enactment of this Act.
21	(5) Term; vacancies.—
22	(A) Term.—A member of the Commission
23	shall be appointed for the life of the Commission.
24	(B) VACANCIES.—Any vacancy in the
25	Commission—

1	(i) shall not affect the powers of the
2	Commission; and
3	(ii) shall be filled in the same manner
4	as the original appointment.
5	(b) Purpose.—The Commission shall conduct a com-
6	prehensive review of the energy policy of the United States
7	<i>by</i> —
8	(1) reviewing relevant analyses of the current
9	and long-term energy policy of, and conditions in, the
10	United States;
11	(2) identifying problems that may threaten the
12	achievement by the United States of long-term energy
13	policy goals, including energy independence;
14	(3) analyzing potential solutions to problems
15	that threaten the long-term ability of the United
16	States to achieve those energy policy goals; and
17	(4) providing recommendations that will ensure,
18	to the maximum extent practicable, that the energy
19	policy goals of the United States are achieved.
20	(c) Report and Recommendations.—
21	(1) In General.—Not later than December 31 of
22	each of calendar years 2009, 2011, 2013, and 2015,
23	the Commission shall submit to Congress and the
24	President a report on the progress of United States in
25	meeting the long-term energy policy goal of energy

1	independence, including a detailed statement of the
2	consensus findings, conclusions, and recommendations
3	of the Commission.
4	(2) Legislative language.—If a recommenda-
5	tion submitted under paragraph (1) involves legisla-
6	tive action, the report shall include proposed legisla-
7	tive language to carry out the action.
8	(d) Commission Personnel Matters.—
9	(1) Staff and director.—The Commission
10	shall have a staff headed by an Executive Director.
11	(2) Staff appointment.—The Executive Direc-
12	tor may appoint such personnel as the Executive Di-
13	rector and the Commission determine to be appro-
14	priate.
15	(3) Experts and consultants.—With the ap-
16	proval of the Commission, the Executive Director may
17	procure temporary and intermittent services under
18	section 3109(b) of title 5, United States Code.
19	(4) FEDERAL AGENCIES.—
20	(A) Detail of Government employ-
21	EES.—
22	(i) In General.—Upon the request of
23	the Commission, the head of any Federal
24	agency may detail, without reimbursement,
25	any of the personnel of the Federal agency

1	to the Commission to assist in carrying out
2	the duties of the Commission.
3	(ii) Nature of detail.—Any detail
4	of a Federal employee under clause (i) shall
5	not interrupt or otherwise affect the civil
6	service status or privileges of the Federal
7	employee.
8	(B) Technical assistance.—Upon the re-
9	quest of the Commission, the head of a Federal
10	agency shall provide such technical assistance to
11	the Commission as the Commission determines to
12	be necessary to carry out the duties of the Com-
13	mission.
14	(e) Resources.—
15	(1) In General.—The Commission shall have
16	reasonable access to materials, resources, statistical
17	data, and such other information from Executive
18	agencies as the Commission determines to be nec-
19	essary to carry out the duties of the Commission.
20	(2) Form of requests.—The co-chairpersons of
21	the Commission shall make requests for access de-
22	scribed in paragraph (1) in writing, as necessary.

1	Subtitle E—Promoting Federal
2	Leadership in Energy Efficiency
3	and Renewable Energy
4	SEC. 261. FEDERAL FLEET CONSERVATION REQUIREMENTS.
5	(a) Federal Fleet Conservation Require-
6	MENTS.—
7	(1) In general.—Part J of title III of the En-
8	ergy Policy and Conservation Act (42 U.S.C. 6374 et
9	seq.) is amended by adding at the end the following:
10	"SEC. 400FF. FEDERAL FLEET CONSERVATION REQUIRE-
11	MENTS.
12	"(a) Mandatory Reduction in Petroleum Con-
13	SUMPTION.—
14	"(1) In General.—The Secretary shall issue
15	regulations (including provisions for waivers from the
16	requirements of this section) for Federal fleets subject
17	to section 400AA requiring that not later than Octo-
18	ber 1, 2015, each Federal agency achieve at least a 20
19	percent reduction in petroleum consumption, and that
20	each Federal agency increase alternative fuel con-
21	sumption by 10 percent annually, as calculated from
22	the baseline established by the Secretary for fiscal
23	year 2005.
24	"(2) PLAN.—

1	"(A) Requirement.—The regulations shall
2	require each Federal agency to develop a plan to
3	meet the required petroleum reduction levels and
4	the alternative fuel consumption increases.
5	"(B) Measures.—The plan may allow an
6	agency to meet the required petroleum reduction
7	level through—
8	"(i) the use of alternative fuels;
9	"(ii) the acquisition of vehicles with
10	higher fuel economy, including hybrid vehi-
11	cles, neighborhood electric vehicles, electric
12	vehicles, and plug-in hybrid vehicles if the
13	vehicles are commercially available;
14	"(iii) the substitution of cars for light
15	trucks;
16	"(iv) an increase in vehicle load fac-
17	tors;
18	"(v) a decrease in vehicle miles trav-
19	eled;
20	"(vi) a decrease in fleet size; and
21	"(vii) other measures.
22	"(b) Federal Employee Incentive Programs for
23	Reducing Petroleum Consumption.—
24	"(1) In general.—Each Federal agency shall
25	actively promote incentive programs that encourage

1	Federal employees and contractors to reduce petro-
2	leum usage through the use of practices such as—
3	$``(A) \ telecommuting;$
4	"(B) public transit;
5	"(C) carpooling; and
6	"(D) bicycling and the use of 2-wheeled elec-
7	tric drive devices.
8	"(2) Monitoring and support for incentive
9	PROGRAMS.—The Administrator of General Services,
10	the Director of the Office of Personnel Management,
11	and the Secretary of Energy shall monitor and pro-
12	vide appropriate support to agency programs de-
13	scribed in paragraph (1).
14	"(3) Recognition.—The Secretary may estab-
15	lish a program under which the Secretary recognizes
16	private sector employers and State and local govern-
17	ments for outstanding programs to reduce petroleum
18	usage through practices described in paragraph (1).
19	"(c) Replacement Tires.—
20	"(1) In general.—Except as provided in para-
21	graph (2), the regulations issued under subsection
22	(a)(1) shall include a requirement that, to the max-
23	imum extent practicable, each Federal agency pur-
24	chase energy-efficient replacement tires for the respec-
25	tive fleet vehicles of the agency.

1	"(2) Exceptions.—This section does not apply
2	to—
3	"(A) law enforcement motor vehicles;
4	"(B) emergency motor vehicles; or
5	"(C) motor vehicles acquired and used for
6	military purposes that the Secretary of Defense
7	has certified to the Secretary must be exempt for
8	national security reasons.
9	"(d) Annual Reports on Compliance.—The Sec-
10	retary shall submit to Congress an annual report that sum-
11	marizes actions taken by Federal agencies to comply with
12	this section.".
13	(2) Table of contents amendment.—The
14	table of contents of the Energy Policy and Conserva-
15	tion Act (42 U.S.C. prec. 6201) is amended by adding
16	at the end of the items relating to part J of title III
17	$the\ following:$
	"Sec. 400FF. Federal fleet conservation requirements.".
18	(b) Authorization of Appropriations.—There is
19	authorized to be appropriated to carry out the amendment
20	made by this section \$10,000,000 for the period of fiscal
21	uears 2008 through 2013.

1	SEC. 262. FEDERAL REQUIREMENT TO PURCHASE ELEC-
2	TRICITY GENERATED BY RENEWABLE EN-
3	ERGY.
4	Section 203 of the Energy Policy Act of 2005 (42
5	U.S.C. 15852) is amended—
6	(1) by striking subsection (a) and inserting the
7	following:
8	"(a) Requirement.—
9	"(1) In General.—The President, acting
10	through the Secretary, shall require that, to the extent
11	economically feasible and technically practicable, of
12	the total quantity of domestic electric energy the Fed-
13	eral Government consumes during any fiscal year, the
14	following percentages shall be renewable energy from
15	facilities placed in service after January 1, 1999:
16	"(A) Not less than 10 percent in fiscal year
17	2010.
18	"(B) Not less than 15 percent in fiscal year
19	2015.
20	"(2) Capitol complex.—The Architect of the
21	Capitol, in consultation with the Secretary, shall en-
22	sure that, of the total quantity of electric energy the
23	Capitol complex consumes during any fiscal year, the
24	percentages prescribed in paragraph (1) shall be re-
25	newable energy.

1	"(3) Waiver authority.—The President may
2	reduce or waive the requirement under paragraph (1)
3	on a fiscal-year basis if the President determines that
4	complying with paragraph (1) for a fiscal year would
5	result in—
6	"(A) a negative impact on military train-
7	ing or readiness activities conducted by the De-
8	partment of Defense;
9	"(B) a negative impact on domestic pre-
10	paredness activities conducted by the Depart-
11	ment of Homeland Security; or
12	"(C) a requirement that a Federal agency
13	provide emergency response services in the event
14	of a natural disaster or terrorist attack."; and
15	(2) by adding at the end the following:
16	"(e) Contracts for Renewable Energy From
17	Public Utility Services.—Notwithstanding section
18	501(b)(1)(B) of title 40, United States Code, a contract for
19	renewable energy may be made for a period of not more
20	than 50 years.".
21	SEC. 263. ENERGY SAVINGS PERFORMANCE CONTRACTS.
22	(a) Retention of Savings.—Section 546(c) of the
23	National Energy Conservation Policy Act (42 U.S.C.
24	8256(c)) is amended by striking paragraph (5).

1	(b) Sunset and Reporting Requirements.—Sec-
2	tion 801 of the National Energy Conservation Policy Act
3	(42 U.S.C. 8287) is amended by striking subsection (c).
4	(c) Definition of Energy Savings.—Section 804(2)
5	of the National Energy Conservation Policy Act (42 U.S.C.
6	8287c(2)) is amended—
7	(1) by redesignating subparagraphs (A), (B),
8	and (C) as clauses (i), (ii), and (iii), respectively,
9	and indenting appropriately;
10	(2) by striking "means a reduction" and insert-
11	ing "means—
12	"(A) a reduction";
13	(3) by striking the period at the end and insert-
14	ing a semicolon; and
15	(4) by adding at the end the following:
16	"(B) the increased efficient use of an exist-
17	ing energy source by cogeneration or heat recov-
18	ery, and installation of renewable energy sys-
19	tems;
20	"(C) if otherwise authorized by Federal or
21	State law (including regulations), the sale or
22	transfer of electrical or thermal energy generated
23	on-site from renewable energy sources or cogen-
24	eration, but in excess of Federal needs, to utili-
25	ties or non-Federal energy users: and

1	"(D) the increased efficient use of existing
2	water sources in interior or exterior applica-
3	tions.".
4	(d) Notification.—
5	(1) Authority to enter into contracts.—
6	Section $801(a)(2)(D)$ of the National Energy Con-
7	servation Policy Act (42 U.S.C. $8287(a)(2)(D)$) is
8	amended—
9	(A) in clause (ii), by inserting "and" after
10	the semicolon at the end;
11	(B) by striking clause (iii); and
12	(C) by redesignating clause (iv) as clause
13	(iii).
14	(2) Reports.—Section 548(a)(2) of the National
15	Energy Conservation Policy Act (42 U.S.C.
16	8258(a)(2)) is amended by inserting "and any termi-
17	nation penalty exposure" after "the energy and cost
18	savings that have resulted from such contracts".
19	(3) Conforming amendment.—Section 2913 of
20	title 10, United States Code, is amended by striking
21	subsection (e).
22	(e) Energy and Cost Savings in Nonbuilding Ap-
23	PLICATIONS.—
24	(1) Definitions.—In this subsection:

1	(A) Nonbuilding application.—The term
2	"nonbuilding application" means—
3	(i) any class of vehicles, devices, or
4	equipment that is transportable under the
5	power of the applicable vehicle, device, or
6	equipment by land, sea, or air and that
7	consumes energy from any fuel source for
8	the purpose of—
9	(I) that transportation; or
10	(II) maintaining a controlled en-
11	vironment within the vehicle, device, or
12	equipment; and
13	(ii) any federally-owned equipment
14	used to generate electricity or transport
15	water.
16	(B) Secondary savings.—
17	(i) In General.—The term "secondary
18	savings" means additional energy or cost
19	savings that are a direct consequence of the
20	energy savings that result from the energy
21	efficiency improvements that were financed
22	and implemented pursuant to an energy
23	savings performance contract.
24	(ii) Inclusions.—The term "sec-
25	ondary savings" includes—

1	(I) energy and cost savings that
2	result from a reduction in the need for
3	fuel delivery and logistical support;
4	(II) personnel cost savings and
5	environmental benefits; and
6	(III) in the case of electric genera-
7	tion equipment, the benefits of in-
8	creased efficiency in the production of
9	electricity, including revenues received
10	by the Federal Government from the
11	sale of electricity so produced.
12	(2) STUDY.—
13	(A) In general.—As soon as practicable
14	after the date of enactment of this Act, the Sec-
15	retary and the Secretary of Defense shall jointly
16	conduct, and submit to Congress and the Presi-
17	dent a report of, a study of the potential for the
18	use of energy savings performance contracts to
19	reduce energy consumption and provide energy
20	and cost savings in nonbuilding applications.
21	(B) Requirements.—The study under this
22	subsection shall include—
23	(i) an estimate of the potential energy
24	and cost savings to the Federal Government,
25	including secondary savings and benefits,

1	from increased efficiency in nonbuilding
2	applications;
3	(ii) an assessment of the feasibility of
4	extending the use of energy savings perform-
5	ance contracts to nonbuilding applications,
6	including an identification of any regu-
7	latory or statutory barriers to such use; and
8	(iii) such recommendations as the Sec-
9	retary and Secretary of Defense determine
10	to be appropriate.
11	SEC. 264. ENERGY MANAGEMENT REQUIREMENTS FOR FED-
12	ERAL BUILDINGS.
13	Section 543(a)(1) of the National Energy Conservation
14	Policy Act (42 U.S.C. 8253(a)(1)) is amended by striking
15	the table and inserting the following:
	"Fiscal Year Percentage reduction
	$egin{array}{cccccccccccccccccccccccccccccccccccc$
16	SEC. 265. COMBINED HEAT AND POWER AND DISTRICT EN-
17	ERGY INSTALLATIONS AT FEDERAL SITES.
1 /	ERGI INSTALLATIONS AT FEDERAL SITES.
1 Q	Section 542 of the National Francy Conservation Del
18	Section 543 of the National Energy Conservation Pol-
181920	Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended by adding at the end the following:

1	"(f) Combined Heat and Power and District En-
2	ERGY INSTALLATIONS AT FEDERAL SITES.—
3	"(1) In general.—Not later than 18 months
4	after the date of enactment of this subsection, the Sec-
5	retary, in consultation with the Administrator of
6	General Services and the Secretary of Defense, shall
7	identify Federal sites that could achieve significant
8	cost-effective energy savings through the use of com-
9	bined heat and power or district energy installations.
10	"(2) Information and technical assist-
11	ANCE.—The Secretary shall provide agencies with in-
12	formation and technical assistance that will enable
13	the agencies to take advantage of the energy savings
14	described in paragraph (1).
15	"(3) Energy performance requirements.—
16	Any energy savings from the installations described
17	in paragraph (1) may be applied to meet the energy
18	performance requirements for an agency under sub-
19	section $(a)(1)$.".
20	SEC. 266. FEDERAL BUILDING ENERGY EFFICIENCY PER-
21	FORMANCE STANDARDS.
22	Section $305(a)(3)(A)$ of the Energy Conservation and
23	Production Act (42 U.S.C. 6834(a)(3)(A)) is amended—

1	(1) in	the matter preceding clause (i), by strik-
2	ing "this p	paragraph" and by inserting "the Energy
3	Efficiency 1	Promotion Act of 2007"; and
4	(2) in	clause (i)—
5	(A	1) in subclause (I), by striking "and" at
6	the end	l;
7	(1	B) by redesignating subclause (II) as sub-
8	clause	(III); and
9	((C) by inserting after subclause (I) the fol-
10	lowing	:
11	"	(II) the buildings be designed, to the extent
12	econon	nically feasible and technically practicable,
13	so that	t the fossil fuel-generated energy consump-
14	tion o	f the buildings is reduced, as compared
15	with th	he fossil fuel-generated energy consumption
16	by a	similar Federal building in fiscal year
17	2003	(as measured by Commercial Buildings
18	Energy	y Consumption Survey or Residential En-
19	ergy C	Consumption Survey data from the Energy
20	Inform	nation Agency), by the percentage specified
21	in the	following table:
	"Fiscal Year	Percentage reduction
	2020	
22	and".	

1	SEC. 267. APPLICATION OF INTERNATIONAL ENERGY CON-
2	SERVATION CODE TO PUBLIC AND ASSISTED
3	HOUSING.
4	Section 109 of the Cranston-Gonzalez National Afford-
5	able Housing Act (42 U.S.C. 12709) is amended—
6	(1) in subsection (a)(1)(C), by striking, ", where
7	such standards are determined to be cost effective by
8	the Secretary of Housing and Urban Development";
9	(2) in subsection $(a)(2)$ —
10	(A) by striking "the Council of American
11	Building Officials Model Energy Code, 1992"
12	and inserting "2006 International Energy Con-
13	servation Code"; and
14	(B) by striking ", and, with respect to reha-
15	bilitation and new construction of public and as-
16	sisted housing funded by HOPE VI revitaliza-
17	tion grants under section 24 of the United States
18	Housing Act of 1937 (42 U.S.C. 1437v), the 2003
19	$International\ Energy\ Conservation\ Code";$
20	(3) in subsection (b)—
21	(A) in the heading, by striking "Model
22	Energy Code.—" and inserting "Inter-
23	NATIONAL ENERGY CONSERVATION CODE.—";
24	(B) after "all new construction" in the first
25	sentence insert "and rehabilitation": and

1	(C) by striking ", and, with respect to reha-
2	bilitation and new construction of public and as-
3	sisted housing funded by HOPE VI revitaliza-
4	tion grants under section 24 of the United States
5	Housing Act of 1937 (42 U.S.C. 1437v), the 2003
6	$International\ Energy\ Conservation\ Code";$
7	(4) in subsection (c)—
8	(A) in the heading, by striking "Model
9	Energy Code and"; and
10	(B) by striking ", or, with respect to reha-
11	bilitation and new construction of public and as-
12	sisted housing funded by HOPE VI revitaliza-
13	tion grants under section 24 of the United States
14	Housing Act of 1937 (42 U.S.C. 1437v), the 2003
15	International Energy Conservation Code";
16	(5) by adding at the end the following:
17	"(d) Failure To Amend the Standards.—If the
18	Secretaries have not, within 1 year after the requirements
19	of the 2006 IECC or the ASHRAE Standard 90.1–2004 are
20	revised, amended the standards or made a determination
21	under subsection (c) of this section, the Secretary of Hous-
22	ing and Urban Development or the Secretary of Agriculture
23	make a determination that the revised codes do not nega-
24	tively affect the availability or affordability of new con-
25	struction of assisted housing and single family and multi-

1	family residential housing (other than manufactured
2	homes) subject to mortgages insured under the National
3	Housing Act (12 U.S.C. 1701 et seq.) or insured, guaran-
4	teed, or made by the Secretary of Agriculture under title
5	V of the Housing Act of 1949 (42 U.S.C. 1471 et seq.), re-
6	spectively, and the Secretary of Energy has made a deter-
7	mination under section 304 of the Energy Conservation and
8	Production Act (42 U.S.C. 6833) that the revised code or
9	standard would improve energy efficiency, all new construc-
10	tion and rehabilitation of housing specified in subsection
11	(a) shall meet the requirements of the revised code or stand-
12	ard.";
13	(6) by striking "CABO Model Energy Code,
14	1992" each place it appears and inserting "the 2006
15	IECC"; and
16	(7) by striking "1989" each place it appears and
17	inserting "2004".
18	SEC. 268. ENERGY EFFICIENT COMMERCIAL BUILDINGS INI-
19	TIATIVE.
20	(a) Definitions.—In this section:
21	(1) Consortium.—The term "consortium"
22	means a working group that is comprised of—
23	(A) individuals representing—
24	(i) 1 or more businesses engaged in—

1	(I) commercial building develop-
2	ment;
3	$(II)\ construction;\ or$
4	$(III)\ real\ estate;$
5	$(ii)\ financial\ institutions;$
6	(iii) academic or research institutions;
7	(iv) State or utility energy efficiency
8	programs;
9	(v) nongovernmental energy efficiency
10	organizations; and
11	(vi) the Federal Government;
12	(B) 1 or more building designers; and
13	(C) 1 or more individuals who own or oper-
14	ate 1 or more buildings.
15	(2) Energy efficient commercial build-
16	ING.—The term "energy efficient commercial build-
17	ing" means a commercial building that is designed,
18	constructed, and operated—
19	(A) to require a greatly reduced quantity of
20	energy;
21	(B) to meet, on an annual basis, the bal-
22	ance of energy needs of the commercial building
23	from renewable sources of energy; and
24	(C) to be economically viable.

1	(3) Initiative.—The term "initiative" means
2	the Energy Efficient Commercial Buildings Initia-
3	tive.
4	(b) Initiative.—
5	(1) In general.—The Secretary shall enter into
6	an agreement with the consortium to develop and
7	carry out the initiative—
8	(A) to reduce the quantity of energy con-
9	sumed by commercial buildings located in the
10	United States; and
11	(B) to achieve the development of energy ef-
12	ficient commercial buildings in the United
13	States.
14	(2) Goal of initiative.—The goal of the initia-
15	tive shall be to develop technologies and practices and
16	implement policies that lead to energy efficient com-
17	mercial buildings for—
18	(A) any commercial building newly con-
19	structed in the United States by 2030;
20	(B) 50 percent of the commercial building
21	stock of the United States by 2040; and
22	(C) all commercial buildings in the United
23	States by 2050.

1	(3) Components.—In carrying out the initia-
2	tive, the Secretary, in collaboration with the consor-
3	tium, may—
4	(A) conduct research and development on
5	building design, materials, equipment and con-
6	trols, operation and other practices, integration,
7	energy use measurement and benchmarking, and
8	policies;
9	(B) conduct demonstration projects to
10	evaluate replicable approaches to achieving en-
11	ergy efficient commercial buildings for a variety
12	of building types in a variety of climate zones;
13	(C) conduct deployment activities to dis-
14	seminate information on, and encourage wide-
15	spread adoption of, technologies, practices, and
16	policies to achieve energy efficient commercial
17	buildings; and
18	(D) conduct any other activity necessary to
19	achieve any goal of the initiative, as determined
20	by the Secretary, in collaboration with the con-
21	sortium.
22	(c) Authorization of Appropriations.—
23	(1) In General.—There are authorized to be ap-
24	propriated such sums as are necessary to carry out
25	this section.

1	(2) Addition to
2	amounts authorized to be appropriated under para-
3	graph (1), the Secretary may allocate funds from
4	other appropriations to the initiative without chang-
5	ing the purpose for which the funds are appropriated.
6	SEC. 269. CLEAN ENERGY CORRIDORS.
7	Section 216 of the Federal Power Act (16 U.S.C. 824p)
8	is amended—
9	(1) in subsection (a)—
0	(A) by striking "(1) Not later than" and in-
11	serting the following:
12	"(1) In general.—Not later than";
13	(B) by striking paragraph (2) and inserting
14	$the\ following:$
15	"(2) Report and designations.—
16	"(A) In general.—After considering alter-
17	natives and recommendations from interested
18	parties (including an opportunity for comment
19	from affected States), the Secretary shall issue a
20	report, based on the study conducted under para-
21	graph (1), in which the Secretary may designate
22	as a national interest electric transmission cor-
23	ridor any geographic area experiencing electric
24	energy transmission capacity constraints or con-

1	gestion that adversely affects consumers, includ-
2	ing constraints or congestion that—
3	"(i) increases costs to consumers;
4	"(ii) limits resource options to serve
5	load growth; or
6	"(iii) limits access to sources of clean
7	energy, such as wind, solar energy, geo-
8	thermal energy, and biomass.
9	"(B) Additional designations.—In addi-
10	tion to the corridor designations made under
11	subparagraph (A), the Secretary may designate
12	additional corridors in accordance with that sub-
13	paragraph upon the application by an interested
14	person, on the condition that the Secretary pro-
15	vides for an opportunity for notice and comment
16	by interested persons and affected States on the
17	application.";
18	(C) in paragraph (3), the striking "(3) The
19	Secretary" and inserting the following:
20	"(3) Consultation.—The Secretary"; and
21	(D) in paragraph (4)—
22	(i) by striking "(4) In determining"
23	and inserting the following:
24	"(4) Basis for determination.—In deter-
25	mining"; and

1	(ii) by striking subparagraphs (A)
2	through (E) and inserting the following:
3	"(A) the economic vitality and development
4	of the corridor, or the end markets served by the
5	corridor, may be constrained by lack of adequate
6	or reasonably priced electricity;
7	"(B)(i) economic growth in the corridor, or
8	the end markets served by the corridor, may be
9	jeopardized by reliance on limited sources of en-
10	ergy; and
11	"(ii) a diversification of supply is war-
12	ranted;
13	"(C) the energy independence of the United
14	States would be served by the designation;
15	"(D) the designation would be in the inter-
16	est of national energy policy; and
17	"(E) the designation would enhance na-
18	tional defense and homeland security."; and
19	(2) by adding at the end the following:
20	"(1) Rates and Recovery of Costs.—
21	"(1) In general.—Not later than 1 year after
22	the date of enactment of this subsection, the Commis-
23	sion shall promulgate regulations providing for the
24	allocation and recovery of costs prudently incurred by
25	public utilities in building and operating facilities

1	authorized under this section for transmission of elec-
2	tric energy generated from clean sources (such as
3	wind, solar energy, geothermal energy, and biomass).
4	"(2) Applicable provisions.—All rates ap-
5	proved under the regulations promulgated under
6	paragraph (1), including any revisions to the regula-
7	tions, shall be subject to the requirements under sec-
8	tions 205 and 206 that all rates, charges, terms, and
9	conditions be just and reasonable and not unduly dis-
10	criminatory or preferential.".
11	SEC. 270. FEDERAL STANDBY POWER STANDARD.
12	(a) Definitions.—In this section:
13	(1) AGENCY.—
14	(A) In general.—The term "Agency" has
15	the meaning given the term "Executive agency"
16	in section 105 of title 5, United States Code.
17	(B) Inclusions.—The term "Agency" in-
18	cludes military departments, as the term is de-
19	fined in section 102 of title 5, United States
20	Code.
21	(2) Eligible Product.—The term "eligible
22	product" means a commercially available, off-the-shelf
23	product that—
24	(A)(i) uses external standby power devices;
25	or

1	(ii) contains an internal standby power
2	function; and
3	(B) is included on the list compiled under
4	subsection (d).
5	(b) Federal Purchasing Requirement.—Subject
6	to subsection (c), if an Agency purchases an eligible prod-
7	uct, the Agency shall purchase—
8	(1) an eligible product that uses not more than
9	1 watt in the standby power consuming mode of the
10	eligible product; or
11	(2) if an eligible product described in paragraph
12	(1) is not available, the eligible product with the low-
13	est available standby power wattage in the standby
14	power consuming mode of the eligible product.
15	(c) Limitation.—The requirements of subsection (b)
16	shall apply to a purchase by an Agency only if—
17	(1) the lower-wattage eligible product is—
18	(A) lifecycle cost-effective; and
19	(B) practicable; and
20	(2) the utility and performance of the eligible
21	product is not compromised by the lower wattage re-
22	quirement.
23	(d) Eligible Products.—The Secretary of Energy,
24	in consultation with the Secretary of Defense, the Adminis-
25	trator of the Environmental Protection Agency, and the Ad-

1	ministrator of General Services, shall compile a publicly
2	accessible list of cost-effective eligible products that shall be
3	subject to the purchasing requirements of subsection (b).
4	SEC. 270A. STANDARD RELATING TO SOLAR HOT WATER
5	HEATERS.
6	Section 305(a)(3)(A) of the Energy Conservation and
7	Production Act (42 U.S.C. 6834(a)(3)(A)) (as amended by
8	section 266) is amended—
9	(1) in clause (i)(III), by striking "and" at the
10	end;
11	(2) in clause (ii), by striking the period at the
12	end and inserting "; and"; and
13	(3) by adding at the end the following:
14	"(iii) if life-cycle cost-effective, as com-
15	pared to other reasonably available tech-
16	nologies, not less than 30 percent of the hot
17	water demand for each new or substantially
18	modified Federal building be met through
19	the installation and use of solar hot water
20	heaters.".
21	SEC. 270B. RENEWABLE ENERGY INNOVATION MANUFAC-
22	TURING PARTNERSHIP.
23	(a) Establishment.—The Secretary shall carry out
24	a program, to be known as the Renewable Energy Innova-
25	tion Manufacturing Partnership Program (referred to in

1	this section as the "Program"), to make assistance awards
2	to eligible entities for use in carrying out research, develop-
3	ment, and demonstration relating to the manufacturing of
4	renewable energy technologies.
5	(b) Solicitation.—To carry out the Program, the
6	Secretary shall annually conduct a competitive solicitation
7	for assistance awards for an eligible project described in
8	subsection (e).
9	(c) Program Purposes.—The purposes of the Pro-
10	gram are—
11	(1) to develop, or aid in the development of, ad-
12	vanced manufacturing processes, materials, and in-
13	frastructure;
14	(2) to increase the domestic production of renew-
15	able energy technology and components; and
16	(3) to better coordinate Federal, State, and pri-
17	vate resources to meet regional and national renew-
18	able energy goals through advanced manufacturing
19	partnerships.
20	(d) Eligible Entities.—An entity shall be eligible
21	to receive an assistance award under the Program to carry
22	out an eligible project described in subsection (e) if the enti-
23	ty is composed of—
24	(1) 1 or more public or private nonprofit institu-
25	tions or national laboratories engaged in research, de-

1	velopment, demonstration, or technology transfer, that
2	would participate substantially in the project; and
3	(2) 1 or more private entities engaged in the
4	manufacturing or development of renewable energy
5	system components (including solar energy, wind en-
6	ergy, biomass, geothermal energy, energy storage, or
7	fuel cells).
8	(e) Eligible Projects.—An eligible entity may use
9	an assistance award provided under this section to carry
10	out a project relating to—
11	(1) the conduct of studies of market opportunities
12	for component manufacturing of renewable energy
13	systems;
14	(2) the conduct of multiyear applied research,
15	development, demonstration, and deployment projects
16	for advanced manufacturing processes, materials, and
17	infrastructure for renewable energy systems; and
18	(3) other similar ventures, as approved by the
19	Secretary, that promote advanced manufacturing of
20	$renewable\ technologies.$
21	(f) Criteria and Guidelines.—The Secretary shall
22	establish criteria and guidelines for the submission, evalua-
23	tion, and funding of proposed projects under the Program.

1	(g) 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	(h) Disclosure.—Section 623 of the Energy Policy
5	Act of 1992 (42 U.S.C. 13293) shall apply to a project car-
6	ried out under this subsection.
7	(i) Sense of the Senate.—It is the sense of the Sen-
8	ate that the Secretary should ensure that small businesses
9	engaged in renewable manufacturing be considered for loan
10	guarantees authorized under title XVII of the Energy Policy
11	Act of 2005 (42 U.S.C. 16511 et seq.).
12	(j) Authorization of Appropriations.—There is
13	authorized to be appropriated out of funds already author-
14	ized to carry out this section \$25,000,000 for each of fiscal
15	years 2008 through 2013, to remain available until ex-
16	pended.
17	SEC. 270C. EXPRESS LOANS FOR RENEWABLE ENERGY AND
18	ENERGY EFFICIENCY.
19	Section 7(a)(31) of the Small Business Act (15 U.S.C.
20	636(a)(31)) is amended by adding at the end the following:
21	"(F) Express loans for renewable en-
22	ERGY AND ENERGY EFFICIENCY.—
23	"(i) Definitions.—In this
24	subparagraph—
25	"(I) the term biomass'—

1	"(aa) means any organic
2	material that is available on a re-
3	newable or recurring basis,
4	including—
5	``(AA) agricultural
6	crops;
7	"(BB) trees grown for
8	energy production;
9	"(CC) wood waste and
10	$wood\ residues;$
11	"(DD) plants (including
12	aquatic plants and grasses);
13	"(EE) residues;
14	$``(FF)\ fibers;$
15	``(GG) animal wastes
16	and other waste materials;
17	and
18	"(HH) fats, oils, and
19	greases (including recycled
20	fats, oils, and greases); and
21	"(bb) does not include—
22	"(AA) paper that is
23	commonly recycled; or
24	``(BB) unsegregated
25	$solid\ waste;$

1	"(II) the term 'energy efficiency
2	project' means the installation or up-
3	grading of equipment that results in a
4	significant reduction in energy usage;
5	and
6	"(III) the term 'renewable energy
7	system' means a system of energy de-
8	rived from—
9	"(aa) a wind, solar, biomass
10	(including biodiesel), or geo-
11	thermal source; or
12	"(bb) hydrogen derived from
13	biomass or water using an energy
14	source described in item (aa).
15	"(ii) Loans.—Loans may be made
16	under the 'Express Loan Program' for the
17	purpose of—
18	"(I) purchasing a renewable en-
19	ergy system; or
20	"(II) an energy efficiency project
21	for an existing business.".
22	SEC. 270D. SMALL BUSINESS ENERGY EFFICIENCY.
23	(a) DEFINITIONS.—In this section—

- (1) the terms "Administration" and "Adminis trator" mean the Small Business Administration and
 the Administrator thereof, respectively;
 - (2) the term "association" means the association of small business development centers established under section 21(a)(3)(A) of the Small Business Act (15 U.S.C. 648(a)(3)(A));
 - (3) the term "disability" has the meaning given that term in section 3 of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102);
 - (4) the term "electric utility" has the meaning given that term in section 3 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2602);
 - (5) the term "on-bill financing" means a low interest or no interest financing agreement between a small business concern and an electric utility for the purchase or installation of equipment, under which the regularly scheduled payment of that small business concern to that electric utility is not reduced by the amount of the reduction in cost attributable to the new equipment and that amount is credited to the electric utility, until the cost of the purchase or installation is repaid;

1	(6) the term "small business concern" has the
2	meaning given that term in section 3 of the Small
3	Business Act (15 U.S.C. 636);
4	(7) the term "small business development center"
5	means a small business development center described
6	in section 21 of the Small Business Act (15 U.S.C.
7	648);
8	(8) the term "telecommuting" means the use of
9	telecommunications to perform work functions under
10	circumstances which reduce or eliminate the need to
11	commute; and
12	(9) the term "veteran" has the meaning given
13	that term in section 101 of title 38, United States
14	Code.
15	(b) Implementation of Small Business Energy
16	Efficiency Program.—
17	(1) In general.—Not later than 90 days after
18	the date of enactment of this Act, the Administrator
19	shall promulgate final rules establishing the Govern-
20	ment-wide program authorized under subsection (d)
21	of section 337 of the Energy Policy and Conservation
22	Act (42 U.S.C. 6307) that ensure compliance with
23	that subsection by not later than 6 months after such
24	$date\ of\ enactment.$

1	(2) PLAN.—Not later than 90 days after the date
2	of enactment of this Act, the Administrator shall pub-
3	lish a detailed plan regarding how the Administrator
4	will—
5	(A) assist small business concerns in becom-
6	ing more energy efficient; and
7	(B) build on the Energy Star for Small
8	Business Program of the Department of Energy
9	and the Environmental Protection Agency.
10	(3) Assistant administrator for small
11	BUSINESS ENERGY POLICY.—
12	(A) In General.—There is in the Adminis-
13	tration an Assistant Administrator for Small
14	Business Energy Policy, who shall be appointed
15	by, and report to, the Administrator.
16	(B) Duties.—The Assistant Administrator
17	for Small Business Energy Policy shall—
18	(i) oversee and administer the require-
19	ments under this subsection and section
20	337(d) of the Energy Policy and Conserva-
21	tion Act (42 U.S.C. 6307(d)); and
22	(ii) promote energy efficiency efforts
23	for small business concerns and reduce en-
24	ergy costs of small business concerns.

1	(4) Reports.—The Administrator shall submit
2	to the Committee on Small Business and Entrepre-
3	neurship of the Senate and the Committee on Small
4	Business of the House of Representatives an annual
5	report on the progress of the Administrator in encour-
6	aging small business concerns to become more energy
7	efficient, including data on the rate of use of the
8	Small Business Energy Clearinghouse established
9	under section 337(d)(4) of the Energy Policy and
10	Conservation Act (42 U.S.C. $6307(d)(4)$).
11	(c) Small Business Energy Efficiency.—
12	(1) Authority.—The Administrator shall estab-
13	lish a Small Business Energy Efficiency Pilot Pro-
14	gram (in this subsection referred to as the "Efficiency
15	Pilot Program") to provide energy efficiency assist-
16	ance to small business concerns through small busi-
17	ness development centers.
18	(2) Small business development centers.—
19	(A) In general.—In carrying out the Effi-
20	ciency Pilot Program, the Administrator shall
21	enter into agreements with small business devel-
22	opment centers under which such centers shall—
23	(i) provide access to information and
24	resources on energy efficiency practices, in-
25	cluding on-bill financing options:

1	(ii) conduct training and educational
2	activities;
3	(iii) offer confidential, free, one-on-one,
4	in-depth energy audits to the owners and
5	operators of small business concerns regard-
6	ing energy efficiency practices;
7	(iv) give referrals to certified profes-
8	sionals and other providers of energy effi-
9	ciency assistance who meet such standards
10	for educational, technical, and professional
11	competency as the Administrator shall es-
12	tablish; and
13	(v) act as a facilitator between small
14	business concerns, electric utilities, lenders,
15	and the Administration to facilitate on-bill
16	financing arrangements.
17	(B) Reports.—Each small business devel-
18	opment center participating in the Efficiency
19	Pilot Program shall submit to the Administrator
20	and the Administrator of the Environmental
21	Protection Agency an annual report that
22	includes—
23	(i) a summary of the energy efficiency
24	assistance provided by that center under the
25	Efficiency Pilot Program;

1	(ii) the number of small business con-
2	cerns assisted by that center under the Effi-
3	ciency Pilot Program;
4	(iii) statistics on the total amount of
5	energy saved as a result of assistance pro-
6	vided by that center under the Efficiency
7	Pilot Program; and
8	(iv) any additional information deter-
9	mined necessary by the Administrator, in
10	consultation with the association.
11	(C) Reports to congress.—Not later
12	than 60 days after the date on which all reports
13	under subparagraph (B) relating to a year are
14	submitted, the Administrator shall submit to the
15	Committee on Small Business and Entrepreneur-
16	ship of the Senate and the Committee on Small
17	Business of the House of Representatives a report
18	summarizing the information regarding the Effi-
19	ciency Pilot Program submitted by small busi-
20	ness development centers participating in that
21	program.
22	(3) Eligibility.—A small business development
23	center shall be eligible to participate in the Efficiency
24	Pilot Program only if that center is certified under

1	section 21(k)(2) of the Small Business Act (15 U.S.C.
2	648(k)(2)).
3	(4) Selection of participating state pro-
4	GRAMS.—
5	(A) Groupings.—
6	(i) Selection of programs.—The
7	Administrator shall select the small business
8	development center programs of 2 States
9	from each of the groupings of States de-
10	scribed in clauses (ii) through (xi) to par-
11	ticipate in the pilot program established
12	under this subsection.
13	(ii) Group 1.—Group 1 shall consist
14	of Maine, Massachusetts, New Hampshire,
15	Connecticut, Vermont, and Rhode Island.
16	(iii) Group 2.—Group 2 shall consist
17	of New York, New Jersey, Puerto Rico, and
18	the Virgin Islands.
19	(iv) Group 3.—Group 3 shall consist
20	of Pennsylvania, Maryland, West Virginia,
21	Virginia, the District of Columbia, and
22	De laware.
23	(v) Group 4.—Group 4 shall consist of
24	Georgia Alabama North Carolina South

1	Carolina, Mississippi, Florida, Kentucky,
2	and Tennessee.
3	(vi) Group 5.—Group 5 shall consist
4	of Illinois, Ohio, Michigan, Indiana, Wis-
5	consin, and Minnesota.
6	(vii) Group 6.—Group 6 shall consist
7	of Texas, New Mexico, Arkansas, Oklahoma,
8	and Louisiana.
9	(viii) Group 7.—Group 7 shall consist
10	of Missouri, Iowa, Nebraska, and Kansas.
11	(ix) Group 8.—Group 8 shall consist
12	of Colorado, Wyoming, North Dakota, South
13	Dakota, Montana, and Utah.
14	(x) Group 9.—Group 9 shall consist of
15	California, Guam, American Samoa, Ha-
16	waii, Nevada, and Arizona.
17	(xi) Group 10.—Group 10 shall con-
18	sist of Washington, Alaska, Idaho, and Or-
19	egon.
20	(5) Matching requirement.—Subparagraphs
21	(A) and (B) of section 21(a)(4) of the Small Business
22	Act (15 U.S.C. $648(a)(4)$) shall apply to assistance
23	made available under the Efficiency Pilot Program.
24	(6) Grant amounts.—Each small business de-
25	velopment center selected to participate in the Effi-

1	ciency Pilot Program under paragraph (4) shall be
2	eligible to receive a grant in an amount equal to—
3	(A) not less than \$100,000 in each fiscal
4	year; and
5	(B) not more than \$300,000 in each fiscal
6	year.
7	(7) Evaluation and report.—The Comptroller
8	General of the United States shall—
9	(A) not later than 30 months after the date
10	of disbursement of the first grant under the Effi-
11	ciency Pilot Program, initiate an evaluation of
12	that pilot program; and
13	(B) not later than 6 months after the date
14	of the initiation of the evaluation under sub-
15	paragraph (A), submit to the Administrator, the
16	Committee on Small Business and Entrepreneur-
17	ship of the Senate, and the Committee on Small
18	Business of the House of Representatives, a re-
19	port containing—
20	(i) the results of the evaluation; and
21	(ii) any recommendations regarding
22	whether the Efficiency Pilot Program, with
23	or without modification, should be extended
24	to include the participation of all small
25	business development centers.

1	(8) Guarantee.—The Administrator may guar-
2	antee the timely payment of a loan made to a small
3	business concern through an on-bill financing agree-
4	ment on such terms and conditions as the Adminis-
5	trator shall establish through a formal rule making,
6	after providing notice and an opportunity for com-
7	ment.
8	(9) Authorization of Appropriations.—
9	(A) In general.—There are authorized to
10	be appropriated from such sums as are already
11	authorized under section 21 of the Small Busi-
12	ness Act to carry out this subsection—
13	(i) \$5,000,000 for the first fiscal year
14	beginning after the date of enactment of this
15	Act; and
16	(ii) \$5,000,000 for each of the 3 fiscal
17	years following the fiscal year described in
18	clause (i).
19	(B) Limitation on use of other
20	FUNDS.—The Administrator may carry out the
21	Efficiency Pilot Program only with amounts ap-
22	propriated in advance specifically to carry out
23	this subsection.
24	(10) Termination.—The authority under this
25	subsection shall terminate 4 years after the date of

1	disbursement of the first grant under the Efficiency
2	Pilot Program.
3	(d) Small Business Telecommuting.—
4	(1) Pilot program.—
5	(A) In General.—In accordance with this
6	subsection, the Administrator shall conduct, in
7	not more than 5 of the regions of the Adminis-
8	tration, a pilot program to provide information
9	regarding telecommuting to employers that are
10	small business concerns and to encourage such
11	employers to offer telecommuting options to em-
12	ployees (in this subsection referred to as the
13	"Telecommuting Pilot Program").
14	(B) Special outreach to individuals
15	WITH DISABILITIES.—In carrying out the Tele-
16	commuting Pilot Program, the Administrator
17	shall make a concerted effort to provide informa-
18	tion to—
19	(i) small business concerns owned by
20	or employing individuals with disabilities,
21	particularly veterans who are individuals
22	$with \ disabilities;$
23	(ii) Federal, State, and local agencies
24	having knowledge and expertise in assisting
25	individuals with disabilities including vet-

1	erans who are individuals with disabilities;
2	and
3	(iii) any group or organization, the
4	primary purpose of which is to aid individ-
5	uals with disabilities or veterans who are
6	individuals with disabilities.
7	(C) Permissible activities.—In carrying
8	out the Telecommuting Pilot Program, the Ad-
9	ministrator may—
10	(i) produce educational materials and
11	conduct presentations designed to raise
12	awareness in the small business community
13	of the benefits and the ease of telecom-
14	muting;
15	(ii) conduct outreach—
16	(I) to small business concerns that
17	are considering offering telecommuting
18	options; and
19	(II) as provided in subparagraph
20	(B); and
21	(iii) acquire telecommuting tech-
22	nologies and equipment to be used for dem-
23	onstration purposes.
24	(D) Selection of regions.—In deter-
25	mining which regions will participate in the

- Telecommuting Pilot Program, the Administrator shall give priority consideration to regions in which Federal agencies and private-sector employers have demonstrated a strong regional commitment to telecommuting.
- (2) Report to congress.—Not later than 2 6 7 years after the date on which funds are first appro-8 priated to carry out this subsection, the Adminis-9 trator shall transmit to the Committee on Small 10 Business and Entrepreneurship of the Senate and the 11 Committee on Small Business of the House of Rep-12 resentatives a report containing the results of an eval-13 uation of the Telecommuting Pilot Program and any 14 recommendations regarding whether the pilot pro-15 gram, with or without modification, should be ex-16 tended to include the participation of all regions of 17 the Administration.
 - (3) TERMINATION.—The Telecommuting Pilot Program shall terminate 4 years after the date on which funds are first appropriated to carry out this subsection.
 - (4) Authorization of Appropriations.—

 There is authorized to be appropriated to the Administration \$5,000,000 to carry out this subsection.

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1	(e) Encouraging Innovation in Energy Effi-
2	CIENCY.—Section 9 of the Small Business Act (15 U.S.C.
3	638) is amended by adding at the end the following:
4	"(z) Encouraging Innovation in Energy Effi-
5	CIENCY.—
6	"(1) FEDERAL AGENCY ENERGY-RELATED PRI-
7	ORITY.—In carrying out its duties under this section
8	to SBIR and STTR solicitations by Federal agencies,
9	the Administrator shall—
10	"(A) ensure that such agencies give high
11	priority to small business concerns that partici-
12	pate in or conduct energy efficiency or renewable
13	energy system research and development projects;
14	and
15	"(B) include in the annual report to Con-
16	gress under subsection (b)(7) a determination of
17	whether the priority described in subparagraph
18	(A) is being carried out.
19	"(2) Consultation required.—The Adminis-
20	trator shall consult with the heads of other Federal
21	agencies and departments in determining whether
22	priority has been given to small business concerns
23	that participate in or conduct energy efficiency or re-
24	newable energy system research and development
25	projects, as required by this section.

1	"(3) Guidelines.—The Administrator shall, as
2	soon as is practicable after the date of enactment of
3	this subsection, issue guidelines and directives to as-
4	sist Federal agencies in meeting the requirements of
5	this section.
6	"(4) Definitions.—In this subsection—
7	"(A) the term biomass'—
8	"(i) means any organic material that
9	is available on a renewable or recurring
10	basis, including—
11	$``(I)\ agricultural\ crops;$
12	"(II) trees grown for energy pro-
13	duction;
14	"(III) wood waste and wood resi-
15	dues;
16	"(IV) plants (including aquatic
17	plants and grasses);
18	"(V) residues;
19	"(VI) fibers;
20	"(VII) animal wastes and other
21	waste materials; and
22	"(VIII) fats, oils, and greases (in-
23	cluding recycled fats, oils, and greases);
24	and
25	"(ii) does not include—

1	"(I) paper that is commonly recy-
2	$cled;\ or$
3	"(II) unsegregated solid waste;
4	"(B) the term 'energy efficiency project'
5	means the installation or upgrading of equip-
6	ment that results in a significant reduction in
7	energy usage; and
8	"(C) the term 'renewable energy system'
9	means a system of energy derived from—
10	"(i) a wind, solar, biomass (including
11	biodiesel), or geothermal source; or
12	"(ii) hydrogen derived from biomass or
13	water using an energy source described in
14	clause (i).".
15	Subtitle F-Assisting State and
16	Local Governments in Energy Ef-
17	ficiency
18	SEC. 271. WEATHERIZATION ASSISTANCE FOR LOW-INCOME
19	PERSONS.
20	Section 422 of the Energy Conservation and Produc-
21	tion Act (42 U.S.C. 6872) is amended by striking
22	"\$700,000,000 for fiscal year 2008" and inserting
23	"\$750,000,000 for each of fiscal years 2008 through 2012".

1	SEC. 272. STATE ENERGY CONSERVATION PLANS.
2	Section 365(f) of the Energy Policy and Conservation
3	Act (42 U.S.C. 6325(f)) is amended by striking "fiscal year
4	2008" and inserting "each of fiscal years 2008 through
5	2012".
6	SEC. 273. UTILITY ENERGY EFFICIENCY PROGRAMS.
7	(a) Electric Utilities.—Section 111(d) of the Pub-
8	lic Utility Regulatory Policies Act of 1978 (16 U.S.C.
9	2621(d)) is amended by adding at the end the following:
10	"(16) Integrated resource planning.—Each
11	electric utility shall—
12	"(A) integrate energy efficiency resources
13	into utility, State, and regional plans; and
14	"(B) adopt policies establishing cost-effective
15	energy efficiency as a priority resource.
16	"(17) Rate design modifications to pro-
17	MOTE ENERGY EFFICIENCY INVESTMENTS.—
18	"(A) In General.—The rates allowed to be
19	charged by any electric utility shall—
20	"(i) align utility incentives with the
21	delivery of cost-effective energy efficiency;
22	and
23	"(ii) promote energy efficiency invest-
24	ments.
25	"(B) Policy options.—In complying with
26	subparagraph (A), each State regulatory author-

1	ity and each nonregulated utility shall
2	consider—
3	"(i) removing the throughput incentive
4	and other regulatory and management dis-
5	incentives to energy efficiency;
6	"(ii) providing utility incentives for
7	the successful management of energy effi-
8	ciency programs;
9	"(iii) including the impact on adop-
10	tion of energy efficiency as 1 of the goals of
11	retail rate design, recognizing that energy
12	efficiency must be balanced with other objec-
13	tives;
14	"(iv) adopting rate designs that en-
15	courage energy efficiency for each customer
16	class; and
17	"(v) allowing timely recovery of energy
18	efficiency-related costs.".
19	(b) Natural Gas Utilities.—Section 303(b) of the
20	Public Utility Regulatory Policies Act of 1978 (16 U.S.C.
21	3203(b)) is amended by adding at the end the following:
22	"(5) Energy efficiency.—Each natural gas
23	utility shall—

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

1	"(iii) promoting the impact on adop-
2	tion of energy efficiency as 1 of the goals of
3	retail rate design, recognizing that energy
4	efficiency must be balanced with other objec-
5	tives; and
6	"(iv) adopting rate designs that en-
7	courage energy efficiency for each customer
8	class.".
9	SEC. 274. ENERGY EFFICIENCY AND DEMAND RESPONSE
10	PROGRAM ASSISTANCE.
11	The Secretary shall provide technical assistance re-
12	garding the design and implementation of the energy effi-
13	ciency and demand response programs established under
14	this title, and the amendments made by this title, to State
15	energy offices, public utility regulatory commissions, and
16	nonregulated utilities through the appropriate national lab-
17	$or atories\ of\ the\ Department\ of\ Energy.$
18	SEC. 275. ENERGY AND ENVIRONMENTAL BLOCK GRANT.
19	Title I of the Housing and Community Development
20	Act of 1974 (42 U.S.C. 5301 et seq.) is amended by adding
21	at the end the following:
22	"SEC. 123. ENERGY AND ENVIRONMENTAL BLOCK GRANT.
23	"(a) Definitions.—In this section
24	"(1) Eligible enti-
25	ty' means—

1	"(A) a State;
2	"(B) an eligible unit of local government
3	within a State; and
4	"(C) an Indian tribe.
5	"(2) Eligible unit of local government.—
6	The term 'eligible unit of local government' means—
7	"(A) a city with a population—
8	"(i) of at least 35,000; or
9	"(ii) that causes the city to be 1 of the
10	top 10 most populous cities of the State in
11	which the city is located; and
12	"(B) a county with a population—
13	"(i) of at least 200,000; or
14	"(ii) that causes the county to be 1 of
15	the top 10 most populous counties of the
16	State in which the county is located.
17	"(3) Secretary.—The term 'Secretary' means
18	the Secretary of Energy.
19	"(4) State.—The term 'State' means—
20	"(A) a State;
21	"(B) the District of Columbia;
22	"(C) the Commonwealth of Puerto Rico; and
23	"(D) any other territory or possession of the
24	United States.

1	"(b) Purpose.—The purpose of this section is to assist
2	State, Indian tribal, and local governments in imple-
3	menting strategies—
4	"(1) to reduce fossil fuel emissions created as a
5	result of activities within the boundaries of the States
6	or units of local government in an environmentally
7	sustainable way that, to the maximum extent prac-
8	ticable, maximizes benefits for local and regional com-
9	munities;
10	"(2) to reduce the total energy use of the States,
11	Indian tribes, and units of local government; and
12	"(3) to improve energy efficiency in the trans-
13	portation sector, building sector, and any other ap-
14	propriate sectors.
15	"(c) Program.—
16	"(1) In general.—The Secretary shall provide
17	to eligible entities block grants to carry out eligible
18	activities (as specified under paragraph (2)) relating
19	to the implementation of environmentally beneficial
20	energy strategies.
21	"(2) Eligible Activities.—The Secretary, in
22	consultation with the Administrator of the Environ-
23	mental Protection Agency, the Secretary of Transpor-
24	tation, and the Secretary of Housing and Urban De-

1	velopment, shall establish a list of activities that are
2	eligible for assistance under the grant program.
3	"(3) Allocation to states, indian tribes,
4	AND ELIGIBLE UNITS OF LOCAL GOVERNMENT.—
5	"(A) In general.—Of the amounts made
6	available to provide grants under this subsection,
7	the Secretary shall allocate—
8	"(i) 68 percent to eligible units of local
9	government;
10	"(ii) 28 percent to States; and
11	"(iii) 4 percent to Indian tribes.
12	"(B) Distribution to eligible units of
13	LOCAL GOVERNMENT.—
14	"(i) In general.—The Secretary shall
15	establish a formula for the distribution of
16	amounts under subparagraph $(A)(i)$ to eli-
17	gible units of local government, taking into
18	account any factors that the Secretary de-
19	termines to be appropriate, including the
20	residential and daytime population of the
21	eligible units of local government.
22	"(ii) Criteria.—Amounts shall be dis-
23	tributed to eligible units of local government
24	under clause (i) only if the eligible units of
25	local government meet the criteria for dis-

1	tribution established by the Secretary for
2	units of local government.
3	"(C) Distribution to states.—
4	"(i) In general.—Of the amounts
5	provided to States under subparagraph
6	(A)(ii), the Secretary shall distribute—
7	"(I) at least 1.25 percent to each
8	State; and
9	"(II) the remainder among the
10	States, based on a formula, to be deter-
11	mined by the Secretary, that takes into
12	account the population of the States
13	and any other criteria that the Sec-
14	retary determines to be appropriate.
15	"(ii) Criteria.—Amounts shall be dis-
16	tributed to States under clause (i) only if
17	the States meet the criteria for distribution
18	established by the Secretary for States.
19	"(iii) Limitation on use of state
20	FUNDS.—At least 40 percent of the amounts
21	distributed to States under this subpara-
22	graph shall be used by the States for the
23	conduct of eligible activities in nonentitle-
24	ment areas in the States, in accordance

1	with any criteria established by the Sec-
2	retary.
3	"(D) Distribution to indian tribes.—
4	"(i) In general.—The Secretary shall
5	establish a formula for the distribution of
6	amounts under subparagraph (A)(iii) to eli-
7	gible Indian tribes, taking into account any
8	factors that the Secretary determines to be
9	appropriate, including the residential and
10	daytime population of the eligible Indian
11	tribes.
12	"(ii) Criteria.—Amounts shall be dis-
13	tributed to eligible Indian tribes under
14	clause (i) only if the eligible Indian tribes
15	meet the criteria for distribution established
16	by the Secretary for Indian tribes.
17	"(4) Report.—Not later than 2 years after the
18	date on which an eligible entity first receives a grant
19	under this section, and every 2 years thereafter, the
20	eligible entity shall submit to the Secretary a report
21	that describes any eligible activities carried out using
22	assistance provided under this subsection.
23	"(5) Authorization of Appropriations.—
24	There are authorized to be appropriated such sums as

1	are necessary to carry out this subsection for each of
2	fiscal years 2008 through 2012.
3	"(d) Environmentally Beneficial Energy Strat-
4	EGIES SUPPLEMENTAL GRANT PROGRAM.—
5	"(1) In General.—The Secretary shall provide
6	to each eligible entity that meets the applicable cri-
7	$teria\ under\ subparagraph\ (B)(ii),\ (C)(ii),\ or\ (D)(ii)$
8	of subsection (c)(3) a supplemental grant to pay the
9	Federal share of the total costs of carrying out an ac-
10	tivity relating to the implementation of an environ-
11	mentally beneficial energy strategy.
12	"(2) Requirements.—To be eligible for a grant
13	under paragraph (1), an eligible entity shall—
14	"(A) demonstrate to the satisfaction of the
15	Secretary that the eligible entity meets the appli-
16	cable criteria under subparagraph (B) (ii),
17	$(C)(ii),\ or\ (D)(ii)\ of\ subsection\ (c)(3);\ and$
18	"(B) submit to the Secretary for approval a
19	plan that describes the activities to be funded by
20	$the\ grant.$
21	"(3) Cost-sharing requirement.—
22	"(A) FEDERAL SHARE.—The Federal share
23	of the cost of carrying out any activities under
24	this subsection shall be 75 percent.
25	"(B) Non-federal share.—

1	"(i) FORM.—Not more than 50 percent
2	of the non-Federal share may be in the form
3	of in-kind contributions.
4	"(ii) Limitation.—Amounts provided
5	to an eligible entity under subsection (c)
6	shall not be used toward the non-Federal
7	share.
8	"(4) Maintenance of Effort.—An eligible en-
9	tity shall provide assurances to the Secretary that
10	funds provided to the eligible entity under this sub-
11	section will be used only to supplement, not to sup-
12	plant, the amount of Federal, State, tribal, and local
13	funds otherwise expended by the eligible entity for eli-
14	gible activities under this subsection.
15	"(5) Authorization of Appropriations.—
16	There are authorized to be appropriated such sums as
17	are necessary to carry out this subsection for each of
18	fiscal years 2008 through 2012.
19	"(e) Grants to Other States and Communities.—
20	"(1) In general.—Of the total amount of funds
21	that are made available each fiscal year to carry out
22	this section, the Secretary shall use 2 percent of the
23	amount to make competitive grants under this section
24	to States, Indian tribes, and units of local govern-

1	ment that are not eligible entities or to consortia of
2	such units of local government.
3	"(2) Applications.—To be eligible for a grant
4	under this subsection, a State, Indian tribe, unit of
5	local government, or consortia described in paragraph
6	(1) shall apply to the Secretary for a grant to carry
7	out an activity that would otherwise be eligible for a
8	grant under subsection (c) or (d).
9	"(3) Priority.—In awarding grants under this
10	subsection, the Secretary shall give priority to—
11	"(A) States with populations of less than
12	2,000,000; and
13	"(B) projects that would result in signifi-
14	cant energy efficiency improvements, reductions
15	in fossil fuel use, or capital improvements.".
16	SEC. 276. ENERGY SUSTAINABILITY AND EFFICIENCY
17	GRANTS FOR INSTITUTIONS OF HIGHER EDU-
18	CATION.
19	Part G of title III of the Energy Policy and Conserva-
20	tion Act is amended by inserting after section 399 (42
21	U.S.C. 371h) the following:
22	"SEC. 399A. ENERGY SUSTAINABILITY AND EFFICIENCY
23	GRANTS FOR INSTITUTIONS OF HIGHER EDU-
24	CATION.
25	"(a) DEFINITIONS.—In this section:

1	"(1) Energy sustainability.—The term 'en-
2	ergy sustainability' includes using a renewable energy
3	resource and a highly efficient technology for elec-
4	tricity generation, transportation, heating, or cooling.
5	"(2) 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	"(b) Grants for Energy Efficiency Improve-
10	MENT.—
11	"(1) In general.—The Secretary shall award
12	not more than 100 grants to institutions of higher
13	education to carry out projects to improve energy effi-
14	ciency on the grounds and facilities of the institution
15	of higher education, including not less than 1 grant
16	to an institution of higher education in each State.
17	"(2) Condition.—As a condition of receiving a
18	grant under this subsection, an institution of higher
19	education shall agree to—
20	"(A) implement a public awareness cam-
21	paign concerning the project in the community
22	in which the institution of higher education is
23	located; and
24	"(B) submit to the Secretary, and make
25	available to the public, reports on any efficiency

1	improvements, energy cost savings, and environ-
2	mental benefits achieved as part of a project car-
3	ried out under paragraph (1).
4	"(c) Grants for Innovation in Energy Sustain-
5	ABILITY.—
6	"(1) In general.—The Secretary shall award
7	not more than 250 grants to institutions of higher
8	education to engage in innovative energy sustain-
9	ability projects, including not less than 2 grants to
10	institutions of higher education in each State.
11	"(2) Innovation projects.—An innovation
12	project carried out with a grant under this subsection
13	shall—
14	"(A) involve—
15	"(i) an innovative technology that is
16	not yet commercially available; or
17	"(ii) available technology in an inno-
18	vative application that maximizes energy
19	efficiency and sustainability;
20	"(B) have the greatest potential for testing
21	or demonstrating new technologies or processes;
22	and
23	"(C) ensure active student participation in
24	the project, including the planning, implementa-
25	tion, evaluation, and other phases of the project.

1	"(3) Condition.—As a condition of receiving a
2	grant under this subsection, an institution of higher
3	education shall agree to submit to the Secretary, and
4	make available to the public, reports that describe the
5	results of the projects carried out under paragraph
6	(1).
7	"(d) Awarding of Grants.—
8	"(1) APPLICATION.—An institution of higher
9	education that seeks to receive a grant under this sec-
10	tion may submit to the Secretary an application for
11	the grant at such time, in such form, and containing
12	such information as the Secretary may prescribe.
13	"(2) Selection.—The Secretary shall establish
14	a committee to assist in the selection of grant recipi-
15	ents under this section.
16	"(e) Allocation to Institutions of Higher Edu-
17	CATION WITH SMALL ENDOWMENTS.—Of the amount of
18	grants provided for a fiscal year under this section, the Sec-
19	retary shall provide not less 50 percent of the amount to
20	institutions of higher education that have an endowment
21	of not more than \$100,000,000, with 50 percent of the allo-
22	cation set aside for institutions of higher education that
23	have an endowment of not more than \$50,000,000.
24	"(f) Grant Amounts.—The maximum amount of

25 grants for a project under this section shall not exceed—

1	"(1) in the case of grants for energy efficiency
2	improvement under subsection (b), \$1,000,000; or
3	"(2) in the case of grants for innovation in en-
4	ergy sustainability under subsection (c), \$500,000.
5	"(g) Authorization of Appropriations.—There
6	are authorized to be appropriated such sums as are nec-
7	essary to carry out this section for each of fiscal years 2008
8	through 2012.".
9	SEC. 277. ENERGY EFFICIENCY AND RENEWABLE ENERGY
10	WORKER TRAINING PROGRAM.
11	Section 1101 of the Energy Policy Act of 2005 (42
12	U.S.C. 16411) is amended—
13	(1) by redesignating subsection (d) as subsection
14	(e); and
15	(2) by inserting after subsection (c), the fol-
16	lowing:
17	"(d) Energy Efficiency and Renewable Energy
18	Worker Training Program.—
19	"(1) Purpose.—It is the purpose of this sub-
20	section to—
21	"(A) create a sustainable, comprehensive
22	public program that provides quality training
23	that is linked to jobs that are created through re-
24	newable energy and energy efficiency initiatives;

"(B) satisfy industry demand for a skilled workforce, to support economic growth, to boost America's global competitiveness in the expanding energy efficiency and renewable energy industries, and to provide economic self-sufficiency and family-sustaining jobs for America's workers, including low wage workers, through quality training and placement in job opportunities in the growing energy efficiency and renewable energy industries;

"(C) provide grants for the safety, health, and skills training and education of workers who are, or may be engaged in, activities related to the energy efficiency and renewable energy industries; and

"(D) provide funds for national and State industry-wide research, labor market information and labor exchange programs, and the development of nationally and State administered training programs.

"(2) Grant Program.—

"(A) IN GENERAL.—Not later than 6 months after the date of enactment of this Act, the Secretary of Labor (referred to in this subsection as the 'Secretary'), in consultation with

1	the Secretary of Energy, shall establish an en-
2	ergy efficiency and renewable energy worker
3	training program under which the Secretary
4	shall carry out the activities described in para-
5	graph (3) to achieve the purposes of this sub-
6	section.
7	"(B) Eligibility.—For purposes of pro-
8	viding assistance and services under the program
9	established under this subsection—
10	"(i) target populations of individuals
11	eligible for training and other services shall
12	include, but not be limited to—
13	"(I) veterans, or past and present
14	members of the reserve components of
15	the Armed Forces;
16	"(II) workers affected by national
17	energy and environmental policy;
18	"(III) workers displaced by the
19	$impacts\ of\ economic\ globalization;$
20	"(IV) individuals, including at-
21	risk youth, seeking employment path-
22	ways out of poverty and into economic
23	self- $sufficiency;$
24	"(V) formerly incarcerated, adju-
25	dicated, non-violent offenders; and

1	"(VI) individuals in need of up-
2	dated training related to the energy ef-
3	ficiency and renewable energy indus-
4	tries; and
5	"(ii) energy efficiency and renewable
6	energy industries eligible for such assistance
7	and services shall include—
8	"(I) the energy-efficient building,
9	construction, and retrofits industries;
10	"(II) the renewable electric power
11	in dustry;
12	"(III) the energy efficient and ad-
13	vanced drive train vehicle industry;
14	"(IV) the bio-fuels industry; and
15	"(V) the deconstruction and mate-
16	rials use industries.
17	"(3) Activities.—
18	"(A) National Research Program.—
19	Under the program established under paragraph
20	(2), the Secretary, acting through the Bureau of
21	Labor Statistics, shall provide assistance to sup-
22	port national research to develop labor market
23	data and to track future workforce trends result-
24	ing from energy-related initiatives carried out

1	under this section. Activities carried out under
2	this paragraph shall include—
3	"(i) linking research and development
4	in renewable energy and energy efficiency
5	technology with the development of stand-
6	ards and curricula for current and future
7	jobs;
8	"(ii) the tracking and documentation
9	of academic and occupational competencies
10	as well as future skill needs with respect to
11	renewable energy and energy efficiency tech-
12	nology;
13	"(iii) tracking and documentation of
14	occupational information and workforce
15	training data with respect to renewable en-
16	ergy and energy efficiency technology;
17	"(iv) 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	"(v) collaborating with State agencies,
22	industry, organized labor, and community
23	and nonprofit organizations to disseminate
24	successful innovations for labor market serv-
25	ices and worker training with respect to re-

1	newable energy and energy efficiency tech-
2	nology.
3	"(B) National energy training part-
4	NERSHIP GRANTS.—
5	"(i) In general.—Under the program
6	established under paragraph (2), the Sec-
7	retary shall award National Energy Train-
8	ing Partnerships Grants on a competitive
9	basis to eligible entities to enable such enti-
10	ties to carry out national training that
11	leads to economic self-sufficiency and to de-
12	velop an energy efficiency and renewable
13	energy industries workforce. Grants shall be
14	awarded under this subparagraph so as to
15	ensure geographic diversity with at least 2
16	grants awarded to entities located in each of
17	the 4 Petroleum Administration for Defense
18	Districts with no subdistricts and at least 1
19	grant awarded to an entity located in each
20	of the subdistricts of the Petroleum Admin-
21	istration for Defense District with subdis-
22	tricts.
23	"(ii) Eligibility.—To be eligible to
24	receive a grant under clause (i), an entity
25	shall be a non-profit partnership that—

1	"(I) includes the equal participa-
2	tion of industry, including public or
3	private employers, and labor organiza-
4	tions, including joint labor-manage-
5	ment training programs, and may in-
6	clude community-based organizations,
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 workers who
20	are, or will be engaged in, activi-
21	ties related to energy efficiency
22	and renewable energy industries;
23	and

"(cc) the ability to help	1
workers achieve economic self-suf-	2
ficiency.	3
"(iii) Activities.—Activities to be	4
carried out under a grant under this sub-	5
paragraph may include—	6
"(I) the provision of occupational	7
skills training, including curriculum	8
development, on-the-job training, and	9
$class room\ training;$	10
"(II) the provision of safety and	11
$health\ training;$	12
"(III) the provision of basic skills,	13
literacy, GED, English as a second	14
language, and job readiness training;	15
"(IV) individual referral and tui-	16
tion assistance for a community college	17
$training\ program;$	18
"(V) the provision of customized	19
training in conjunction with an exist-	20
ing registered apprenticeship program	21
$or\ labor-management\ partnership;$	22
"(VI) the provision of career lad-	23
der and upgrade training; and	24

1	"(VII) the implementation of
2	$transitional\ jobs\ strategies.$
3	"(C) State labor market research, in-
4	FORMATION, AND LABOR EXCHANGE RESEARCH
5	PROGRAM.—
6	"(i) In general.—Under the program
7	established under paragraph (2), the Sec-
8	retary shall award competitive grants to
9	States to enable such States to administer
10	labor market and labor exchange informa-
11	tional programs that include the implemen-
12	tation of the activities described in clause
13	(ii).
14	"(ii) Activities.—A State shall use
15	amounts awarded under a grant under this
16	subparagraph to provide funding to the
17	State agency that administers the Wagner-
18	Peyser Act and State unemployment com-
19	pensation programs to carry out the fol-
20	lowing activities using State agency merit
21	staff:
22	``(I) The identification of job
23	openings in the renewable energy and
24	energy efficiency sector.

1	"(II) The administration of skill
2	and aptitude testing and assessment
3	for workers.
4	"(III) The counseling, case man-
5	agement, and referral of qualified job
6	seekers to openings and training pro-
7	grams, including energy efficiency and
8	renewable energy training programs.
9	"(D) State energy training partner-
10	SHIP PROGRAM.—
11	"(i) In general.—Under the program
12	established under paragraph (2), the Sec-
13	retary shall award competitive grants to
14	States to enable such States to administer
15	renewable energy and energy efficiency
16	workforce development programs that in-
17	clude the implementation of the activities
18	described in clause (ii).
19	"(ii) Activities.—
20	"(I) In general.—A State shall
21	use amounts awarded under a grant
22	under this subparagraph to award
23	competitive grants to eligible State En-
24	ergy Sector Partnerships to enable such
25	Partnerships to coordinate with exist-

1	ing apprenticeship and labor manage-
2	ment training programs and imple-
3	ment training programs that lead to
4	the economic self-sufficiency of train-
5	ees.
6	"(II) Eligibility.—To be eligible
7	to receive a grant under this subpara-
8	graph, a State Energy Sector Partner-
9	ship shall—
10	"(aa) consist of non-profit
11	organizations that include equal
12	participation from industry, in-
13	cluding public or private non-
14	profit employers, and labor orga-
15	nizations, including joint labor-
16	management training programs,
17	and may include representatives
18	from local governments, worker
19	investment agency one-stop career
20	centers, community based organi-
21	zations, community colleges, other
22	post-secondary institutions, small
23	businesses, cooperatives, State and
24	local veterans agencies, and vet-
25	erans service organizations;

1	"(bb) demonstrate experience
2	in implementing and operating
3	worker skills training and edu-
4	cation programs; and
5	"(cc) demonstrate the ability
6	to identify and involve in train-
7	ing programs, target populations
8	of workers who are, or will be en-
9	gaged in, activities related to en-
10	ergy efficiency and renewable en-
11	ergy industries.
12	"(iii) Priority.—In awarding grants
13	under this subparagraph, the Secretary
14	shall give priority to States that dem-
15	onstrate linkages of activities under the
16	grant with—
17	"(I) meeting national energy poli-
18	cies associated with energy efficiency,
19	renewable energy, and the reduction of
20	emissions of greenhouse gases; and
21	"(II) meeting State energy poli-
22	cies associated with energy efficiency,
23	renewable energy, and the reduction of
24	emissions of greenhouse gases.

1	"(iv) Coordination.—A grantee
2	under this subparagraph shall coordinate
3	activities carried out under the grant with
4	existing apprenticeship and labor manage-
5	ment training programs and implement
6	training programs that lead to the economic
7	self-sufficiency of trainees, including
8	providing—
9	"(I) outreach and recruitment
10	services, in coordination with the ap-
11	propriate State agency;
12	"(II) occupational skills training,
13	including curriculum development, on-
14	the-job training, and classroom train-
15	ing;
16	"(III) safety and health training;
17	"(IV) basic skills, literacy, GED,
18	English as a second language, and job
19	$readiness\ training;$
20	"(V) individual referral and tui-
21	tion assistance for a community college
22	$training\ program;$
23	"(VI) customized training in con-
24	iunction with an existing registered

1	apprenticeship program or labor-man-
2	$agement\ partnership;$
3	"(VII) career ladder and upgrade
4	training; and
5	"(VIII) services under transi-
6	$tional\ jobs\ strategies.$
7	"(4) Worker protections and non-
8	DISCRIMINATION REQUIREMENTS.—
9	"(A) APPLICATION OF WIA.—The provisions
10	of sections 181 and 188 of the Workforce Invest-
11	ment Act of 1998 (29 U.S.C. 2931 and 2938)
12	shall apply to all programs carried out with as-
13	sistance under this subsection.
14	"(B) Consultation with labor organi-
15	zations.—If a labor organization represents a
16	substantial number of workers who are engaged
17	in similar work or training in an area that is
18	the same as the area that is proposed to be fund-
19	ed under this subsection, the labor organization
20	shall be provided an opportunity to be consulted
21	and to submit comments in regard to such a pro-
22	posal.
23	"(5) Authorization of Appropriations.—
24	There is authorized to be appropriated to carry out

1	this subsection, \$100,000,000 for each fiscal year, of
2	which—
3	"(A) not to exceed 20 percent of the amount
4	appropriated in each fiscal year shall be made
5	available for, and shall be equally divided be-
6	tween, national labor market research and infor-
7	mation under paragraph (3)(A) and State labor
8	market information and labor exchange research
9	under paragraph $(3)(C)$; and
10	"(B) the remainder shall be divided equally
11	between National Energy Partnership Training
12	Grants under paragraph (3)(B) and State en-
13	ergy training partnership grants under para-
14	$graph\ (3)(D).$
15	"(6) Definition.—In this subsection, the term
16	'renewable electric power' has the meaning given the
17	term 'renewable energy' in section 203(b)(2) of the
18	Energy Policy Act of 2005 (Public Law 109–58).".
19	SEC. 278. ASSISTANCE TO STATES TO REDUCE SCHOOL BUS
20	IDLING.
21	(a) Statement of Policy.—Congress encourages
22	each local educational agency (as defined in section
23	9101(26) of the Elementary and Secondary Education Act
24	of 1965 (20 U.S.C. 7801(26))) that receives Federal funds
25	under the Elementary and Secondary Education Act of

1	1965 (20 U.S.C. 6301 et seq.) to develop a policy to reduce
2	the incidence of school bus idling at schools while picking
3	up and unloading students.
4	(b) AUTHORIZATION OF APPROPRIATIONS.—There are
5	authorized to be appropriated to the Secretary, working in
6	coordination with the Secretary of Education, \$5,000,000
7	for each of fiscal years 2007 through 2012 for use in edu-
8	cating States and local education agencies about—
9	(1) benefits of reducing school bus idling; and
10	(2) ways in which school bus idling may be re-
11	duced.
12	SEC. 279. DEFINITION OF STATE.
13	Section 412 of the Energy Conservation and Produc-
14	tion Act (42 U.S.C. 6862) is amended by striking para-
15	graph (8) and inserting the following:
16	"(8) State.—The term 'State' means—
17	"(A) a State;
18	"(B) the District of Columbia; and
19	"(C) the Commonwealth of Puerto Rico.".
20	SEC. 280. COORDINATION OF PLANNED REFINERY OUT-
21	AGES.
22	(a) Definitions.—In this section:
23	(1) Administrator.—The term "Adminis-
24	trator" means the Administrator of the Energy Infor-
25	$mation\ Administration.$

1	(2) Planned refinery outage.—
2	(A) In general.—The term "planned re
3	finery outage" means a removal, scheduled befor
4	the date on which the removal occurs, of a refin
5	ery, or any unit of a refinery, from service for
6	maintenance, repair, or modification.
7	(B) Exclusion.—The term "planned refin
8	ery outage" does not include any necessary and
9	unplanned removal of a refinery, or any unit of
10	a refinery, from service as a result of a compo
11	nent failure, safety hazard, emergency, or action
12	reasonably anticipated to be necessary to preven
13	such events.
14	(3) Refined Petroleum Product.—The term
15	"refined petroleum product" means any gasoline, die
16	sel fuel, fuel oil, lubricating oil, liquid petroleum gas
17	or other petroleum distillate that is produced through
18	the refining or processing of crude oil or an oil de
19	rived from tar sands, shale, or coal.
20	(4) Refinery.—The term "refinery" means of
21	facility used in the production of a refined petroleum
22	product through distillation, cracking, or any other
23	process.
24	(5) Secretary.—The term "Secretary" mean

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the Secretary of Energy.

1	(b) Review and Analysis of Available Informa-
2	TION.—The Administrator shall, on an ongoing basis—
3	(1) review information on planned refinery out-
4	ages that is available from commercial reporting serv-
5	ices;
6	(2) analyze that information to determine wheth-
7	er the scheduling of a planned refinery outage may
8	nationally or regionally affect the price or supply of
9	any refined petroleum product by—
10	(A) decreasing the production of the refined
11	petroleum product; and
12	(B) causing or contributing to a retail or
13	wholesale supply shortage or disruption;
14	(3) not less frequently than twice each year, sub-
15	mit to the Secretary a report describing the results of
16	the review and analysis under paragraphs (1) and
17	(2); and
18	(4) specifically alert the Secretary of any
19	planned refinery outage that the Administrator deter-
20	mines may nationally or regionally affect the price or
21	supply of a refined petroleum product.
22	(c) Action by Secretary.—On a determination by
23	the Secretary, based on a report or alert under paragraph
24	(3) or (4) of subsection (b), that a planned refinery outage
25	may affect the price or supply of a refined petroleum prod-

1	uct, the Secretary shall make available to refinery operators
2	information on planned refinery outages to encourage re-
3	ductions of the quantity of refinery capacity that is out of
4	service at any time.
5	(d) Limitation.—Nothing in this section shall alter
6	any existing legal obligation or responsibility of a refinery
7	operator, or create any legal right of action, nor shall this
8	section authorize the Secretary—
9	(1) to prohibit a refinery operator from con-
10	ducting a planned refinery outage; or
11	(2) to require a refinery operator to continue to
12	operate a refinery.
13	SEC. 281. TECHNICAL CRITERIA FOR CLEAN COAL POWER
14	INITIATIVE.
15	Section 402(b)(1)(B)(ii) of the Energy Policy Act of
16	2005 (42 U.S.C. 15962(b)(1)(B)(ii)) is amended by striking
17	subclause (I) and inserting the following:
18	"(I)(aa) to remove at least 99 per-
19	cent of sulfur dioxide; or
20	"(bb) to emit not more than 0.04
21	pound SO ₂ per million Btu, based on
22	a 30-day average;".

1 SEC. 282. ADMINISTRATION.

2	Section 106 of the Alaska Natural Gas Pipeline Act
3	(15 U.S.C. 720d) is amended by adding at the end the fol-
4	lowing:
5	"(h) Administration.—
6	"(1) Personnel appointments.—
7	"(A) In General.—The Federal Coordi-
8	nator may appoint and terminate such personnel
9	as the Federal Coordinator determines to be ap-
10	propriate.
11	"(B) AUTHORITY OF FEDERAL COORDI-
12	NATOR.—Personnel appointed by the Federal Co-
13	ordinator under subparagraph (A) shall be ap-
14	pointed without regard to the provisions of title
15	5, United States Code, governing appointments
16	in the competitive service.
17	"(2) Compensation.—
18	"(A) In general.—Subject to subpara-
19	graph (B), personnel appointed by the Federal
20	Coordinator under paragraph (1)(A) shall be
21	paid without regard to the provisions of chapter
22	51 and subchapter III of chapter 53 of title 5,
23	United States Code (relating to classification
24	and General Schedule pay rates).
25	"(B) Maximum level of compensa-
26	TION.—The rate of pay for personnel appointed

1	by the Federal Coordinator under paragraph
2	(1)(A) shall not exceed the maximum level of rate
3	payable for level III of the Executive Schedule.
4	"(C) Applicability of Section 5941.—
5	Section 5941 of title 5, United States Code, shall
6	apply to personnel appointed by the Federal Co-
7	$ordinator\ under\ paragraph\ (1)(A).$
8	"(3) Temporary services.—
9	"(A) In General.—The Federal Coordi-
10	nator may procure temporary and intermittent
11	services in accordance with section 3109(b) of
12	title 5, United States Code.
13	"(B) Maximum level of compensa-
14	TION.—The level of compensation of an indi-
15	vidual employed on a temporary or intermittent
16	basis under subparagraph (A) shall not exceed
17	the maximum level of rate payable for level III
18	of the Executive Schedule.
19	"(4) Fees, charges, and commissions.—
20	"(A) In General.—The Federal Coordi-
21	nator shall have the authority to establish,
22	change, and abolish reasonable filing and service
23	fees, charges, and commissions, require deposits
24	of payments, and provide refunds as provided to

the Secretary of the Interior in section 304 of the

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1	Federal Land Policy and Management Act of
2	1976 (43 U.S.C. 1734), except that the authority
3	shall be with respect to the duties of the Federal
4	Coordinator, as delineated in the Alaska Natural
5	Gas Pipeline Act (15 U.S.C. 720 et seq.), as
6	amended.

- "(B) AUTHORITY OF SECRETARY OF THE INTERIOR.—Subparagraph (A) shall not affect the authority of the Secretary of the Interior to establish, change, and abolish reasonable filing and service fees, charges, and commissions, require deposits of payments, and provide refunds under section 304 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1734).
- 15 "(C) USE OF FUNDS.—The Federal Coordi-16 nator is authorized to use, without further ap-17 propriation, amounts collected under subpara-18 graph (A) to carry out this section.".

19 SEC. 283. OFFSHORE RENEWABLE ENERGY.

20 (a) Leases, Easements, or Rights-of-Way for 21 Energy and Related Purposes.—Section 8(p) of the 22 Outer Continental Shelf Lands Act (43 U.S.C. 1337(p)) is

23 amended—

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1	(1) by inserting after "Secretary of the Depart-
2	ment in which the Coast Guard is operating" the fol-
3	lowing: ", the Secretary of Commerce,";
4	(2) by striking paragraph (3) and inserting the
5	following:
6	"(3) Competitive or noncompetitive basis.—
7	Any lease, easement, or right-of-way under paragraph
8	(1) shall be issued on a competitive basis, unless—
9	"(A) the lease, easement, or right-of-way re-
10	lates to a project that meets the criteria estab-
11	lished under section 388(d) of the Energy Policy
12	Act of 2005 (43 U.S.C. 1337 note; Public Law
13	109–58);
14	"(B) the lease, easement, or right-of-way—
15	"(i) is for the placement and operation
16	of a meteorological or marine data collec-
17	tion facility; and
18	"(ii) has a term of not more than 5
19	years; or
20	"(C) the Secretary determines, after pro-
21	viding public notice of a proposed lease, ease-
22	ment, or right-of-way, that no competitive inter-
23	est exists."; and
24	(3) by adding at the end the following:
25	"(11) Clarification.—

1	"(A) In general.—Subject to subpara-
2	graph (B), the Federal Energy Regulatory Com-
3	mission shall not have authority to approve or
4	license a wave or current energy project on the
5	outer Continental Shelf under part I of the Fed-
6	eral Power Act (16 U.S.C. 792 et seq.)
7	"(B) Transmission of power.—Subpara-
8	graph (A) shall not affect any authority of the
9	Commission with respect to the transmission of
10	power generated from a project described in sub-
11	paragraph (A).".
12	(b) Consideration of Certain Requests for Au-
13	THORIZATION.—In considering a request for authorization
14	of a project pending before the Commission on the outer
15	Continental Shelf as of the date of enactment of this Act,
16	the Secretary of the Interior shall rely, to the maximum
17	extent practicable, on the materials submitted to the Com-
18	mission before that date.
19	(c) Savings Provision.—Nothing in this section or
20	an amendment made by this section requires the resubmis-
21	sion of any document that was previously submitted, or the
22	reauthorization of any action that was previously author-
23	ized, with respect to a project on the outer Continental
24	Shelf, for which a preliminary permit was issued by the
25	Commission before the date of enactment of this Act.

1	Subtitle G—Marine and
2	Hydrokinetic Renewable Energy
3	Promotion
4	SEC. 291. DEFINITION OF MARINE AND HYDROKINETIC RE-
5	NEWABLE ENERGY.
6	(a) In General.—In this subtitle, the term "marine
7	and hydrokinetic renewable energy" means electrical energy
8	from—
9	(1) waves, tides, and currents in oceans, estu-
10	aries, and tidal areas;
11	(2) free flowing water in rivers, lakes, and
12	streams;
13	(3) free flowing water in man-made channels,
14	including projects that utilize nonmechanical struc-
15	tures to accelerate the flow of water for electric power
16	production purposes; and
17	(4) differentials in ocean temperature (ocean
18	thermal energy conversion).
19	(b) Exclusion.—Except as provided in subsection
20	(a)(3), the term "marine and hydrokinetic renewable en-
21	ergy" does not include energy from any source that uses
22	a dam, diversionary structure, or impoundment for electric
23	power purposes.

1 SEC. 292. RESEARCH AND DEVELOPMENT.

2	(a) PROGRAM.—The Secretary, in consultation with
3	the Secretary of Commerce and the Secretary of the Inte-
4	rior, shall establish a program of marine and hydrokinetic
5	renewable energy research, including—
6	(1) developing and demonstrating marine and
7	hydrokinetic renewable energy technologies;
8	(2) reducing the manufacturing and operation
9	costs of marine and hydrokinetic renewable energy
10	technologies;
11	(3) increasing the reliability and survivability of
12	marine and hydrokinetic renewable energy facilities;
13	(4) integrating marine and hydrokinetic renew-
14	able energy into electric grids;
15	(5) identifying opportunities for cross fertiliza-
16	tion and development of economies of scale between
17	offshore wind and marine and hydrokinetic renewable
18	energy sources;
19	(6) identifying, in conjunction with the Sec-
20	retary of Commerce and the Secretary of the Interior,
21	the potential environmental impacts of marine and
22	hydrokinetic renewable energy technologies and meas-
23	ures to minimize or prevent adverse impacts, and
24	technologies and other means available for monitoring
25	and determining environmental impacts;

1	(7) identifying, in conjunction with the Com-
2	mandant of the United States Coast Guard, the po-
3	tential navigational impacts of marine and
4	hydrokinetic renewable energy technologies and meas-
5	ures to minimize or prevent adverse impacts;
6	(8) standards development, demonstration, and
7	technology transfer for advanced systems engineering
8	and system integration methods to identify critical
9	interfaces; and
10	(9) providing public information and oppor-
11	tunity for public comment concerning all technologies.
12	(b) Report.—Not later than 18 months after the date
13	of enactment of this Act, the Secretary, in consultation with
14	the Secretary of Commerce and the Secretary of the Inte-
15	rior, shall provide to the appropriate committees of Con-
16	gress a report that addresses—
17	(1) the potential environmental impacts of
18	hydrokinetic renewable energy technologies in free-
19	flowing water in rivers, lakes, and streams;
20	(2) the means by which to minimize or prevent
21	any adverse environmental impacts;
22	(3) the potential role of monitoring and adaptive
23	management in addressing any adverse environ-
24	mental impacts; and

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1	(4) the necessary components of such an adaptive
2	management program.
3	(c) Authorization of Appropriations.—There are
4	authorized to be appropriated to the Secretary to carry out
5	this section \$50,000,000 for each of the fiscal years 2008
6	through 2017.
7	SEC. 293. NATIONAL OCEAN ENERGY RESEARCH CENTERS.
8	(a) In General.—Subject to the availability of appro-
9	priations under subsection (e), the Secretary shall establish
10	not less than 1, and not more than 6, national ocean energy
11	research centers at institutions of higher education for the
12	purpose of conducting research, development, demonstra-
13	tion, and testing of ocean energy technologies and associated

- 15 (b) Evaluations.—Each Center shall (in consultation
- 16 with developers, utilities, and manufacturers) conduct eval-
- 17 uations of technologies and equipment described in sub-
- 18 section (a).

14 equipment.

- 19 (c) Location.—In establishing centers under this sec-
- 20 tion, the Secretary shall locate the centers in coastal regions
- 21 of the United State in a manner that, to the maximum ex-
- 22 tent practicable, is geographically dispersed.
- 23 (d) Coordination.—Prior to carrying out any activ-
- 24 ity under this section in waters subject to the jurisdiction
- 25 of the United States, the Secretary shall identify, in con-

1	junction with the Secretary of Commerce and the Secretary
2	of Interior, the potential environmental impacts of such ac-
3	tivity and measures to minimize or prevent adverse im-
4	pacts.
5	(e) AUTHORIZATION OF APPROPRIATIONS.—There are
6	authorized to be appropriate such sums as are necessary
7	to carry out this section.
8	TITLE III—CARBON CAPTURE
9	AND STORAGE RESEARCH, DE-
10	VELOPMENT, AND DEM-
11	ONSTRATION
12	SEC. 301. SHORT TITLE.
13	This title may be cited as the "Carbon Capture and
14	Sequestration Act of 2007".
15	SEC. 302. CARBON CAPTURE AND STORAGE RESEARCH, DE-
16	VELOPMENT, AND DEMONSTRATION PRO-
17	GRAM.
18	Section 963 of the Energy Policy Act of 2005 (42
19	U.S.C. 16293) is amended—
20	(1) in the section heading, by striking "RE-
21	SEARCH AND DEVELOPMENT" and inserting
22	"AND STORAGE RESEARCH, DEVELOPMENT,
23	AND DEMONSTRATION";
24	(2) in subsection (a)—

1	(A) by striking "research and development"
2	and inserting "and storage research, develop-
3	ment, and demonstration"; and
4	(B) by striking "capture technologies on
5	combustion-based systems" and inserting "cap-
6	ture and storage technologies related to energy
7	systems";
8	(3) in subsection (b)—
9	(A) in paragraph (3), by striking "and" at
10	$the\ end;$
11	(B) in paragraph (4), by striking the period
12	at the end and inserting "; and"; and
13	(C) by adding at the end the following:
14	"(5) to expedite and carry out large-scale testing
15	of carbon sequestration systems in a range of geologi-
16	cal formations that will provide information on the
17	cost and feasibility of deployment of sequestration
18	technologies."; and
19	(4) by striking subsection (c) and inserting the
20	following:
21	"(c) Programmatic Activities.—
22	"(1) Energy research and development un-
23	DERLYING CARBON CAPTURE AND STORAGE TECH-
24	NOLOGIES AND CARBON USE ACTIVITIES.—

1	"(A) In General.—The Secretary shall
2	carry out fundamental science and engineering
3	research (including laboratory-scale experiments,
4	numeric modeling, and simulations) to develop
5	and document the performance of new ap-
6	proaches to capture and store, recycle, or reuse
7	carbon dioxide.
8	"(B) Program integration.—The Sec-
9	retary shall ensure that fundamental research
10	carried out under this paragraph is appro-
11	priately applied to energy technology develop-
12	ment activities, the field testing of carbon seques-
13	tration, and carbon use activities, including—
14	"(i) development of new or improved
15	technologies for the capture and storage of
16	carbon dioxide;
17	"(ii) development of new or improved
18	technologies that reduce the cost and in-
19	crease the efficacy of advanced compression
20	of carbon dioxide required for the storage of
21	carbon dioxide;
22	"(iii) modeling and simulation of geo-
23	logical sequestration field demonstrations;

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1	"(iv) quantitative assessment of risks
2	relating to specific field sites for testing of
3	$sequestration\ technologies;$
4	"(v) research and development of new
5	and improved technologies for—
6	"(I) carbon use, including recy-
7	cling and reuse of carbon dioxide; and
8	"(II) the containment of carbon
9	dioxide in the form of solid materials
10	or products derived from a gasification
11	technology that does not involve geo-
12	logic containment or injection; and
13	"(vi) research and development of new
14	and improved technologies for oxygen sepa-
15	ration from air.
16	"(2) Field validation testing activities.—
17	"(A) In General.—The Secretary shall
18	promote, to the maximum extent practicable, re-
19	gional carbon sequestration partnerships to con-
20	duct geologic sequestration tests involving carbon
21	dioxide injection and monitoring, mitigation,
22	and verification operations in a variety of can-
23	didate geological settings, including—
24	"(i) operating oil and gas fields;
25	"(ii) depleted oil and gas fields;

1	"(iii) unmineable coal seams;
2	"(iv) deep saline formations;
3	"(v) deep geological systems that may
4	be used as engineered reservoirs to extract
5	economical quantities of heat from geo-
6	thermal resources of low permeability or po-
7	rosity;
8	"(vi) deep geologic systems containing
9	basalt formations; and
10	"(vii) coal-bed methane recovery.
11	"(B) Objectives.—The objectives of tests
12	conducted under this paragraph shall be—
13	"(i) to develop and validate geo-
14	physical tools, analysis, and modeling to
15	monitor, predict, and verify carbon dioxide
16	containment;
17	"(ii) to validate modeling of geological
18	formations;
19	"(iii) to refine storage capacity esti-
20	mated for particular geological formations;
21	"(iv) to determine the fate of carbon
22	dioxide concurrent with and following injec-
23	$tion\ into\ geological\ formations;$
24	"(v) to develop and implement best
25	practices for operations relating to, and

1	monitoring of, injection and storage of car-
2	bon dioxide in geologic formations;
3	"(vi) to assess and ensure the safety of
4	operations related to geological storage of
5	carbon dioxide; and
6	"(vii) to allow the Secretary to pro-
7	mulgate policies, procedures, requirements,
8	and guidance to ensure that the objectives of
9	this subparagraph are met in large-scale
10	testing and deployment activities for carbon
11	capture and storage that are funded by the
12	Department of Energy.
13	"(3) Large-scale testing and deploy-
14	MENT.—
15	"(A) In General.—The Secretary shall
16	conduct not less than 7 initial large-volume se-
17	questration tests involving at least 1,000,000
18	tons of carbon dioxide per year for geological
19	containment of carbon dioxide (at least 1 of
20	which shall be international in scope) to collect
21	and validate information on the cost and feasi-
22	bility of commercial deployment of technologies
23	for geological containment of carbon dioxide.
24	"(B) Diversity of formations to be
25	STUDIED.—In selecting formations for study

1	under this paragraph, the Secretary shall con-
2	sider a variety of geological formations across the
3	United States, and require characterization and
4	modeling of candidate formations, as determined
5	by the Secretary.
6	"(4) Preference in project selection from
7	MERITORIOUS PROPOSALS.—In making competitive
8	awards under this subsection, subject to the require-
9	ments of section 989, the Secretary shall give pref-
10	erence to proposals from partnerships among indus-
11	trial, academic, and government entities.
12	"(5) Cost sharing.—Activities under this sub-
13	section shall be considered research and development
14	activities that are subject to the cost-sharing require-
15	ments of section 988(b).
16	"(6) Program review and report.—During
17	fiscal year 2011, the Secretary shall—
18	"(A) conduct a review of programmatic ac-
19	tivities carried out under this subsection; and
20	"(B) make recommendations with respect to
21	continuation of the activities.
22	"(d) Authorization of Appropriations.—There
23	are authorized to be appropriated to carry out this
24	section—
25	"(1) \$150,000,000 for fiscal year 2008;

1	"(2) \$200,000,000 for fiscal year 2009;
2	"(3) \$200,000,000 for fiscal year 2010;
3	"(4) \$180,000,000 for fiscal year 2011; and
4	"(5) \$165,000,000 for fiscal year 2012.".
5	SEC. 303. CARBON DIOXIDE STORAGE CAPACITY ASSESS-
6	MENT.
7	(a) Definitions.—In this section
8	(1) Assessment.—The term "assessment"
9	means the national assessment of capacity for carbon
10	dioxide completed under subsection (f).
11	(2) CAPACITY.—The term "capacity" means the
12	portion of a storage formation that can retain carbon
13	dioxide in accordance with the requirements (includ-
14	ing physical, geological, and economic requirements)
15	established under the methodology developed under
16	subsection (b).
17	(3) Engineered Hazard.—The term "engi-
18	neered hazard" includes the location and completion
19	history of any well that could affect potential storage.
20	(4) Risk.—The term "risk" includes any risk
21	posed by geomechanical, geochemical, hydrogeological,
22	structural, and engineered hazards.
23	(5) Secretary.—The term "Secretary" means
24	the Secretary of the Interior, acting through the Di-
25	rector of the United States Geological Survey

1	(6) Storage formation.—The term "storage
2	formation" means a deep saline formation,
3	unmineable coal seam, or oil or gas reservoir that is
4	capable of accommodating a volume of industrial car-
5	$bon\ dioxide.$
6	(b) Methodology.—Not later than 1 year after the
7	date of enactment of this Act, the Secretary shall develop
8	a methodology for conducting an assessment under sub-
9	section (f), taking into consideration—
10	(1) the geographical extent of all potential stor-
11	age formations in all States;
12	(2) the capacity of the potential storage forma-
13	tions;
14	(3) the injectivity of the potential storage forma-
15	tions;
16	(4) an estimate of potential volumes of oil and
17	gas recoverable by injection and storage of industrial
18	carbon dioxide in potential storage formations;
19	(5) the risk associated with the potential storage
20	formations; and
21	(6) the work done to develop the Carbon Seques-
22	tration Atlas of the United States and Canada that
23	was completed by the Department of Energy.
24	(c) Coordination.—
25	(1) Federal coordination.—

1	(A) Consultation.—The Secretary shall
2	consult with the Secretary of Energy and the Ad-
3	ministrator of the Environmental Protection
4	Agency on issues of data sharing, format, devel-
5	opment of the methodology, and content of the
6	assessment required under this title to ensure the
7	maximum usefulness and success of the assess-
8	ment.
9	(B) Cooperation.—The Secretary of En-
10	ergy and the Administrator shall cooperate with
11	the Secretary to ensure, to the maximum extent
12	practicable, the usefulness and success of the as-
13	sessment.
14	(2) State coordination.—The Secretary shall
15	consult with State geological surveys and other rel-
16	evant entities to ensure, to the maximum extent prac-
17	ticable, the usefulness and success of the assessment.
18	(d) External Review and Publication.—On com-
19	pletion of the methodology under subsection (b), the Sec-
20	retary shall—
21	(1) publish the methodology and solicit comments
22	from the public and the heads of affected Federal and
23	State agencies;
24	(2) establish a panel of individuals with exper-
25	tise in the matters described in paragraphs (1)

1	through (5) of subsection (b) composed, as appro-
2	priate, of representatives of Federal agencies, institu-
3	tions of higher education, nongovernmental organiza-
4	tions, State organizations, industry, and inter-
5	national geoscience organizations to review the meth-
6	odology and comments received under paragraph (1);
7	and
8	(3) on completion of the review under paragraph
9	(2), publish in the Federal Register the revised final
10	methodology.
11	(e) Periodic Updates.—The methodology developed
12	under this section shall be updated periodically (including
13	at least once every 5 years) to incorporate new data as the
14	data becomes available.
15	(f) National Assessment.—
16	(1) In general.—Not later than 2 years after
17	the date of publication of the methodology under sub-
18	section (d)(1), the Secretary, in consultation with the
19	Secretary of Energy and State geological surveys,
20	shall complete a national assessment of capacity for

(2) Geological verification.—As part of the assessment under this subsection, the Secretary shall carry out a drilling program to supplement the geological data relevant to determining storage capacity

carbon dioxide in accordance with the methodology.

1	of carbon dioxide in geological storage formations,
2	including—
3	(A) well log data;
4	(B) core data; and
5	(C) fluid sample data.
6	(3) Partnership with other drilling pro-
7	GRAMS.—As part of the drilling program under para-
8	graph (2), the Secretary shall enter, as appropriate,
9	into partnerships with other entities to collect and in-
10	tegrate data from other drilling programs relevant to
11	the storage of carbon dioxide in geologic formations.
12	(4) Incorporation into natcarb.—
13	(A) In general.—On completion of the as-
14	sessment, the Secretary of Energy and the Sec-
15	retary of the Interior shall incorporate the re-
16	sults of the assessment using—
17	(i) the NatCarb database, to the max-
18	imum extent practicable; or
19	(ii) a new database developed by the
20	Secretary of Energy, as the Secretary of
21	Energy determines to be necessary.
22	(B) Ranking.—The database shall include
23	the data necessary to rank potential storage sites
24	for capacity and risk, across the United States,

1	within each State, by formation, and within
2	each basin.
3	(5) Report.—Not later than 180 days after the
4	date on which the assessment is completed, the Sec-
5	retary shall submit to the Committee on Energy and
6	Natural Resources of the Senate and the Committee
7	on Science and Technology of the House of Represent-
8	atives a report describing the findings under the as-
9	sessment.
10	(6) Periodic updates.—The national assess-
11	ment developed under this section shall be updated pe-
12	riodically (including at least once every 5 years) to
13	support public and private sector decisionmaking.
14	(g) Authorization of Appropriations.—There is
15	authorized to be appropriated to carry out this section
16	\$30,000,000 for the period of fiscal years 2008 through
17	2012.
18	SEC. 304. CARBON CAPTURE AND STORAGE INITIATIVE.
19	(a) Definitions.—In this section:
20	(1) Industrial sources of carbon diox-
21	IDE.—The term "industrial sources of carbon diox-
22	ide" means one or more facilities to—
23	(A) generate electric energy from fossil fuels;
24	(B) refine petroleum;
25	(C) manufacture iron or steel;

1	(D) manufacture cement or cement clinker;
2	(E) manufacture commodity chemicals (in-
3	cluding from coal gasification);
4	(F) manufacture transportation fuels from
5	coal; or
6	(G) manufacture biofuels.
7	(2) Secretary.—The term "Secretary" means
8	the Secretary of Energy.
9	(b) Program Establishment.—
10	(1) In general.—The Secretary shall carry out
11	a program to demonstrate technologies for the large-
12	scale capture of carbon dioxide from industrial
13	sources of carbon dioxide.
14	(2) Scope of Award.—An award under this
15	section shall be only for the portion of the project
16	that—
17	(A) carries out the large-scale capture (in-
18	cluding purification and compression) of carbon
19	dioxide;
20	(B) provides for the cost of transportation
21	and injection of carbon dioxide; and
22	(C) incorporates a comprehensive measure-
23	ment, monitoring, and validation program.

1	(3) QUALIFICATIONS FOR AWARD.—To be eligible
2	for an award under this section, a project proposal
3	must include the following:
4	(A) Capacity.—The capture of not less
5	than eighty-five percent of the produced carbon
6	dioxide at the facility, and not less than 500,000
7	short tons of carbon dioxide per year.
8	(B) Storage agreement.—A binding
9	agreement for the storage of all of the captured
10	carbon dioxide in—
11	(i) a field testing validation activity
12	under section 963 of the Energy Policy Act
13	of 2005, as amended by this Act; or
14	(ii) other geological storage projects ap-
15	proved by the Secretary.
16	(C) Purity Level.—A purity level of at
17	least 95 percent carbon dioxide by volume for the
18	captured carbon dioxide delivered for storage.
19	(D) Commitment to continued oper-
20	ATION OF SUCCESSFUL UNIT.—If the project suc-
21	cessfully demonstrates capture and storage of
22	carbon dioxide, a commitment to continued cap-
23	ture and storage of carbon dioxide after the con-
24	clusion of the demonstration.

1	(4) Cost-sharing require-
2	ments of section 988 of the Energy Policy Act of 2005
3	shall apply to this section.
4	(c) Authorization of Appropriations.—There is
5	authorized to be appropriated to the Secretary to carry out
6	this section \$100,000,000 per year for fiscal years 2009
7	through 2013.
8	SEC. 305. CAPITOL POWER PLANT CARBON DIOXIDE EMIS-
9	SIONS DEMONSTRATION PROGRAM.
10	The first section of the Act of March 4, 1911 (2 U.S.C.
11	2162; 36 Stat. 1414, chapter 285), is amended in the sev-
12	enth undesignated paragraph (relating to the Capitol power
13	plant), under the heading "Public Buildings", under the
14	heading "Under the Department of the Interior"—
15	(1) by striking "ninety thousand dollars:" and
16	inserting "\$90,000."; and
17	(2) by striking "Provided, That hereafter the"
18	and all that follows through the end of the proviso
19	and inserting the following:
20	"(a) Designation.—The heating, lighting, and power
21	plant constructed under the terms of the Act approved April
22	28, 1904 (33 Stat. 479, chapter 1762), shall be known as
23	the 'Capitol power plant', and all vacancies occurring in
24	the force operating that plant and the substations in connec-
25	tion with the plant shall be filled by the Architect of the

1	Capitol, with the approval of the commission in control of
2	the House Office Building appointed under the first section
3	of the Act of March 4, 1907 (2 U.S.C. 2001).
4	"(b) Capitol Power Plant Carbon Dioxide Emis-
5	SIONS DEMONSTRATION PROGRAM.—
6	"(1) Definitions.—In this subsection:
7	"(A) Administrator.—The term 'Adminis-
8	trator' means the Administrator of the Environ-
9	$mental\ Protection\ Agency.$
10	"(B) Carbon dioxide energy effi-
11	CIENCY.—The term 'carbon dioxide energy effi-
12	ciency', with respect to a project, means the
13	quantity of electricity used to power equipment
14	for carbon dioxide capture and storage or use.
15	"(C) Program.—The term 'program'
16	means the competitive grant demonstration pro-
17	$gram\ established\ under\ paragraph\ (2)(B).$
8	"(2) Establishment of program.—
9	"(A) Feasibility study.—Not later than
20	180 days after the date of enactment of this sec-
21	tion, the Architect of the Capitol, in cooperation
22	with the Administrator, shall complete a feasi-
23	bility study evaluating the available methods to
24	proceed with the project and program established
25	under this section taking into consideration—

1	"(i) the availability of carbon capture
2	technologies;
3	"(ii) energy conservation and carbon
4	reduction strategies; and
5	"(iii) security of operations at the
6	Capitol power plant.
7	"(B) Competitive grant program.—The
8	Architect of the Capitol, in cooperation with the
9	Administrator, shall establish a competitive
10	grant demonstration program under which the
11	Architect of the Capitol shall, subject to the
12	availability of appropriations, provide to eligible
13	entities, as determined by the Architect of the
14	Capitol, in cooperation with the Administrator,
15	grants to carry out projects to demonstrate, dur-
16	ing the 2-year period beginning on the date of
17	enactment of this subsection, the capture and
18	storage or use of carbon dioxide emitted from the
19	Capitol power plant as a result of burning coal.
20	"(3) Requirements.—
21	"(A) Provision of grants.—
22	"(i) In general.—The Architect of the
23	Capitol, in cooperation with the Adminis-
24	trator, shall provide the grants under the
25	program on a competitive basis.

1	"(ii) Factors for consideration.—
2	In providing grants under the program, the
3	Architect of the Capitol, in cooperation with
4	the Administrator, shall take into
5	consideration—
6	"(I) the practicability of conver-
7	sion by the proposed project of carbon
8	dioxide into useful products, such as
9	$transportation\ fuel;$
10	"(II) the carbon dioxide energy ef-
11	ficiency of the proposed project; and
12	"(III) whether the proposed
13	project is able to reduce more than 1
14	air pollutant regulated under this Act.
15	"(B) Requirements for entities.—An
16	entity that receives a grant under the program
17	shall—
18	"(i) use to carry out the project of the
19	entity a technology designed to reduce or
20	eliminate emission of carbon dioxide that is
21	in existence on the date of enactment of this
22	subsection that has been used—
23	"(I) by not less than 3 other fa-
24	cilities (including a coal-fired power
25	plant); and

1	"(II) on a scale of not less than 5
2	times the size of the proposed project of
3	the entity at the Capitol power plant;
4	and
5	"(ii) carry out the project of the entity
6	in consultation with, and with the concur-
7	rence of, the Architect of the Capitol and the
8	Administrator.
9	"(C) Consistency with capitol power
10	PLANT MODIFICATIONS.—The Architect of the
11	Capitol may require changes to a project under
12	the program that are necessary to carry out any
13	modifications to be made to the Capitol power
14	plant.
15	"(4) Incentive.—In addition to the grant under
16	this subsection, the Architect of the Capitol may pro-
17	vide to an entity that receives such a grant an incen-
18	tive award in an amount equal to not more than
19	\$50,000, of which—
20	"(A) \$15,000 shall be provided after the
21	project of the entity has sustained operation for
22	a period of 100 days, as determined by the Ar-
23	chitect of the Capitol;
24	"(B) \$15,000 shall be provided after the
25	project of the entity has sustained operation for

1	a period of 200 days, as determined by the Ar-
2	chitect of the Capitol; and
3	"(C) \$20,000 shall be provided after the
4	project of the entity has sustained operation for
5	a period of 300 days, as determined by the Ar-
6	chitect of the Capitol.
7	"(5) Termination.—The program shall termi-
8	nate on the date that is 2 years after the date of en-
9	actment of this subsection.
10	"(6) Authorization of Appropriations.—
11	There is authorized to be appropriated to carry out
12	the program \$3,000,000.".
13	SEC. 306. ASSESSMENT OF CARBON SEQUESTRATION AND
14	METHANE AND NITROUS OXIDE EMISSIONS
15	FROM TERRESTRIAL ECOSYSTEMS.
16	(a) Definitions.—In this section:
17	(1) Adaptation strategy.—The term "adapta-
18	tion strategy" means a land use and management
19	strategy that can be used to increase the sequestration
20	capabilities of any terrestrial ecosystem.
21	(2) Assessment.—The term "assessment"
22	means the national assessment authorized under sub-
23	section (b).

1	(3) Covered Greenhouse Gas.—The term
2	"covered greenhouse gas" means carbon dioxide, ni-
3	trous oxide, and methane gas.
4	(4) Native plant species.—The term "native
5	plant species" means any noninvasive, naturally oc-
6	curring plant species within a terrestrial ecosystem.
7	(5) Secretary.—The term "Secretary" means
8	the Secretary of the Interior.
9	(6) FEDERAL LAND—The term "Federal land"
10	means—
11	(A) land of the National Forest System (as
12	defined in section 11(a) of the Forest and Range-
13	land Renewable Resources Planning Act of 1974
14	(16 U.S.C. 1609(a))) administered by the Sec-
15	retary of Agriculture, acting through the Chief of
16	the Forest Service; and
17	(B) public lands (as defined in section 103
18	of the Federal Land Policy and Management Act
19	of 1976 (43 U.S.C. 1702)), the surface of which
20	is administered by the Secretary of the Interior,
21	acting through the Director of the Bureau of
22	Land Management.
23	(7) Terrestrial ecosystem.—

1	(A) In General.—The term "terrestrial
2	ecosystem" means any ecological and surficial
3	geological system on Federal land.
4	(B) Inclusions.—The term "terrestrial
5	ecosystem" includes—
6	(i) forest land;
7	(ii) grassland; and
8	(iii) freshwater aquatic ecosystems.
9	(b) Authorization of Assessment.—Not later than
10	2 years after the date on which the final methodology is
11	published under subsection (f)(3)(D), the Secretary shall
12	complete a national assessment of—
13	(1) the quantity of carbon stored in and released
14	from terrestrial ecosystems; including from man-
15	caused and natural fires; and
16	(2) the annual flux of covered greenhouse gases
17	in and out of terrestrial ecosystems.
18	(c) Components.—In conducting the assessment
19	under subsection (b), the Secretary shall—
20	(1) determine the processes that control the flux
21	of covered greenhouse gases in and out of each terres-
22	$trial\ ecosystem;$
23	(2) estimate the technical and economic potential
24	for increasing carbon sequestration in natural and
25	managed terrestrial ecosystems through management

1	activities or restoration activities in each terrestrial
2	e cosystem;
3	(3) develop near-term and long-term adaptation
4	strategies or mitigation strategies that can be
5	employed—
6	(A) to enhance the sequestration of carbon
7	in each terrestrial ecosystem;
8	(B) to reduce emissions of covered green-
9	house gases; and
10	(C) to adapt to climate change; and
11	(4) estimate annual carbon sequestration capac-
12	ity of terrestrial ecosystems under a range of policies
13	in support of management activities to optimize se-
14	questration.
15	(d) Use of Native Plant Species.—In developing
16	restoration activities under subsection (c)(2) and manage-
17	ment strategies and adaptation strategies under subsection
18	(c)(3), the Secretary shall emphasize the use of native plant
19	species (including mixtures of many native plant species)
20	for sequestering covered greenhouse gas in each terrestrial
21	ecosystem.
22	(e) Consultation.—In conducting the assessment
23	under subsection (b) and developing the methodology under
24	subsection (f), the Secretary shall consult with—
25	(1) the Secretary of Energy;

1	(2) the Secretary of Agriculture;
2	(3) the Administrator of the Environmental Pro-
3	tection Agency;
4	(4) the heads of other relevant agencies;
5	(5) consortia based at institutions of higher edu-
6	cation and with research corporations; and
7	(6) Federal forest and grassland managers.
8	(f) Methodology.—
9	(1) In general.—Not later than 1 year after
10	the date of enactment of this Act, the Secretary shall
11	develop a methodology for conducting the assessment.
12	(2) Requirements.—The methodology developed
13	under paragraph (1)—
14	(A) shall—
15	(i) determine the method for meas-
16	uring, monitoring, quantifying, and mone-
17	tizing covered greenhouse gas emissions and
18	reductions, including methods for allocating
19	and managing offsets or credits; and
20	(ii) estimate the total capacity of each
21	terrestrial ecosystem to—
22	(I) sequester carbon; and
23	(II) reduce emissions of covered
24	greenhouse gases; and

1	(B) may employ economic and other sys-
2	tems models, analyses, and estimations, to be de-
3	veloped in consultation with each of the individ-
4	uals described in subsection (e).
5	(3) External review and publication.—On
6	completion of a proposed methodology, the Secretary
7	shall—
8	(A) publish the proposed methodology;
9	(B) at least 60 days before the date on
10	which the final methodology is published, solicit
11	comments from—
12	(i) the public; and
13	(ii) heads of affected Federal and State
14	agencies;
15	(C) establish a panel to review the proposed
16	methodology published under subparagraph (A)
17	and any comments received under subparagraph
18	(B), to be composed of members—
19	(i) with expertise in the matters de-
20	scribed in subsections (c) and (d); and
21	(ii) that are, as appropriate, represent-
22	atives of Federal agencies, institutions of
23	higher education, nongovernmental organi-
24	zations, State organizations, industry, and
25	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—
8	(A) the carbon sequestration capacity of rel-
9	evant terrestrial ecosystems;
10	(B) a national inventory of covered green-
11	house gas sources that is consistent with the in-
12	ventory prepared by the Environmental Protec-
13	tion Agency entitled the "Inventory of U.S.
14	Greenhouse Gas Emissions and Sinks: 1990-
15	2005"; and
16	(C) the willingness of covered greenhouse
17	gas emitters to pay to sequester the covered
18	greenhouse gases emitted by the applicable
19	emitters in designated terrestrial ecosystems; and
20	(2) not later than 180 days after the date on
21	which the assessment is completed, submit to the
22	heads of applicable Federal agencies and the appro-
23	priate committees of Congress a report that describes
24	the results of the assessment.

1	(h) Data and Report Availability.—On completion
2	of the assessment, the Secretary shall incorporate the results
3	of the assessment into a web-accessible database for public
4	use.
5	SEC. 307. ABRUPT CLIMATE CHANGE RESEARCH PROGRAM
6	(a) Establishment of Program.—The Secretary of
7	Commerce shall establish within the Office of Oceanic and
8	Atmospheric Research of the National Oceanic and Atmos
9	pheric Administration, and shall carry out, a program of
10	scientific research on abrupt climate change.
11	(b) Purposes of Program.—The purposes of the pro-
12	gram are as follows:
13	(1) To develop a global array of terrestrial and
14	oceanographic indicators of paleoclimate in order to
15	sufficiently identify and describe past instances of ab-
16	rupt climate change.
17	(2) To improve understanding of thresholds and
18	nonlinearities in geophysical systems related to the
19	mechanisms of abrupt climate change.
20	(3) To incorporate such mechanisms into ad-
21	vanced geophysical models of climate change.
22	(4) To test the output of such models against ar
23	improved global array of records of past abrupt cli
24	mate chanaes

1	(c) Abrupt Climate Change Defined.—In this sec-
2	tion, the term "abrupt climate change" means a change in
3	the climate that occurs so rapidly or unexpectedly that
4	human or natural systems have difficulty adapting to the
5	climate as changed.
6	(d) Authorization of Appropriations.—Of such
7	sums previously authorized, there is authorized to be appro-
8	priated to the Department of Commerce for each of fiscal
9	years 2009 through 2014, to remain available until ex-
10	pended, such sums as are necessary, not to exceed
11	\$10,000,000, to carry out the research program required
12	under this section.
13	TITLE IV—COST-EFFECTIVE AND
14	ENVIRONMENTALLY SUSTAIN-
15	ABLE PUBLIC BUILDINGS
16	Subtitle A—Public Buildings Cost
17	Reduction
18	SEC. 401. SHORT TITLE.
19	This subtitle may be cited as the "Public Buildings
20	Cost Reduction Act of 2007".
21	SEC. 402. COST-EFFECTIVE AND GEOTHERMAL HEAT PUMP
22	TECHNOLOGY ACCELERATION PROGRAM.
23	(a) Definition of Administrator.—In this section,
24	the term "Administrator" means the Administrator of Gen-

1	(b) Establishment.—
2	(1) In General.—The Administrator shall es-
3	tablish a program to accelerate the use of more cost-
4	effective technologies and practices and geothermal
5	heat pumps at GSA facilities.
6	(2) Requirements.—The program established
7	under this subsection shall—
8	(A) ensure centralized responsibility for the
9	coordination of cost reduction-related and geo-
10	thermal heat pump-related recommendations,
11	practices, and activities of all relevant Federal
12	agencies;
13	(B) provide technical assistance and oper-
14	ational guidance to applicable tenants to achieve
15	the goal identified in subsection $(c)(2)(B)(ii)$;
16	and
17	(C) establish methods to track the success of
18	Federal departments and agencies with respect to
19	that goal.
20	(c) Accelerated Use of Technologies.—
21	(1) Review.—
22	(A) In general.—As part of the program
23	under this section, not later than 90 days after
24	the date of enactment of this Act, the Adminis-
25	trator shall conduct a review of—

1	(i) current use of cost-effective lighting
2	technologies and geothermal heat pumps in
3	GSA facilities; and
4	(ii) the availability to managers of
5	GSA facilities of cost-effective lighting tech-
6	nologies and geothermal heat pumps.
7	(B) Requirements.—The review under
8	subparagraph (A) shall—
9	(i) examine the use of cost-effective
10	lighting technologies, geothermal heat
11	pumps, and other cost-effective technologies
12	and practices by Federal agencies in GSA
13	facilities; and
14	(ii) as prepared in consultation with
15	the Administrator of the Environmental
16	Protection Agency, identify cost-effective
17	lighting technology and geothermal heat
18	pump technology standards that could be
19	used for all types of GSA facilities.
20	(2) Replacement.—
21	(A) In general.—As part of the program
22	under this section, not later than 180 days after
23	the date of enactment of this Act, the Adminis-
24	trator shall establish, using available appropria-
25	tions, a cost-effective lighting technology and geo-

thermal 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.

(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, 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, maximum feasible replacement of existing lighting, heating, and cooling technologies with cost-effective lighting technologies and geothermal heat

1	pump technologies by not later than the
2	date that is 5 years after the date of enact-
3	ment of this Act.
4	(d) GSA FACILITY TECHNOLOGIES AND PRACTICES.—
5	Not later than 180 days after the date of enactment of this
6	Act, and annually thereafter, the Administrator shall—
7	(1) ensure that a manager responsible for accel-
8	erating the use of cost-effective technologies and prac-
9	tices and geothermal heat pump technologies is des-
10	ignated for each GSA facility; and
11	(2) submit to Congress a plan, to be implemented
12	to the maximum extent feasible (including at the
13	maximum rate feasible) using available appropria-
14	tions, by not later than the date that is 5 years after
15	the date of enactment of this Act, that—
16	(A) with respect to cost-effective technologies
17	and practices—
18	(i) identifies the specific activities
19	needed to achieve a 20-percent reduction in
20	operational costs through the application of
21	cost-effective technologies and practices from
22	2003 levels at GSA facilities by not later
23	than 5 years after the date of enactment of
24	$this\ Act;$

1	(ii) describes activities required and
2	carried out to estimate the funds necessary
3	to achieve the reduction described in clause
4	(i);
5	(B) includes an estimate of the funds nec-
6	essary to carry out this section;
7	(C) describes the status of the implementa-
8	tion of cost-effective technologies and practices
9	and geothermal heat pump technologies and
10	practices at GSA facilities, including—
11	(i) the extent to which programs, in-
12	cluding the program established under sub-
13	section (b), are being carried out in accord-
14	ance with this subtitle; and
15	(ii) the status of funding requests and
16	appropriations for those programs;
17	(D) identifies within the planning, budg-
18	eting, and construction processes, all types of
19	GSA facility-related procedures that inhibit new
20	and existing GSA facilities from implementing
21	cost-effective technologies or geothermal heat
22	pump technologies;
23	(E) recommends language for uniform
24	standards for use by Federal agencies in imple-
25	menting cost-effective technologies and practices

1	and geothermal heat pump technologies and
2	practices;
3	(F) in coordination with the Office of Man-
4	agement and Budget, reviews the budget process
5	for capital programs with respect to alternatives
6	for—
7	(i) permitting Federal agencies to re-
8	tain all identified savings accrued as a re-
9	sult of the use of cost-effective technologies
10	and geothermal heat pump technologies; and
11	(ii) identifying short- and long-term
12	cost savings that accrue from the use of cost-
13	effective technologies and practices and geo-
14	thermal heat pump technologies and prac-
15	tices;
16	(G)(i) with respect to geothermal heat pump
17	technologies, achieves substantial operational cost
18	savings through the application of the tech-
19	nologies; and
20	(ii) with respect to cost-effective technologies
21	and practices, achieves cost savings through the
22	application of cost-effective technologies and
23	practices sufficient to pay the incremental addi-
24	tional costs of installing the cost-effective tech-

1	nologies and practices by not later than the date
2	that is 5 years after the date of installation; and
3	(H) includes recommendations to address
4	each of the matters, and a plan for implementa-
5	tion of each recommendation, described in sub-
6	paragraphs (A) through (G).
7	(e) Authorization of Appropriations.—There are
8	authorized to be appropriated such sums as are necessary
9	to carry out this section, to remain available until ex-
10	pended.
11	SEC. 403. ENVIRONMENTAL PROTECTION AGENCY DEM-
12	ONSTRATION GRANT PROGRAM FOR LOCAL
13	GOVERNMENTS.
14	(a) Grant Program.—
15	(1) In General.—The Administrator of the En-
16	e de la companya de
10	vironmental Protection Agency (referred to in this
17	•
	vironmental Protection Agency (referred to in this
17	vironmental Protection Agency (referred to in this section as the "Administrator") shall establish a dem-
17 18	vironmental Protection Agency (referred to in this section as the "Administrator") shall establish a demonstration program under which the Administrator
17 18 19	vironmental Protection Agency (referred to in this section as the "Administrator") shall establish a demonstration program under which the Administrator shall provide competitive grants to assist local govern-
17 18 19 20	vironmental Protection Agency (referred to in this section as the "Administrator") shall establish a demonstration program under which the Administrator shall provide competitive grants to assist local governments (such as municipalities and counties), with re-
17 18 19 20 21	vironmental Protection Agency (referred to in this section as the "Administrator") shall establish a demonstration program under which the Administrator shall provide competitive grants to assist local governments (such as municipalities and counties), with respect to local government buildings—
17 18 19 20 21 22	vironmental Protection Agency (referred to in this section as the "Administrator") shall establish a demonstration program under which the Administrator shall provide competitive grants to assist local governments (such as municipalities and counties), with respect to local government buildings— (A) to deploy cost-effective technologies and

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

- the application of cost-effective technologies and
 practices reported by grantees under this section;
 - (B) standards for grantees to implement training programs, and to provide technical assistance and education, relating to the retrofit of buildings using cost-effective technologies and practices; and
 - (C) a requirement that each local government that receives a grant under this section shall achieve facility-wide cost savings, through renovation of existing local government buildings using cost-effective technologies and practices, of at least 40 percent as compared to the baseline operational costs of the buildings before the renovation (as calculated assuming a 3-year, weather-normalized average).
- 17 (c) COMPLIANCE WITH STATE AND LOCAL LAW.—
 18 Nothing in this section or any program carried out using
 19 a grant provided under this section supersedes or otherwise
 20 affects any State or local law, to the extent that the State
 21 or local law contains a requirement that is more stringent
 22 than the relevant requirement of this section.
- 23 (d) AUTHORIZATION OF APPROPRIATIONS.—There is 24 authorized to be appropriated to carry out this section 25 \$20,000,000 for each of fiscal years 2007 through 2012.

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1	(e) Reports.—
2	(1) In General.—The Administrator shall pro-
3	vide annual reports to Congress on cost savings
4	achieved and actions taken and recommendations
5	made under this section, and any recommendations
6	for further action.
7	(2) Final Report.—The Administrator shall
8	issue a final report at the conclusion of the program,
9	including findings, a summary of total cost savings
10	achieved, and recommendations for further action.
11	(f) TERMINATION.—The program under this section
12	shall terminate on September 30, 2012.
13	SEC. 404. DEFINITIONS.
14	In this subtitle:
15	(1) Cost-effective lighting technology.—
16	(A) In General.—The term "cost-effective
17	lighting technology" means a lighting technology
18	that—
19	(i) will result in substantial oper-
20	ational cost savings by ensuring an in-
21	stalled consumption of not more than 1
22	watt per square foot; or
23	(ii) is contained in a list under—
24	(I) section 553 of Public Law 95–
25	619 (42 U.S.C. 8259b); and

1	(II) Federal acquisition regula-
2	tion 23–203.
3	(B) Inclusions.—The term "cost-effective
4	lighting technology" includes—
5	(i) lamps;
6	(ii) ballasts;
7	(iii) luminaires;
8	$(iv)\ lighting\ controls;$
9	(v) daylighting; and
10	(vi) early use of other highly cost-effec-
11	tive lighting technologies.
12	(2) Cost-effective technologies and prac-
13	TICES.—The term "cost-effective technologies and
14	practices" means a technology or practice that—
15	(A) will result in substantial operational
16	cost savings by reducing utility costs; and
17	(B) complies with the provisions of section
18	553 of Public Law 95-619 (42 U.S.C. 8259b)
19	and Federal acquisition regulation 23–203.
20	(3) Operational cost savings.—
21	(A) In General.—The term "operational
22	cost savings" means a reduction in end-use oper-
23	ational costs through the application of cost-effec-
24	tive technologies and practices or geothermal
25	heat pumps, including a reduction in electricity

1	consumption relative to consumption by the
2	same customer or at the same facility in a given
3	year, as defined in guidelines promulgated by
4	the Administrator pursuant to section 403(b),
5	that achieves cost savings sufficient to pay the
6	incremental additional costs of using cost-effec-
7	tive technologies and practices or geothermal
8	heat pumps by not later than—
9	(i) for cost-effective technologies and
10	practices, the date that is 5 years after the
11	date of installation; and
12	(ii) for geothermal heat pumps, as soon
13	as practical after the date of installation of
14	the applicable geothermal heat pump.
15	(B) Inclusions.—The term "operational
16	cost savings" includes savings achieved at a fa-
17	cility as a result of—
18	(i) the installation or use of cost-effec-
19	tive technologies and practices; or
20	(ii) the planting of vegetation that
21	shades the facility and reduces the heating,
22	cooling, or lighting needs of the facility.
23	(C) Exclusion.—The term "operational
24	cost savings" does not include savings from
25	measures that would likely be adopted in the ab-

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

1	(ii) is leased, in whole or in part, by
2	the Administrator for use by the Federal
3	Government—
4	(I) except as provided in sub-
5	clause (II), for a term of not less than
6	5 years; or
7	(II) for a term of less than 5
8	years, if the Administrator determines
9	that use of cost-effective technologies
10	and practices would result in the pay-
11	back of expenses.
12	(B) Inclusion.—The term "GSA facility"
13	includes any group of buildings, structures, or
14	facilities described in subparagraph (A) (includ-
15	ing the associated energy-consuming support sys-
16	tems of the buildings, structures, and facilities).
17	(C) Exemption.—The Administrator may
18	exempt from the definition of "GSA facility"
19	under this paragraph a building, structure, or
20	facility that meets the requirements of section
21	543(c) of Public Law 95–619 (42 U.S.C.
22	8253(c)).

1	Subtitle B—Installation of Photo-
2	voltaic System at Department of
3	Energy Headquarters Building
4	SEC. 411. INSTALLATION OF PHOTOVOLTAIC SYSTEM AT DE-
5	PARTMENT OF ENERGY HEADQUARTERS
6	BUILDING.
7	(a) In General.—The Administrator of General
8	Services shall install a photovoltaic system, as set forth in
9	the Sun Wall Design Project, for the headquarters building
10	of the Department of Energy located at 1000 Independence
11	Avenue, Southwest, Washington, D.C., commonly known as
12	the Forrestal Building.
13	(b) Funding.—There shall be available from the Fed-
14	eral Buildings Fund established by section 592 of title 40,
15	United States Code, \$30,000,000 to carry out this section.
16	Such sums shall be derived from the unobligated balance
17	of amounts made available from the Fund for fiscal year
18	2007, and prior fiscal years, for repairs and alterations and
19	other activities (excluding amounts made available for the
20	energy program). Such sums shall remain available until
21	expended.
22	(c) Obligation of Funds.—None of the funds made
23	available pursuant to subsection (b) may be obligated prior
24	to September 30, 2007.

1	Suotitie C—Hign-Performance
2	Green Buildings
3	SEC. 421. SHORT TITLE.
4	This subtitle may be cited as the "High-Performance
5	Green Buildings Act of 2007".
6	SEC. 422. FINDINGS AND PURPOSES.
7	(a) FINDINGS.—Congress finds that—
8	(1) high-performance green buildings—
9	(A) reduce energy, water, and material re-
10	source use and the generation of waste;
11	(B) improve indoor environmental quality,
12	and protect indoor air quality by, for example,
13	using materials that emit fewer or no toxic
14	chemicals into the indoor air;
15	(C) improve thermal comfort;
16	(D) improve lighting and the acoustic envi-
17	ronment;
18	(E) improve the health and productivity of
19	individuals who live and work in the buildings;
20	(F) improve indoor and outdoor impacts of
21	the buildings on human health and the environ-
22	ment;
23	(G) increase the use of environmentally
24	preferable products, including biobased, recycled,

1	and nontoxic products with lower lifecycle im-
2	pacts; and
3	(H) increase opportunities for reuse of ma-
4	terials and for recycling;
5	(2) during the planning, design, and construc-
6	tion of a high-performance green building, the envi-
7	ronmental and energy impacts of building location
8	and site design, the minimization of energy and ma-
9	terials use, and the environmental impacts of the
10	building are considered;
11	(3) according to the United States Green Build-
12	ing Council, certified green buildings, as compared to
13	conventional buildings—
14	(A) use an average of 36 percent less total
15	energy (and in some cases up to 50 to 70 percent
16	less total energy);
17	(B) use 30 percent less water; and
18	(C) reduce waste costs, often by 50 to 90
19	percent;
20	(4) the benefits of high-performance green build-
21	ings are important, because in the United States,
22	buildings are responsible for approximately—
23	(A) 39 percent of primary energy use;
24	(B) 12 percent of potable water use;

1	(C) 136,000,000 tons of building-related
2	construction and demolition debris;
3	(D) 70 percent of United States resource
4	consumption; and
5	(E) 70 percent of electricity consumption;
6	(5) green building certification programs can be
7	highly beneficial by disseminating up-to-date infor-
8	mation and expertise regarding high-performance
9	green buildings, and by providing third-party
10	verification of green building design, practices, and
11	materials, and other aspects of buildings; and
12	(6) a July 2006 study completed for the General
13	Services Administration, entitled "Sustainable Build-
14	ing Rating Systems Summary," concluded that—
15	(A) green building standards are an impor-
16	tant means to encourage better practices;
17	(B) the Leadership in Energy and Environ-
18	mental Design (LEED) standard for green
19	building certification is "currently the dominant
20	system in the United States market and is being
21	adapted to multiple markets worldwide"; and
22	(C) there are other useful green building
23	certification or rating programs in various
24	stages of development and adoption, including

1	the Green Globes program and other rating sys-
2	tems.
3	(b) Purposes.—The purposes of this subtitle are—

- (b) Purposes.—The purposes of this subtitle are—
- (1) to encourage the Federal Government to act as an example for State and local governments, the private sector, and individuals by building high-performance green buildings that reduce energy use and environmental impacts;
- (2) to establish an Office within the General Services Administration, and a Green Building Advisory Committee, to advance the goals of conducting research and development and public outreach, and to move the Federal Government toward construction of high-performance green buildings;
- (3) to encourage States, local governments, and school systems to site, build, renovate, and operate high-performance green schools through the adoption of voluntary guidelines for those schools, the dissemination of grants, and the adoption of environmental health plans and programs;
- (4) to strengthen Federal leadership on high-performance green buildings through the adoption of incentives for high-performance green buildings, and improved green procurement by Federal agencies; and

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1	(5) to demonstrate that high-performance green
2	buildings can and do provide significant benefits, in
3	order to encourage wider adoption of green building
4	practices, through the adoption of demonstration
5	projects.
6	SEC. 423. DEFINITIONS.
7	In this subtitle:
8	(1) Administrator.—The term "Adminis-
9	trator" means the Administrator of General Services.
10	(2) Committee.—The term "Committee" means
11	the Green Building Advisory Committee established
12	under section $433(a)$.
13	(3) DIRECTOR.—The term "Director" means the
14	individual appointed to the position established under
15	section $431(a)$.
16	(4) Federal facility.—
17	(A) In General.—The term "Federal facil-
18	ity" means any building or facility the intended
19	use of which requires the building or facility to
20	be—
21	(i) accessible to the public; and
22	(ii) constructed or altered by or on be-
23	half of the United States.
24	(B) Exclusions.—The term "Federal facil-
25	itu" does not include a privatelu-owned residen-

1	tial or commercial structure that is not leased by
2	the Federal Government.
3	(5) High-performance green building.—The
4	term "high-performance green building" means a
5	building—
6	(A) that, during its life-cycle—
7	(i) reduces energy, water, and material
8	resource use and the generation of waste;
9	(ii) improves indoor environmental
10	quality, including protecting indoor air
11	quality during construction, using low-
12	emitting materials, improving thermal com-
13	fort, and improving lighting and acoustic
14	environments that affect occupant health
15	and productivity;
16	(iii) improves indoor and outdoor im-
17	pacts of the building on human health and
18	$the\ environment;$
19	(iv) increases the use of environ-
20	mentally preferable products, including
21	biobased, recycled content, and nontoxic
22	products with lower life-cycle impacts;
23	(v) increases reuse and recycling op-
24	portunities; and

1	(vi) integrates systems in the building;
2	and
3	(B) for which, during its planning, design,
4	and construction, the environmental and energy
5	impacts of building location and site design are
6	considered.
7	(6) Life cycle.—The term "life cycle", with re-
8	spect to a high-performance green building, means all
9	stages of the useful life of the building (including com-
10	ponents, equipment, systems, and controls of the
11	building) beginning at conception of a green building
12	project and continuing through site selection, design,
13	$construction,\ landscaping,\ commissioning,\ operation,$
14	maintenance, renovation, deconstruction or demoli-
15	tion, removal, and recycling of the green building.
16	(7) Life-cycle assessment.—The term "life-
17	cycle assessment" means a comprehensive system ap-
18	proach for measuring the environmental performance
19	of a product or service over the life of the product or
20	service, beginning at raw materials acquisition and
21	continuing through manufacturing, transportation,
22	installation, use, reuse, and end-of-life waste manage-
23	ment.
24	(8) Life-cycle costing.—The term "life-cycle
25	costing", with respect to a high-performance green

1	building, means a technique of economic evaluation
2	that—
3	(A) sums, over a given study period, the
4	costs of initial investment (less resale value), re-
5	placements, operations (including energy use),
6	and maintenance and repair of an investment
7	decision; and
8	(B) is expressed—
9	(i) in present value terms, in the case
10	of a study period equivalent to the longest
11	useful life of the building, determined by
12	taking into consideration the typical life of
13	such a building in the area in which the
14	building is to be located; or
15	(ii) in annual value terms, in the case
16	of any other study period.
17	(9) Office.—The term "Office" means the Office
18	of High-Performance Green Buildings established
19	$under\ section\ 432(a).$
20	PART I—OFFICE OF HIGH-PERFORMANCE GREEN
21	BUILDINGS
22	SEC. 431. OVERSIGHT.
23	(a) In General.—The Administrator shall establish
24	within the General Services Administration, and appoint

1	an individual to serve as Director in, a position in the ca-
2	reer-reserved Senior Executive service, to—
3	(1) establish and manage the Office in accord-
4	ance with section 432; and
5	(2) carry out other duties as required under this
6	subtitle.
7	(b) Compensation.—The compensation of the Direc-
8	tor shall not exceed the maximum rate of basic pay for the
9	Senior Executive Service under section 5382 of title 5,
10	United States Code, including any applicable locality-based
11	comparability payment that may be authorized under sec-
12	tion $5304(h)(2)(C)$ of that title.
13	SEC. 432. OFFICE OF HIGH-PERFORMANCE GREEN BUILD-
14	INGS.
15	
13	(a) Establishment.—The Director shall establish
16	(a) Establishment.—The Director shall establish within the General Services Administration an Office of
16	within the General Services Administration an Office of
16 17	within the General Services Administration an Office of High-Performance Green Buildings.
16 17 18	within the General Services Administration an Office of High-Performance Green Buildings. (b) DUTIES.—The Director shall—
16 17 18 19	within the General Services Administration an Office of High-Performance Green Buildings. (b) DUTIES.—The Director shall— (1) ensure full coordination of high-performance
16 17 18 19 20	within the General Services Administration an Office of High-Performance Green Buildings. (b) DUTIES.—The Director shall— (1) ensure full coordination of high-performance green building information and activities within the
116 117 118 119 220 221	within the General Services Administration an Office of High-Performance Green Buildings. (b) DUTIES.—The Director shall— (1) ensure full coordination of high-performance green building information and activities within the General Services Administration and all relevant
116 117 118 119 220 221 222	within the General Services Administration an Office of High-Performance Green Buildings. (b) DUTIES.—The Director shall— (1) ensure full coordination of high-performance green building information and activities within the General Services Administration and all relevant Federal agencies, including, at a minimum—

1	(C) the Office of Federal Procurement Pol-
2	icy;
3	(D) the Department of Energy;
4	(E) the Department of Health and Human
5	Services;
6	(F) the Department of Defense; and
7	(G) such other Federal agencies as the Di-
8	rector considers to be appropriate;
9	(2) establish a senior-level green building advi-
10	sory committee, which shall provide advice and rec-
11	ommendations in accordance with section 433;
12	(3) identify and biennially reassess improved or
13	higher rating standards recommended by the Com-
14	mittee;
15	(4) establish a national high-performance green
16	building clearinghouse in accordance with section
17	434, which shall provide green building information
18	through—
19	$(A) \ outreach;$
20	(B) education; and
21	(C) the provision of technical assistance;
22	(5) ensure full coordination of research and de-
23	velopment information relating to high-performance
24	green building initiatives under section 435;

1	(6) identify and develop green building stand-
2	ards that could be used for all types of Federal facili-
3	ties in accordance with section 435;
4	(7) establish green practices that can be used
5	throughout the life of a Federal facility;
6	(8) review and analyze current Federal budget
7	practices and life-cycle costing issues, and make rec-
8	ommendations to Congress, in accordance with section
9	436; and
10	(9) complete and submit the report described in
11	subsection (c).
12	(c) Report.—Not later than 2 years after the date of
13	enactment of this Act, and biennially thereafter, the Direc-
14	tor shall submit to Congress a report that—
15	(1) describes the status of the green building ini-
16	tiatives under this subtitle and other Federal pro-
17	grams in effect as of the date of the report,
18	including—
19	(A) the extent to which the programs are
20	being carried out in accordance with this sub-
21	title; and
22	(B) the status of funding requests and ap-
23	propriations for those programs;
24	(2) identifies within the planning, budgeting,
25	and construction process all types of Federal facility

1	procedures that inhibit new and existing Federal fa-
2	cilities from becoming high-performance green build-
3	ings, as measured by the standard for high-perform-
4	ance green buildings identified in accordance with
5	subsection (d);
6	(3) identifies inconsistencies, as reported to the
7	Committee, in Federal law with respect to product ac-
8	quisition guidelines and high-performance product
9	guidelines;
10	(4) recommends language for uniform standards
11	for use by Federal agencies in environmentally re-
12	$sponsible\ acquisition;$
13	(5) in coordination with the Office of Manage-
14	ment and Budget, reviews the budget process for cap-
15	ital programs with respect to alternatives for—
16	(A) restructuring of budgets to require the
17	use of complete energy- and environmental-cost
18	accounting;
19	(B) using operations expenditures in budg-
20	et-related decisions while simultaneously incor-
21	porating productivity and health measures (as
22	those measures can be quantified by the Office,
23	with the assistance of universities and national

laboratories);

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1	(C) permitting Federal agencies to retain
2	all identified savings accrued as a result of the
3	use of life cycle costing; and
4	(D) identifying short- and long-term cost
5	savings that accrue from high-performance green
6	buildings, including those relating to health and
7	productivity;
8	(6) identifies green, self-sustaining technologies
9	to address the operational needs of Federal facilities
10	in times of national security emergencies, natural dis-
11	asters, or other dire emergencies;
12	(7) summarizes and highlights development, at
13	the State and local level, of green building initiatives,
14	including Executive orders, policies, or laws adopted
15	promoting green building (including the status of im-
16	plementation 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	(6).
22	(d) Identification of Standard.—
23	(1) In general.—For the purpose of subsection
24	(c)(2), not later than 60 days after the date of enact-
25	ment of this Act, the Director shall identify a stand-

1	ard that the Director determines to be the most likely
2	to encourage a comprehensive and environmentally-
3	sound approach to certification of green buildings.
4	(2) Basis.—The standard identified under para-
5	graph (1) shall be based on—
6	(A) a biennial study, which shall be carried
7	out by the Director to compare and evaluate
8	standards;
9	(B) the ability and availability of assessors
10	and auditors to independently verify the criteria
11	and measurement of metrics at the scale nec-
12	essary to implement this subtitle;
13	(C) the ability of the applicable standard-
14	setting organization to collect and reflect public
15	comment;
16	(D) the ability of the standard to be devel-
17	oped and revised through a consensus-based proc-
18	ess;
19	(E) an evaluation of the adequacy of the
20	standard, which shall give credit for—
21	(i) efficient and sustainable use of
22	water, energy, and other natural resources;
23	(ii) use of renewable energy sources;
24	(iii) improved indoor environmental
25	quality through enhanced indoor air qual-

1	ity, thermal comfort, acoustics, day light-
2	ing, pollutant source control, and use of
3	low-emission materials and building system
4	controls; and
5	(iv) such other criteria as the Director
6	determines to be appropriate; and
7	(F) national recognition within the build-
8	ing industry.
9	(3) Biennial review.—The Director shall—
10	(A) conduct a biennial review of the stand-
11	ard identified under paragraph (1); and
12	(B) include the results of each biennial re-
13	view in the report required to be submitted under
14	subsection (c).
15	(e) Implementation.—The Office shall carry out each
16	plan for implementation of recommendations under sub-
17	section $(c)(7)$.
18	SEC. 433. GREEN BUILDING ADVISORY COMMITTEE.
19	(a) Establishment.—Not later than 180 days after
20	the date of enactment of this Act, the Director shall establish
21	an advisory committee, to be known as the "Green Building
22	Advisory Committee".
23	(b) Membership.—
24	(1) In General.—The Committee shall be com-
25	posed of representatives of, at a minimum—

1	(A) each agency referred to in section
2	432(b)(1); and
3	(B) other relevant agencies and entities, as
4	determined by the Director, including at least 1
5	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; and
16	(v) environmental health experts, in-
17	cluding those with experience in children's
18	health.
19	(2) Non-federal members.—The total number
20	of non-Federal members on the Committee at any
21	time shall not exceed 15.
22	(c) Meetings.—The Director shall establish a regular
23	schedule of meetings for the Committee.
24	(d) Duties.—The Committee shall provide advice and
25	expertise for use by the Director in carrying out the duties

1	under this subtitle, including such recommendations relat-
2	ing to Federal activities carried out under sections 434
3	through 436 as are agreed to by a majority of the members
4	of the Committee.
5	(e) FACA Exemption.—The Committee shall not be
6	subject to section 14 of the Federal Advisory Committee Act
7	(5 U.S.C. App.).
8	SEC. 434. PUBLIC OUTREACH.
9	The Director, in coordination with the Committee,
0	shall carry out public outreach to inform individuals and
11	entities of the information and services available Govern-
12	ment-wide by—
13	(1) establishing and maintaining a national
14	high-performance green building clearinghouse, in-
15	cluding on the Internet, that—
16	(A) identifies existing similar efforts and
17	coordinates activities of common interest; and
18	(B) provides information relating to high-
19	performance green buildings, including
20	hyperlinks to Internet sites that describe related
21	activities, information, and resources of—
22	(i) the Federal Government;
23	(ii) State and local governments;

1	(iii) the private sector (including non-
2	governmental and nonprofit entities and or-
3	ganizations); and
4	(iv) other relevant organizations, in-
5	cluding those from other countries;
6	(2) identifying and recommending educational
7	resources for implementing high-performance green
8	building practices, including security and emergency
9	benefits and practices;
10	(3) providing access to technical assistance on
11	using tools and resources to make more cost-effective,
12	energy-efficient, health-protective, and environ-
13	mentally beneficial decisions for constructing high-
14	performance green buildings, including tools available
15	to conduct life-cycle costing and life-cycle assessment;
16	(4) providing information on application proc-
17	esses for certifying a high-performance green building,
18	$including\ certification\ and\ commissioning;$
19	(5) providing technical information, market re-
20	search, or other forms of assistance or advice that
21	would be useful in planning and constructing high-
22	performance green buildings; and
23	(6) using such other methods as are determined
24	by the Director to be appropriate.

1	SEC. 435. RESEARCH AND DEVELOPMENT.
2	(a) Establishment.—The Director, in coordination
3	with the Committee, shall—
4	(1)(A) survey existing research and studies relat-
5	ing to high-performance green buildings; and
6	(B) coordinate activities of common interest;
7	(2) develop and recommend a high-performance
8	green building research plan that—
9	(A) identifies information and research
10	needs, including the relationships between
11	human health, occupant productivity, and each
12	of—
13	(i) emissions from materials and prod-
14	ucts in the building;
15	(ii) natural day lighting;
16	(iii) ventilation choices and tech-
17	nologies;
18	(iv) heating, cooling, and system con-
19	trol choices and technologies;
20	(v) moisture control and mold;
21	(vi) maintenance, cleaning, and pest
22	$control\ activities;$
23	(vii) acoustics; and
24	(viii) other issues relating to the
25	health, comfort, productivity, and perform-

ance of occupants of the building; and

26

1	(B) promotes the development and dissemi-
2	nation of high-performance green building meas-
3	urement tools that, at a minimum, may be
4	used—
5	(i) to monitor and assess the life-cycle
6	performance of facilities (including dem-
7	onstration projects) built as high-perform-
8	ance green buildings; and
9	(ii) to perform life-cycle assessments;
10	(3) assist the budget and life-cycle costing func-
11	tions of the Office under section 436;
12	(4) study and identify potential benefits of green
13	buildings relating to security, natural disaster, and
14	emergency needs of the Federal Government; and
15	(5) support other research initiatives determined
16	by the Office.
17	(b) Indoor Air Quality.—The Director, in consulta-
18	tion with the Committee, shall develop and carry out a com-
19	prehensive indoor air quality program for all Federal fa-
20	cilities to ensure the safety of Federal workers and facility
21	occupants—
22	(1) during new construction and renovation of
23	facilities; and
24	(2) in existing facilities.

1	SEC. 436. BUDGET AND LIFE-CYCLE COSTING AND CON-
2	TRACTING.
3	(a) Establishment.—The Director, in coordination
4	with the Committee, shall—
5	(1) identify, review, and analyze current budget
6	and contracting practices that affect achievement of
7	high-performance green buildings, including the iden-
8	tification of barriers to green building life-cycle cost-
9	ing and budgetary issues;
10	(2) develop guidance and conduct training ses-
11	sions with budget specialists and contracting per-
12	sonnel from Federal agencies and budget examiners to
13	apply life-cycle cost criteria to actual projects;
14	(3) identify tools to aid life-cycle cost decision-
15	making; and
16	(4) explore the feasibility of incorporating the
17	benefits of green buildings, such as security benefits,
18	into a cost-budget analysis to aid in life-cycle costing
19	for budget and decision making processes.
20	SEC. 437. AUTHORIZATION OF APPROPRIATIONS.
21	There is authorized to be appropriated to carry out
22	this part \$4,000,000 for each of fiscal years 2008 through
23	2012, to remain available until expended.

1	PART II—HEALTHY HIGH-PERFORMANCE
2	SCHOOLS
3	SEC. 441. DEFINITION OF HIGH-PERFORMANCE SCHOOL.
4	In this part, the term "high-performance school" has
5	the meaning given the term "healthy, high-performance
6	school building" in section 5586 of the Elementary and Sec-
7	ondary Education Act of 1965 (20 U.S.C. 7277e).
8	SEC. 442. GRANTS FOR HEALTHY SCHOOL ENVIRONMENTS.
9	The Administrator of the Environmental Protection
10	Agency, in consultation with the Secretary of Education,
11	may provide grants to qualified State agencies for use in—
12	(1) providing technical assistance for programs
13	of the Environmental Protection Agency (including
14	the Tools for Schools Program and the Healthy School
15	Environmental Assessment Tool) to schools for use in
16	addressing environmental issues; and
17	(2) development of State school environmental
18	quality plans that include—
19	(A) standards for school building design,
20	construction, and renovation; and
21	(B) identification of ongoing school building
22	environmental problems in the State and rec-
23	ommended solutions to address those problems,
24	including assessment of information on the expo-
25	sure of children to environmental hazards in
26	$school\ facilities.$

1	SEC. 443. MODEL GUIDELINES FOR SITING OF SCHOOL FA-
2	CILITIES.
3	The Administrator of the Environmental Protection
4	Agency, in consultation with the Secretary of Education
5	and the Secretary of Health and Human Services, shall de-
6	velop voluntary school site selection guidelines that account
7	for—
8	(1) the special vulnerability of children to haz-
9	ardous substances or pollution exposures in any case
10	in which the potential for contamination at a poten-
11	tial school site exists;
12	(2) modes of transportation available to students
13	and staff;
14	(3) the efficient use of energy; and
15	(4) the potential use of a school at the site as an
16	emergency shelter.
17	SEC. 444. PUBLIC OUTREACH.
18	(a) In General.—The Administrator of the Environ-
19	mental Protection Agency shall provide to the Director in-
20	formation relating to all activities carried out under this
21	part, which the Director shall include in the report de-
22	scribed in section $432(c)$.
23	(b) Public Outreach.—The Director shall ensure, to
24	the maximum extent practicable, that the public clearing-
25	house established under section 434 receives and makes
26	available information on the exposure of children to envi-

1	ronmental hazards in school facilities, as provided by the
2	$Administrator\ of\ the\ Environmental\ Protection\ Agency.$
3	SEC. 445. ENVIRONMENTAL HEALTH PROGRAM.
4	(a) In General.—The Administrator of the Environ-
5	mental Protection Agency, in consultation with the Sec-
6	retary of Education, the Secretary of Health and Human
7	Services, and other relevant agencies, shall issue voluntary
8	guidelines for use by the State in developing and imple-
9	menting an environmental health program for schools
10	that—
11	(1) takes into account the status and findings of
12	Federal research initiatives established under this
13	subtitle and other relevant Federal law with respect
14	to school facilities, including relevant updates on
15	trends in the field, such as the impact of school facil-
16	ity environments on student and staff—
17	(A) health, safety, and productivity; and
18	(B) disabilities or special needs;
19	(2) provides research using relevant tools identi-
20	fied or developed in accordance with section 435(a) to
21	quantify the relationships between—
22	(A) human health, occupant productivity,
23	and student performance; and
24	(B) with respect to school facilities, each
25	αf

1	(i) pollutant emissions from materials
2	and products;
3	(ii) natural day lighting;
4	(iii) ventilation choices and tech-
5	nologies;
6	(iv) heating and cooling choices and
7	technologies;
8	(v) moisture control and mold;
9	(vi) maintenance, cleaning, and pest
10	$control\ activities;$
11	(vii) acoustics; and
12	(viii) other issues relating to the
13	health, comfort, productivity, and perform-
14	ance of occupants of the school facilities;
15	(3) provides technical assistance on siting, de-
16	sign, management, and operation of school facilities,
17	including facilities used by students with disabilities
18	or special needs;
19	(4) collaborates with federally funded pediatric
20	environmental health centers to assist in on-site school
21	$environmental\ investigations;$
22	(5) assists States and the public in better under-
23	standing and improving the environmental health of
24	children; and

1	(6) provides to the Office a biennial report of all
2	activities carried out under this part, which the Di-
3	rector shall include in the report described in section
4	432(c).
5	(b) Public Outreach.—The Director shall ensure, to
6	the maximum extent practicable, that the public clearing-
7	house established under section 434 receives and makes
8	available—
9	(1) information from the Administrator of the
10	Environmental Protection Agency that is contained
11	in the report described in subsection (a)(6); and
12	(2) information on the exposure of children to
13	environmental hazards in school facilities, as pro-
14	vided by the Administrator of the Environmental
15	Protection Agency.
16	SEC. 446. AUTHORIZATION OF APPROPRIATIONS.
17	There is authorized to be appropriated to carry out
18	this part \$10,000,000 for the period of fiscal years 2008
19	through 2012, to remain available until expended.
20	PART III—STRENGTHENING FEDERAL
21	LEADERSHIP
22	SEC. 451. INCENTIVES.
23	As soon as practicable after the date of enactment of
24	this Act, the Director shall identify incentives to encourage

1	the use of green buildings and related technology in the op-
2	erations of the Federal Government, including through—
3	(1) the provision of recognition awards; and
4	(2) the maximum feasible retention of financial
5	savings in the annual budgets of Federal agencies.
6	SEC. 452. FEDERAL PROCUREMENT.
7	(a) In General.—Not later than 2 years after the
8	date of enactment of this Act, the Director of the Office of
9	Federal Procurement Policy, in consultation with the Di-
10	rector and the Under Secretary of Defense for Acquisition,
11	Technology, and Logistics, shall promulgate revisions of the
12	applicable acquisition regulations, to take effect as of the
13	date of promulgation of the revisions—
14	(1) to direct any Federal procurement executives
15	involved in the acquisition, construction, or major
16	renovation (including contracting for the construction
17	or major renovation) of any facility, to the maximum
18	extent practicable—
19	(A) to employ integrated design principles;
20	(B) to optimize building and systems en-
21	ergy performance;
22	(C) to protect and conserve water;
23	(D) to enhance indoor environmental qual-
24	ity; and

1	(E) to reduce environmental impacts of ma-
2	terials and waste flows; and
3	(2) to direct Federal procurement executives in-
4	volved in leasing buildings, to give preference to the
5	lease of facilities that, to the maximum extent
6	practicable—
7	(A) are energy-efficient; and
8	(B) have applied contemporary high-per-
9	formance and sustainable design principles dur-
10	ing construction or renovation.
11	(b) GUIDANCE.—Not later than 90 days after the date
12	of promulgation of the revised regulations under subsection
13	(a), the Director shall issue guidance to all Federal procure-
14	ment executives providing direction and the option to re-
15	negotiate the design of proposed facilities, renovations for
16	existing facilities, and leased facilities to incorporate im-
17	provements that are consistent with this section.
18	SEC. 453. FEDERAL GREEN BUILDING PERFORMANCE.
19	(a) In General.—Not later than October 31 of each
20	of the 2 fiscal years following the fiscal year in which this
21	Act is enacted, and at such times thereafter as the Comp-
22	troller General of the United States determines to be appro-
23	priate, the Comptroller General of the United States shall,
24	with respect to the fiscal years that have passed since the
25	preceding report—

1	(1) conduct an audit of the implementation of
2	this subtitle; and
3	(2) submit to the Office, the Committee, the Ad-
4	ministrator, and Congress a report describing the re-
5	sults of the audit.
6	(b) Contents.—An audit under subsection (a) shall
7	include a review, with respect to the period covered by the
8	report under subsection (a)(2), of—
9	(1) budget, life-cycle costing, and contracting
10	issues, using best practices identified by the Comp-
11	troller General of the United States and heads of other
12	agencies in accordance with section 436;
13	(2) the level of coordination among the Office,
14	the Office of Management and Budget, and relevant
15	agencies;
16	(3) the performance of the Office in carrying out
17	the implementation plan;
18	(4) the design stage of high-performance green
19	building measures;
20	(5) high-performance building data that were
21	collected and reported to the Office; and
22	(6) such other matters as the Comptroller Gen-
23	eral of the United States determines to be appro-
24	priate.

1	(c) Environmental Stewardship Scorecard.—
2	The Director shall consult with the Committee to enhance,
3	and assist in the implementation of, the Environmental
4	Stewardship Scorecard announced at the White House sum-
5	mit on Federal sustainable buildings in January 2006, to
6	measure the implementation by each Federal agency of sus-
7	tainable design and green building initiatives.
8	SEC. 454. STORM WATER RUNOFF REQUIREMENTS FOR FED-
9	ERAL DEVELOPMENT PROJECTS.
10	The sponsor of any development or redevelopment
11	project involving a Federal facility with a footprint that
12	exceeds 5,000 square feet shall use site planning, design,
13	construction, and maintenance strategies for the property
14	to maintain, to the maximum extent technically feasible,
15	the predevelopment hydrology of the property with regard
16	to the temperature, rate, volume, and duration of flow.
17	PART IV—DEMONSTRATION PROJECT
18	SEC. 461. COORDINATION OF GOALS.
19	(a) In General.—The Director shall establish guide-
20	lines to implement a demonstration project to contribute
21	to the research goals of the Office.
22	(b) Projects.—
23	(1) In General.—In accordance with guidelines
24	established by the Director under subsection (a) and

1	the duties of the Director described in part I, the Di-
2	rector shall carry out 3 demonstration projects.
3	(2) Location of projects.—Each project car-
4	ried out under paragraph (1) shall be located in a
5	Federal building in a State recommended by the Di-
6	rector in accordance with subsection (c).
7	(3) Requirements.—Each project carried out
8	under paragraph (1) shall—
9	(A) provide for the evaluation of the infor-
10	mation obtained through the conduct of projects
11	and activities under this subtitle; and
12	(B) achieve the highest available rating
13	under the standard identified pursuant to section
14	432(d).
15	(c) Criteria.—With respect to the existing or pro-
16	posed Federal facility at which a demonstration project
17	under this section is conducted, the Federal facility shall—
18	(1) be an appropriate model for a project relat-
19	ing to—
20	(A) the effectiveness of high-performance
21	technologies;
22	(B) analysis of materials, components, and
23	systems, including the impact on the health of
24	building occupants:

1	(C) life-cycle costing and life-cycle assess-
2	ment of building materials and systems; and
3	(D) location and design that promote access
4	to the Federal facility through walking, biking,
5	and mass transit; and
6	(2) possess sufficient technological and organiza-
7	$tional\ adapta bility.$
8	(d) Report.—Not later than 1 year after the date of
9	enactment of this Act, and annually thereafter through Sep-
10	tember 30, 2013, the Director shall submit to the Adminis-
11	trator a report that describes the status of and findings re-
12	garding the demonstration project.
13	SEC. 462. AUTHORIZATION OF APPROPRIATIONS.
14	There is authorized to be appropriated to carry out
15	the Federal demonstration project described in section
16	461(b) \$10,000,000 for the period of fiscal years 2008
17	through 2012, to remain available until expended.
18	TITLE V—CORPORATE AVERAGE
19	FUEL ECONOMY STANDARDS
20	SEC. 501. SHORT TITLE.
21	This title may be cited as the "Ten-in-Ten Fuel Econ-
22	$omy\ Act$ ".

1	SEC. 502. AVERAGE FUEL ECONOMY STANDARDS FOR AUTO-
2	MOBILES AND CERTAIN OTHER VEHICLES.
3	(a) Increased Standards.—Section 32902 of title
4	49, United States Code, is amended—
5	(1) by striking " NON-PASSENGER
6	AUTOMOBILES.—" in subsection (a) and insert-
7	ing "PRESCRIPTION OF STANDARDS BY
8	REGULATION .—";
9	(2) by striking "(except passenger automobiles)"
10	in subsection (a); and
11	(3) by striking subsection (b) and inserting the
12	following:
13	"(b) Standards for Automobiles and Certain
14	Other Vehicles.—
15	"(1) In General.—The Secretary of Transpor-
16	tation, after consultation with the Administrator of
17	the Environmental Protection Agency, shall prescribe
18	average fuel economy standards for—
19	"(A) automobiles manufactured by manu-
20	facturers in each model year beginning with
21	model year 2011 in accordance with subsection
22	(c); and
23	"(B) commercial medium-duty or heavy-
24	duty on-highway vehicles in accordance with
25	subsection (k).

1	"(2) Fuel economy target for auto-
2	MOBILES.—
3	"(A) Automobile fuel economy average
4	FOR MODEL YEARS 2011 THROUGH 2020.—The
5	Secretary shall prescribe average fuel economy
6	standards for automobiles in each model year be-
7	ginning with model year 2011 to achieve a com-
8	bined fuel economy average for model year 2020
9	of at least 35 miles per gallon for the fleet of
10	automobiles manufactured or sold in the United
11	States. The average fuel economy standards pre-
12	scribed by the Secretary shall be the maximum
13	feasible average fuel economy standards for
14	model years 2011 through 2019.
15	"(B) Automobile fuel economy average
16	FOR MODEL YEARS 2021 THROUGH 2030.—For
17	model years 2021 through 2030, the average fuel
18	economy required to be attained by the fleet of
19	automobiles manufactured or sold in the United
20	States shall be the maximum feasible average
21	fuel economy standard for the fleet.
22	"(C) Progress toward standard re-
23	QUIRED.—In prescribing average fuel economy
24	standards under subparagraph (A), the Sec-
25	retary shall prescribe annual fuel economy

1	standard increases that increase the applicable
2	average fuel economy standard ratably beginning
3	with model year 2011 and ending with model
4	year 2020.".
5	(b) Fuel Economy Target for Commercial Me-
6	DIUM-DUTY AND HEAVY-DUTY ON-HIGHWAY VEHICLES.—
7	Section 32902 of title 49, United States Code, is amended
8	by adding at the end thereof the following:
9	"(k) Commercial Medium- and Heavy-Duty On-
10	Highway Vehicles.—
11	"(1) STUDY.—No later than 18 months after the
12	date of enactment of the Ten-in-Ten Fuel Economy
13	Act, the Secretary of Transportation, in consultation
14	with the Secretary of Energy and the Administrator
15	of the Environmental Protection Agency, shall exam-
16	ine the fuel efficiency of commercial medium- and
17	heavy-duty on-highway vehicles and determine—
18	"(A) the appropriate test procedures and
19	methodologies for measuring commercial
20	medium- and heavy-duty on-highway vehicle fuel
21	$\it efficiency;$
22	"(B) the appropriate metric for measuring
23	and expressing commercial medium- and heavy-
24	duty on-highway vehicle fuel efficiency perform-
25	ance, taking into consideration, among other

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 effect 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.—No later than 24 months after completion of the study required by 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 procedure 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 appropriate test methods, measurement metrics, fuel economy standards, and compliance and enforcement protocols that are appropriate, cost-effective,

1	and technologically feasible for commercial medium-
2	and heavy-duty on-highway vehicles.
3	"(3) Lead-time; regulatory stability.—Any
4	commercial medium- and heavy-duty on-highway ve-
5	hicle fuel efficiency regulatory program adopted pur-
6	suant to this subsection shall provide no less than 4
7	full model years of regulatory lead-time and 3 full
8	model years of regulatory stability.
9	"(4) Commercial medium- and heavy-duty
10	ON-HIGHWAY VEHICLE DEFINED.—In this subsection,
11	the term 'commercial medium- and heavy-duty on-
12	highway vehicle' means an on-highway vehicle with a
13	gross vehicle weight rating of more than 8,500
14	pounds, and that, in the case of a vehicle with a gross
15	vehicle weight rating of less than 10,000 pounds, is
16	not an automobile.".
17	(c) Authority of Secretary.—Section 32902 of
18	title 49, United States Code, as amended by subsection (b),
19	is further amended by adding at the end thereof the fol-
20	lowing:
21	"(l) Authority of the Secretary.—
22	"(1) Vehicle attributes; model years cov-
23	ERED.—The Secretary shall—
24	"(A) prescribe by regulation average fuel
25	economy standards for automobiles based on ve-

1	hicle attributes related to fuel economy and to
2	express the standards in the form of a mathe-
3	matical function; and
4	"(B) issue regulations under this title pre-
5	scribing average fuel economy standards for 1 or
6	more model years.
7	"(2) Prohibition of Uniform percentage in-
8	CREASE.—When the Secretary prescribes a standard,
9	or prescribes an amendment under this section that
10	changes a standard, the standard may not be ex-
11	pressed as a uniform percentage increase from the
12	fuel-economy performance of attribute classes or cat-
13	egories already achieved in a model year by a manu-
14	facturer.".
15	SEC. 503. AMENDING FUEL ECONOMY STANDARDS.
16	(a) In General.—Section 32902(c) of title 49, United
17	States Code, is amended to read as follows:
18	"(c) Amending Fuel Economy Standards.—Not-
19	withstanding subsections (a) and (b), the Secretary of
20	Transportation—
21	"(1) may prescribe a standard higher than that
22	required under subsection (b); or
23	"(2) may prescribe an average fuel economy
24	standard for automobiles that is the maximum fea-
25	sible level for the model year, despite being lower than

1	the standard required under subsection (b), if the Sec-
2	retary determines, based on clear and convincing evi-
3	dence, that the average fuel economy standard pre-
4	scribed in accordance with subsections (a) and (b) for
5	automobiles in that model year is shown not to be
6	cost-effective.".
7	(b) Feasibility Criteria.—Section 32902(f) of title
8	49, United States Code, is amended to read as follows:
9	"(f) Decisions on Maximum Feasible Average
10	Fuel Economy.—
11	"(1) In General.—When deciding maximum
12	feasible average fuel economy under this section, the
13	Secretary shall consider—
14	"(A) economic practicability;
15	"(B) the effect of other motor vehicle stand-
16	ards of the Government on fuel economy;
17	"(C) environmental impacts; and
18	"(D) the need of the United States to con-
19	serve energy.
20	"(2) Limitations.—In setting any standard
21	under subsection (b), (c), or (d), the Secretary shall
22	ensure that each standard is the highest standard
23	that—
24	``(A) is technologically achievable;

1	"(B) can be achieved without materially re-
2	ducing the overall safety of automobiles manu-
3	factured or sold in the United States;
4	"(C) is not less than the standard for that
5	class of vehicles from any prior year; and
6	"(D) is cost-effective.
7	"(3) Cost-effective defined.—In this sub-
8	section, the term 'cost-effective' means that the value
9	to the United States of reduced fuel use from a pro-
10	posed fuel economy standard is greater than or equal
11	to the cost to the United States of such standard. In
12	determining cost-effectiveness, the Secretary shall give
13	priority to those technologies and packages of tech-
14	nologies that offer the largest reduction in fuel use rel-
15	ative to their costs.
16	"(4) Factors for consideration by sec-
17	RETARY IN DETERMINING COST-EFFECTIVENESS.—The
18	Secretary shall consult with the Administrator of the
19	Environmental Protection Agency, and may consult
20	with such other departments and agencies as the Sec-
21	retary deems appropriate, and shall consider in the
22	analysis the following factors:
23	"(A) Economic security.
24	"(B) The impact of the oil or energy inten-
25	sity of the United States economy on the sensi-

1	tivity of the economy to oil and other fuel price
2	changes, including the magnitude of gross domes-
3	tic product losses in response to short term price
4	shocks or long term price increases.
5	"(C) National security, including the im-
6	pact of United States payments for oil and other
7	fuel imports on political, economic, and military
8	developments in unstable or unfriendly oil-ex-
9	porting countries.
10	"(D) The uninternalized costs of pipeline
11	and storage oil seepage, and for risk of oil spills
12	from production, handling, and transport, and
13	related landscape damage.
14	"(E) The emissions of pollutants including
15	greenhouse gases over the lifecycle of the fuel and
16	the resulting costs to human health, the economy,
17	and the environment.
18	"(F) Such additional factors as the Sec-
19	retary deems relevant.
20	"(5) Minimum valuation.—When considering
21	the value to consumers of a gallon of gasoline saved,
22	the Secretary of Transportation shall use as a min-
23	imum value the greater of—
24	"(A) the average value of gasoline prices
25	projected by the Energy Information Adminis-

1	tration over the period covered by the standard;
2	or
3	"(B) the average value of gasoline prices for
4	the 5-year period immediately preceding the year
5	in which the standard is established.".
6	(c) Consultation Requirement.—Section 32902(i)
7	of title 49, United States Code, is amended by inserting
8	"and the Administrator of the Environmental Protection
9	Agency" after "Energy".
10	(d) Comments.—Section 32902(j) of title 49, United
11	States Code, is amended—
12	(1) by striking paragraph (1) and inserting "(1)
13	Before issuing a notice proposing to prescribe or
14	amend an average fuel economy standard under sub-
15	section (b), (c), or (g) of this section, the Secretary of
16	Transportation shall give the Secretary of Energy
17	and Administrator of the Environmental Protection
18	Agency at least 30 days after the receipt of the notice
19	during which the Secretary of Energy and Adminis-
20	trator may, if the Secretary of Energy or Adminis-
21	trator concludes that the proposed standard would ad-
22	versely affect the conservation goals of the Secretary
23	of Energy or environmental protection goals of the
24	Administrator, provide written comments to the Sec-
25	retary of Transportation about the impact of the

1	standard on those goals. To the extent the Secretary
2	of Transportation does not revise a proposed standard
3	to take into account comments of the Secretary of En-
4	ergy or Administrator on any adverse impact of the
5	standard, the Secretary of Transportation shall in-
6	clude those comments in the notice."; and
7	(2) by inserting "and the Administrator" after
8	"Energy" each place it appears in paragraph (2).
9	(e) Alternative Fuel Economy Standards for
10	Low Volume Manufacturers and New Entrants.—
11	Section 32902(d) of title 49, United States Code, is amend-
12	ed to read as follows:
13	"(d) Alternative Average Fuel Economy Stand-
14	ARD.—
15	"(1) In general.—Upon the application of an
16	eligible manufacturer, the Secretary of Transpor-
17	tation may prescribe an alternative average fuel econ-
18	omy standard for automobiles manufactured by that
19	manufacturer if the Secretary determines that—
20	"(A) the applicable standard prescribed
21	under subsection (a), (b), or (c) is more stringent
22	than the maximum feasible average fuel economy
23	level that manufacturer can achieve; and
24	"(B) the alternative average fuel economy
25	standard prescribed under this subsection is the

1	maximum feasible average fuel economy level
2	that manufacturer can achieve.
3	"(2) Application of alternative stand-
4	ARD.—The Secretary may provide for the application
5	of an alternative average fuel economy standard pre-
6	scribed under paragraph (1) to—
7	"(A) the manufacturer that applied for the
8	alternative average fuel economy standard;
9	"(B) all automobiles to which this sub-
10	section applies; or
11	"(C) classes of automobiles manufactured by
12	eligible manufacturers.
13	"(3) Importers.—Notwithstanding paragraph
14	(1), an importer registered under section 30141(c)
15	may not be exempted as a manufacturer under para-
16	graph (1) for an automobile that the importer—
17	"(A) imports; or
18	"(B) brings into compliance with applicable
19	motor vehicle safety standards prescribed under
20	chapter 301 for an individual described in sec-
21	$tion \ 30142.$
22	"(4) Application.—The Secretary of Transpor-
23	tation may prescribe the contents of an application
24	for an alternative average fuel economy standard.

1	"(5) Eligible manufacturer defined.—In
2	this section, the term 'eligible manufacturer' means a
3	manufacturer that—
4	"(A) is not owned in whole or in part by
5	another manufacturer that sold greater than 0.5
6	percent of the number of automobiles sold in the
7	United States in the model year prior to the
8	model year to which the application relates;
9	"(B) sold in the United States fewer than
10	0.4 percent of the number of automobiles sold in
11	the United States in the model year that is 2
12	years before the model year to which the applica-
13	tion relates; and
14	"(C) will sell in the United States fewer
15	than 0.4 percent of the automobiles sold in the
16	United States for the model year for which the
17	alternative average fuel economy standard will
18	apply.
19	"(6) Limitation.—For purposes of this sub-
20	section, notwithstanding section 32901(a)(4), the term
21	'automobile manufactured by a manufacturer' in-
22	cludes every automobile manufactuered by a person
23	that controls, is controlled by, or is under common
24	control with the manufacturer.
25	(f) Technical and Conforming Amendments.—

1	(1) Section 32902(d) of title 49, United States
2	Code, is amended by striking "passenger" each place
3	it appears.
4	(2) Section 32902(g) of title 49, United States
5	Code, is amended—
6	(A) by striking "subsection (a) or (d)" each
7	place it appears in paragraph (1) and inserting
8	"subsection (b), (c), or (d)"; and
9	(B) striking "(and submit the amendment
10	to Congress when required under subsection
11	(c)(2) of this section)" in paragraph (2) .
12	SEC. 504. DEFINITIONS.
13	(a) In General.—Section 32901(a) of title 49, United
14	States Code, is amended—
15	(1) by striking paragraph (3) and inserting the
16	following:
17	"(3) except as provided in section 32908 of this
18	title, 'automobile' means a 4-wheeled vehicle that is
19	propelled by fuel, or by alternative fuel, manufactured
20	primarily for use on public streets, roads, and high-
21	ways and rated at not more than 10,000 pounds gross
22	vehicle weight, except—
23	"(A) a vehicle operated only on a rail line;

1	"(B) a vehicle manufactured by 2 or more
2	manufacturers in different stages and less than
3	10,000 of which are manufactured per year; or
4	"(C) a work truck."; and
5	(2) by adding at the end the following:
6	"(17) 'work truck' means an automobile that the
7	Secretary determines by regulation—
8	"(A) is rated at between 8,500 and 10,000
9	pounds gross vehicle weight; and
10	"(B) is not a medium-duty passenger vehi-
11	cle (as defined in section 86.1803–01 of title 40,
12	Code of Federal Regulations).".
13	(b) Deadline for Regulations.—The Secretary of
14	Transportation—
15	(1) shall issue proposed regulations imple-
16	menting the amendments made by subsection (a) not
17	later than 1 year after the date of enactment of this
18	Act; and
19	(2) shall issue final regulations implementing
20	the amendments not later than 18 months after the
21	date of the enactment of this Act.
22	(c) Effective Date.—Regulations prescribed under
23	subsection (b) shall apply beginning with model year 2010.

1	SEC. 505. ENSURING SAFETY OF AUTOMOBILES.
2	(a) In General.—Subchapter II of chapter 301 of
3	title 49, United States Code, is amended by adding at the
4	end the following:
5	"§ 30129. Vehicle compatibility standard
6	"(a) Standards.—The Secretary of Transportation
7	shall issue a motor vehicle safety standard to reduce auto-
8	mobile incompatibility. The standard shall address charac-
9	teristics necessary to ensure better management of crash
10	forces in multiple vehicle frontal and side impact crashes
11	between different types, sizes, and weights of automobiles
12	with a gross vehicle weight of 10,000 pounds or less in order
13	to decrease occupant deaths and injuries.
14	"(b) Consumer Information.—The Secretary shall
15	develop and implement a public information side and fron-
16	tal compatibility crash test program with vehicle ratings
17	based on risks to occupants, risks to other motorists, and
18	combined risks by vehicle make and model.".
19	(b) Rulemaking Deadlines.—
20	(1) Rulemaking.—The Secretary of Transpor-
21	tation shall issue—
22	(A) a notice of a proposed rulemaking
23	under section 30129 of title 49, United States
24	Code, not later than January 1, 2012; and
25	(B) a final rule under such section not later
26	than December 31, 2014.

1	(2) Effective date of requirements.—Any
2	requirement imposed under the final rule issued
3	under paragraph (1) shall become fully effective not
4	later than September 1, 2018.
5	(c) Conforming Amendment.—The chapter analysis
6	for chapter 301 is amended by inserting after the item relat-
7	ing to section 30128 the following:
	"30129. Vehicle compatibility standard".
8	SEC. 506. CREDIT TRADING PROGRAM.
9	Section 32903 of title 49, United States Code, is
10	amended—
11	(1) by striking "passenger" each place it ap-
12	pears;
13	(2) by striking "section 32902(b)-(d) of this
14	title" each place it appears and inserting "subsection
15	(a), (c), or (d) of section 32902";
16	(3) by striking "3 consecutive model years" in
17	subsection (a)(2) and inserting "5 consecutive model
18	years'';
19	(4) in subsection (a)(2), by striking "clause (1)
20	of this subsection," and inserting "paragraph (1)";
21	and
22	(5) by striking subsection (e) and inserting the
23	following:
24	"(e) Credit Trading Among Manufacturers.—
25	The Secretary of Transportation may establish, by regula-

1	tion, a corporate average fuel economy credit trading pro-
2	gram to allow manufacturers whose automobiles exceed the
3	average fuel economy standards prescribed under section
4	32902 to earn credits to be sold to manufacturers whose
5	automobiles fail to achieve the prescribed standards such
6	that the total oil savings associated with manufacturers that
7	exceed the prescribed standards are preserved when transfer-
8	ring credits to manufacturers that fail to achieve the pre-
9	scribed standards.".
10	SEC. 507. LABELS FOR FUEL ECONOMY AND GREENHOUSE
11	GAS EMISSIONS.
12	Section 32908 of title 49, United States Code, is
13	amended—
14	(1) by redesignating subparagraph (F) of sub-
15	section (b)(1) as subparagraph (H) and inserting
16	after subparagraph (E) the following:
17	"(F) a label (or a logo imprinted on a label re-
18	quired by this paragraph) that—
19	"(i) reflects an automobile's performance on
20	the basis of criteria developed by the Adminis-
21	trator to reflect the fuel economy and greenhouse
22	gas and other emissions consequences of oper-
23	ating the automobile over its likely useful life;

1	"(ii) permits consumers to compare per-
2	formance results under clause (i) among all
3	automobiles; and
4	"(iii) is designed to encourage the manufac-
5	ture and sale of automobiles that meet or exceed
6	applicable fuel economy standards under section
7	32902.
8	"(G) a fuelstar under paragraph (5)."; and
9	(2) by adding at the end of subsection (b) the fol-
10	lowing:
11	"(4) Green Label Program.—
12	"(A) Marketing analysis.—Not later than 2
13	years after the date of the enactment of the Ten-in-
14	Ten Fuel Economy Act, the Administrator shall im-
15	plement a consumer education program and execute
16	marketing strategies to improve consumer under-
17	standing of automobile performance described in
18	$paragraph\ (1)(F).$
19	"(B) Eligibility.—Not later than 3 years after
20	the date described in subparagraph (A), the Adminis-
21	trator shall issue requirements for the label or logo re-
22	quired under paragraph $(1)(F)$ to ensure that an
23	automobile is not eligible for the label or logo unless
24	it—

1	"(i) meets or exceeds the applicable fuel
2	economy standard; or
3	"(ii) will have the lowest greenhouse gas
4	emissions over the useful life of the vehicle of all
5	vehicles in the vehicle attribute class to which it
6	belongs in that model year.
7	"(5) Fuelstar Program.—
8	"(A) In general.—The Secretary shall establish
9	a program, to be known as the 'Fuelstar Program',
10	under which stars shall be imprinted on or attached
11	to the label required by paragraph (1).
12	"(B) Green stars.—Under the Fuelstar Pro-
13	gram, a manufacturer may include on the label
14	maintained on an automobile under paragraph (1)—
15	"(i) 1 green star for any automobile that
16	meets the average fuel economy standard for the
17	model year under section 32902; and
18	"(ii) 1 additional green star for each 2
19	miles per gallon by which the automobile exceeds
20	such standard.
21	"(C) Gold Stars.—Under the Fuelstar Pro-
22	gram, a manufacturer may include a gold star on the
23	label maintained on an automobile under paragraph
24	(1) if the automobile attains a fuel economy of at
25	least 50 miles per gallon.".

1	SEC. 508. CONTINUED APPLICABILITY OF EXISTING STAND
2	ARDS.
3	Nothing in this title, or the amendments made by this
4	title, shall be construed to affect the application of section
5	32902 of title 49, United States Code, to passenger auto-
6	mobiles or non-passenger automobiles manufactured before
7	model year 2011.
8	SEC. 509. NATIONAL ACADEMY OF SCIENCES STUDIES.
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 vehicle fue
13	economy standards, including—
14	(1) an assessment of automotive technologies and
15	costs to reflect developments since the Academy's 2002
16	report evaluating the corporate average fuel economy
17	standards was conducted;
18	(2) an analysis of existing and potential tech
19	nologies that may be used practically to improve
20	automobile and medium-duty and heavy-duty truck
21	$fuel\ economy;$
22	(3) an analysis of how such technologies may be
23	practically integrated into the automotive and me-
24	dium-duty and heavy-duty truck manufacturing
25	process; and

1	(4) an assessment of how such technologies may
2	be used to meet the new fuel economy standards under
3	chapter 329 of title 49, United States Code, as
4	amended by this title.
5	(b) QUINQUENNIAL UPDATES.—After submitting the
6	initial report, the Academy shall update the report at 3
7	year intervals thereafter through 2025.
8	(c) Report.—The Academy shall submit the report to
9	the Secretary, the Senate Committee on Commerce, Science
10	and Transportation and the House of Representatives Com-
11	mittee on Energy and Commerce, with its findings and rec-
12	ommendations no later than 18 months after the date or
13	which the Secretary executes the agreement with the Acad
14	emy.
15	SEC. 510. STANDARDS FOR EXECUTIVE AGENCY AUTO
16	MOBILES.
17	(a) In General.—Section 32917 of title 49, United
18	States Code, is amended to read as follows:
19	"§ 32917. Standards for Executive agency automobiles
20	"(a) Fuel Efficiency.—The head of an Executive
21	agency shall ensure that each new automobile procured by

 $22\ \ \textit{the Executive agency is as fuel efficient as practicable}.$

 $``(b)\ DEFINITIONS.—In\ this\ section:$

23

1	"(1) Executive agency.—The term 'Executive
2	agency' has the meaning given that term in section
3	105 of title 5.
4	"(2) New Automobile.—The term 'new auto-
5	mobile', with respect to the fleet of automobiles of an
6	executive agency, means an automobile that is leased
7	for at least 60 consecutive days or bought, by or for
8	the Executive agency, after September 30, 2008. The
9	term does not include any vehicle designed for com-
10	bat-related missions, law enforcement work, or emer-
11	gency rescue work.".
12	(b) Report.—The Administrator of the General Serv-
13	ices Administration shall develop a report describing and
14	evaluating the efforts of the heads of the Executive agencies
15	to comply with section 32917 of title 49, United States
16	Code, for fiscal year 2009. The Administrator shall submit
17	the report to Congress no later than December 31, 2009.
18	SEC. 511. INCREASING CONSUMER AWARENESS OF FLEXI-
19	BLE FUEL AUTOMOBILES.
20	Section 32908 of title 49, United States Code, is
21	amended by adding at the end the following:
22	"(g) Increasing Consumer Awareness of Flexi-
23	BLE FUEL AUTOMOBILES.—(1) The Secretary of Energy,
24	in consultation with the Secretary of Transportation, shall
25	prescribe regulations that require the manufacturer of auto-

1	mobiles distributed in interstate commerce for sale in the
2	United States—
3	"(A) to prominently display a permanent badge
4	or emblem on the quarter panel or tailgate of each
5	such automobile that indicates such vehicle is capable
6	of operating on alternative fuel; and
7	"(B) to include information in the owner's man-
8	ual of each such automobile information that
9	describes—
10	"(i) the capability of the automobile to op-
11	erate using alternative fuel;
12	"(ii) the benefits of using alternative fuel,
13	including the renewable nature, and the environ-
14	mental benefits of using alternative fuel; and
15	"(C) to contain a fuel tank cap that is clearly
16	labeled to inform consumers that the automobile is ca-
17	pable of operating on alternative fuel.
18	"(2) The Secretary of Transportation shall collaborate
19	with automobile retailers to develop voluntary methods for
20	providing prospective purchasers of automobiles with infor-
21	mation regarding the benefits of using alternative fuel in
22	automobiles, including—
23	"(A) the renewable nature of alternative fuel;
24	and

1	"(B) the environmental benefits of using alter-
2	native fuel.".
3	SEC. 512. PERIODIC REVIEW OF ACCURACY OF FUEL ECON-
4	OMY LABELING PROCEDURES.
5	Beginning in December, 2009, and not less often than
6	every 5 years thereafter, the Administrator of the Environ-
7	mental Protection Agency, in consultation with the Sec-
8	retary of Transportation, shall—
9	(1) reevaluate the fuel economy labeling proce-
10	dures described in the final rule published in the Fed-
11	eral Register on December 27, 2006 (71 Fed. Reg.
12	77,872; 40 C.F.R. parts 86 and 600) to determine
13	whether changes in the factors used to establish the la-
14	beling procedures warrant a revision of that process;
15	and
16	(2) submit a report to the Senate Committee on
17	Commerce, Science, and Transportation and the
18	House of Representatives Committee on Energy and
19	Commerce that describes the results of the reevalua-
20	tion process.
21	SEC. 513. TIRE FUEL EFFICIENCY CONSUMER INFORMA-
22	TION.
23	(a) In General.—Chapter 301 of title 49, United
24	States Code, is amended by inserting after section 30123
25	the following new section:

1	"§ 30123A. Tire fuel efficiency consumer information
2	"(a) Rulemaking.—
3	"(1) In general.—Not later than 18 months
4	after the date of enactment of the Ten-in-Ten Fuel
5	Economy Act, the Secretary of Transportation shall,
6	after notice and opportunity for comment, promulgate
7	rules establishing a national tire fuel efficiency con-
8	sumer information program for tires designed for use
9	on motor vehicles to educate consumers about the ef-
10	fect of tires on automobile fuel efficiency.
11	"(2) Items included in rule.—The rule-
12	making shall include—
13	"(A) a national tire fuel efficiency rating
14	system for motor vehicle tires to assist consumers
15	in making more educated tire purchasing deci-
16	sions;
17	"(B) requirements for providing informa-
18	tion to consumers, including information at the
19	point of sale and other potential information
20	$dissemination\ methods,\ including\ the\ Internet;$
21	"(C) specifications for test methods for
22	manufacturers to use in assessing and rating
23	tires to avoid variation among test equipment
24	and manufacturers; and
25	"(D) a national tire maintenance consumer
26	education program including, information on

- tire inflation pressure, alignment, rotation, and
 tread wear to maximize fuel efficiency.
- 3 "(3) APPLICABILITY.—This section shall not
- 4 apply to tires excluded from coverage under section
- 5 575.104(c)(2) of title 49, Code of Federal Regulations,
- 6 as in effect on date of enactment of the Ten-in-Ten
- 7 Fuel Economy Act.
- 8 "(b) Consultation.—The Secretary shall consult
- 9 with the Secretary of Energy and the Administrator of the
- 10 Environmental Protection Agency on the means of con-
- 11 veying tire fuel efficiency consumer information.
- 12 "(c) Report to Congress.—The Secretary shall con-
- 13 duct periodic assessments of the rules promulgated under
- 14 this section to determine the utility of such rules to con-
- 15 sumers, the level of cooperation by industry, and the con-
- 16 tribution to national goals pertaining to energy consump-
- 17 tion. The Secretary shall transmit periodic reports detail-
- 18 ing the findings of such assessments to the Senate Com-
- 19 mittee on Commerce, Science, and Transportation and the
- 20 House of Representatives Committee on Energy and Com-
- 21 merce.
- 22 "(d) Tire Marking.—The Secretary shall not require
- 23 permanent labeling of any kind on a tire for the purpose
- 24 of tire fuel efficiency information.

- 1 "(e) Preemption.—When a requirement under this
- 2 section is in effect, a State or political subdivision of a
- 3 State may adopt or enforce a law or regulation on tire fuel
- 4 efficiency consumer information only if the law or regula-
- 5 tion is identical to that requirement. Nothing in this section
- 6 shall be construed to preempt a State or political subdivi-
- 7 sion of a State from regulating the fuel efficiency of tires
- 8 not otherwise preempted under this chapter.".
- 9 (b) Enforcement.—Section 30165(a) of title 49,
- 10 United States Code, is amended by adding at the end the
- 11 following:
- 12 "(4) Section 30123a.—Any person who fails to
- comply with the national tire fuel efficiency consumer
- information program under section 30123A is liable
- 15 to the United States Government for a civil penalty
- of not more than \$50,000 for each violation.".
- 17 (c) Conforming Amendment.—The chapter analysis
- 18 for chapter 301 of title 49, United States Code, is amended
- 19 by inserting after the item relating to section 30123 the fol-
- 20 lowing:

"30123A. Tire fuel efficiency consumer information".

21 SEC. 514. ADVANCED BATTERY INITIATIVE.

- 22 (a) In General.—The Secretary of Energy, in con-
- 23 sultation with the Secretary of Transportation, shall estab-
- 24 lish and carry out an Advanced Battery Initiative in ac-
- 25 cordance with this section to support research, development,

1	demonstration, and commercial application of battery tech-
2	nologies.
3	(b) Industry Alliance.—Not later than 180 days
4	after the date of enactment of this Act, the Secretary shall
5	competitively select an Industry Alliance to represent par-
6	ticipants who are private, for-profit firms headquartered in
7	the United States, the primary business of which is the
8	manufacturing of batteries.
9	(c) Research.—
10	(1) Grants.—The Secretary shall carry out re-
11	search activities of the Initiative through competi-
12	tively-awarded grants to—
13	(A) researchers, including Industry Alliance
14	participants;
15	$(B)\ small\ businesses;$
16	(C) National Laboratories; and
17	(D) institutions of higher education.
18	(2) Industry alliance.—The Secretary shall
19	annually solicit from the Industry Alliance—
20	(A) comments to identify advanced battery
21	technology and battery systems needs relevant
22	to—
23	(i) electric drive technology; and
24	(ii) other applications the Secretary
25	$deems\ appropriate;$

1	(B) an assessment of the progress of re-
2	search activities of the Initiative; and
3	(C) assistance in annually updating ad-
4	vanced battery technology and battery systems
5	road maps.
6	(d) Availability to the Public.—The information
7	and roadmaps developed under this section shall be avail-
8	able to the public.
9	(e) Preference.—In making awards under this sub-
10	section, the Secretary shall give preference to participants
11	in the Industry Alliance.
12	(f) Cost Sharing.—In carrying out this section, the
13	Secretary shall require cost sharing in accordance with sec-
14	tion 120(b) of title 23, United States Code.
15	(g) Authorization of Appropriations.—There are
16	authorized to be appropriated to carry out this section such
17	sums as may be necessary for each of fiscal years 2008
18	through 2012.
19	SEC. 515. BIODIESEL STANDARDS.
20	(a) In General.—Not later than 180 days after the
21	date of enactment of this Act, the Administrator of the En-
22	vironmental Protection Agency, in consultation with the
23	Secretary of Transportation and the Secretary of Energy,
24	shall promulgate regulations to ensure that all diesel-equiv-
25	alent fuels derived from renewable biomass that are intro-

1	duced into interstate commerce are tested and certified to
2	comply with appropriate American Society for Testing and
3	Materials standards.
4	(b) Definitions.—In this section:
5	(1) Biodiesel.—
6	(A) In General.—The term "biodiesel"
7	means the monoalkyl esters of long chain fatty
8	acids derived from plant or animal matter that
9	meet—
10	(i) the registration requirements for
11	fuels and fuel additives established by the
12	Environmental Protection Agency under
13	section 211 of the Clean Air Act (42 U.S.C.
14	7545); and
15	(ii) the requirements of the American
16	Society of Testing and Materials D6751.
17	(B) Inclusions.—The term "biodiesel" in-
18	cludes esters described in subparagraph (A) de-
19	rived from—
20	(i) animal waste, including poultry
21	fat, poultry waste, and other waste mate-
22	rial; and
23	(ii) municipal solid waste, sludge, and
24	oil derived from wastewater or the treat-
25	ment of wastewater.

1	(2) BIODIESEL BLEND.—The term 'biodiesel
2	blend" means a mixture of biodiesel and diesel fuel,
3	including—
4	(A) a blend of biodiesel and diesel fuel ap-
5	proximately 5 percent of the content of which is
6	biodiesel (commonly known as "B5"); and
7	(B) a blend of biodiesel and diesel fuel ap-
8	proximately 20 percent of the content of which is
9	biodiesel (commonly known as "B20").
10	SEC. 516. USE OF CIVIL PENALTIES FOR RESEARCH AND DE-
11	VELOPMENT.
12	Section 32912 of title 49, United States Code, is
13	amended by adding at the end thereof the following:
14	"(e) Use of Civil Penalties.—For fiscal year 2008
15	and each fiscal year thereafter, from the total amount de-
16	posited in the general fund of the Treasury during the pre-
17	ceding fiscal year from fines, penalties, and other funds ob-
18	tained through enforcement actions conducted pursuant to
19	this section (including funds obtained under consent de-
20	crees), the Secretary of the Treasury, subject to the avail-
21	ability of appropriations, shall—
22	"(1) transfer 50 percent of such total amount to
23	the account providing appropriations to the Secretary
24	of Transportation for the administration of this chap-
25	ter, which shall be used by the Secretary to carry out

1	a program of research and development into fuel sav-
2	ing automotive technologies and to support rule-
3	making under this chapter; and
4	"(2) transfer 50 percent of such total amount to
5	the Energy Security Fund established by section
6	517(a) of the Ten-in-Ten Fuel Economy Act.".
7	SEC. 517. ENERGY SECURITY FUND AND ALTERNATIVE
8	FUEL GRANT PROGRAM.
9	(a) Establishment of Fund.—
10	(1) In general.—There is established in the
11	Treasury a fund, to be known as the "Energy Secu-
12	rity Fund" (referred to in this section as the
13	"Fund"), consisting of—
14	(A) amounts transferred to the Fund under
15	section 32912(e)(2) of title 49, United States
16	Code; and
17	(B) amounts credited to the Fund under
18	paragraph (2)(C).
19	(2) Investment of amounts.—
20	(A) In General.—The Secretary of the
21	Treasury shall invest in interest-bearing obliga-
22	tions of the United States such portion of the
23	Fund as is not, in the judgment of the Secretary
24	of the Treasury, required to meet current with-
25	drawals.

1	(B) Sale of obligations.—Any obliga-
2	tion acquired by the Fund may be sold by the
3	Secretary of the Treasury at the market price.
4	(C) CREDITS TO FUND.—The interest on,
5	and the proceeds from the sale or redemption of,
6	any obligations held in the Fund shall be cred-
7	ited to, and form a part of, the Fund in accord-
8	ance with section 9602 of the Internal Revenue
9	Code of 1986.
10	(3) Use of amounts in fund.—Amounts in the
11	Fund shall be made available to the Secretary of En-
12	ergy, subject to the availability of appropriations, to
13	carry out the grant program under subsection (b).
14	(b) Alternative Fuels Grant Program.—
15	(1) In general.—Not later than 90 days after
16	the date of enactment of this Act, the Secretary of En-
17	ergy, acting through the Clean Cities Program of the
18	Department of Energy, shall establish and carry out
19	a program under which the Secretary shall provide
20	grants to expand the availability to consumers of al-
21	ternative fuels (as defined in section 32901(a) of title
22	49, United States Code).
23	(2) Eligibility.—
24	(A) In general.—Except as provided in
25	subparagraph (B), any entity that is eligible to

receive assistance under the Clean Cities Program shall be eligible to receive a grant under this subsection.

(B) Exceptions.—

- (i) Certain oil companies.—A large, vertically-integrated oil company shall not be eligible to receive a grant under this subsection.
- (ii) Prohibition of dual benefits.—An entity that receives any other Federal funds for the construction or expansion of alternative refueling infrastructure shall not be eligible to receive a grant under this subsection for the construction or expansion of the same alternative refueling infrastructure.
- (C) Ensuring compliance.—Not later than 30 days after the date of enactment of this Act, the Secretary of Energy shall promulgate regulations to ensure that, before receiving a grant under this subsection, an eligible entity meets applicable standards relating to the installation, construction, and expansion of infrastructure necessary to increase the availability to con-

1	sumers of alternative fuels (as defined in section
2	32901(a) of title 49, United States Code).
3	(3) Maximum amount.—
4	(A) Grants.—The amount of a grant pro-
5	vided under this subsection shall not exceed
6	\$30,000.
7	(B) Amount per station.—An eligible en-
8	tity shall receive not more than \$90,000 under
9	this subsection for any station of the eligible en-
10	tity during a fiscal year.
11	(4) Use of funds.—
12	(A) In general.—A grant provided under
13	this subsection shall be used for the construction
14	or expansion of alternative fueling infrastruc-
15	ture.
16	(B) Administrative expenses.—Not more
17	than 3 percent of the amount of a grant provided
18	under this subsection shall be used for adminis-
19	trative expenses.
20	SEC. 518. AUTHORIZATION OF APPROPRIATIONS.
21	There are authorized to be appropriated to the Sec-
22	retary of Transportation \$25,000,000 for each of fiscal
23	years 2009 through 2021 to carry out the provisions of
24	chapter 329 of title 49, United States Code.

1	SEC. 519. APPLICATION WITH CLEAN AIR ACT.
2	Nothing in this title shall be construed to conflict with
3	the authority provided by sections 202 and 209 of the Clean
4	Air Act (42 U.S.C. 7521 and 7543, respectively).
5	SEC. 520. ALTERNATIVE FUEL VEHICLE ACTION PLAN.
6	(a) In General.—The Secretary of Transportation
7	shall, establish and implement an action plan which takes
8	into consideration the availability and cost effectiveness of
9	alternative fuels, which will ensure that, beginning with
10	model year 2015, the percentage of new automobiles for sale
11	in the United States that are alternative fuel automobiles
12	is not less than 50 percent.
13	(b) Definitions.—In this section:
14	(1) Alternative fuel automobile.—The term
15	"alternative fuel automobile" means the following but
16	not limited to—
17	(A) a new advanced lean burn technology
18	motor vehicle (as defined in section $30B(c)(3)$ of
19	the Internal Revenue Code of 1986) that achieves
20	at least 125 percent of the model year 2002 city
21	fuel economy;
22	(B) an alternative fueled automobile;
23	(C) a flexible fuel automobile;
24	(D) a new qualified fuel cell motor vehicle
25	(as defined in section $30B(e)(4)$ of such Code).

1	(E) a new qualified hybrid motor vehicle
2	(as defined in section $30B(d)(3)$ of such Code);
3	(F) a plug-in hybrid automobile;
4	(G) an electric automobile;
5	(H) a hydrogen internal combustion engine
6	automobile; and
7	(I) any other automobile that uses substan-
8	tially new technology and achieves at least 175
9	percent of the model year 2002 city fuel econ-
10	omy, as determined by the Secretary of Trans-
11	portation, by regulation.
12	(2) Other terms.—Any term used in this sec-
13	tion that is defined in section 32901 of title 49,
14	United States Code, has the meaning given that term
15	in that section.
16	SEC. 521. STUDY OF THE ADEQUACY OF TRANSPORTATION
17	OF DOMESTICALLY-PRODUCED RENEWABLE
18	FUEL BY RAILROADS AND OTHER MODES OF
19	TRANSPORTATION.
20	(a) Study.—
21	(1) In General.—The Secretary of Transpor-
22	tation and the Secretary of Energy shall jointly con-
23	duct a study of the adequacy of transportation of do-
24	mestically-produced renewable fuels by railroad and

1	other modes of transportation as designated by the
2	Secretaries.
3	(2) Components.—In conducting the study
4	under paragraph (1), the Secretaries shall—
5	(A) consider the adequacy of existing rail-
6	road and other transportation infrastructure,
7	equipment, service and capacity to move the nec-
8	essary quantities of domestically-produced re-
9	newable fuel within the timeframes required by
10	section 111;
11	(B)(i) consider the projected costs of moving
12	the domestically-produced renewable fuel by rail-
13	road and other modes transportation; and
14	(ii) consider the impact of the projected
15	costs on the marketability of the domestically-
16	produced renewable fuel;
17	(C) identify current and potential impedi-
18	ments to the reliable transportation of adequate
19	supplies of domestically-produced renewable fuel
20	at reasonable prices, including practices cur-
21	rently utilized by domestic producers, shippers,
22	and receivers of renewable fuels;
23	(D) consider whether inadequate competi-
24	tion exists within and between modes of trans-
25	portation for the transportation of domestically-

- produced renewable fuel and, if such inadequate competition exists, whether such inadequate competition leads to an unfair price for the transportation 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 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

1	and which public and private entities should be
2	responsible for making such expenditures; and
3	(K) provide recommendations on ways to
4	facilitate the reliable transportation of adequate
5	supplies of domestically-produced renewable fuel
6	at reasonable prices.
7	(b) Report.—Not later than 180 days after the date
8	of enactment of this Act, the Secretaries shall jointly submit
9	to the Committee on Commerce, Science and Transpor-
10	tation, the Committee on Energy and Natural Resources,
11	and the Committee on Environment and Public Works of
12	the Senate and the Committee on Transportation and In-
13	frastructure and the Committee on Energy and Commerce
14	of the House of Representatives a report that describes the
15	results of the study conducted under subsection (a).
16	TITLE VI—PRICE GOUGING
17	SEC. 601. SHORT TITLE.
18	This title may be cited as the "Petroleum Consumer
19	Price Gouging Protection Act".
20	SEC. 602. DEFINITIONS.
21	In this title:
22	(1) Affected area.—The term "affected area"
23	means an area covered by a Presidential declaration
24	of energy emergency.

1	(2) Supplier.—The term "supplier" means any
2	person engaged in the trade or business of selling or
3	reselling, at retail or wholesale, or distributing crude
4	oil, gasoline, or petroleum distillates.
5	(3) Price gouging.—The term "price gouging"
6	means the charging of an unconscionably excessive
7	price by a supplier in an affected area.
8	(4) Unconscionably excessive price.—The
9	term "unconscionably excessive price" means an aver-
10	age price charged during an energy emergency de-
11	clared by the President in an area and for a product
12	subject to the declaration, that—
13	(A)(i)(I) constitutes a gross disparity from
14	the average price at which it was offered for sale
15	in the usual course of the supplier's business dur-
16	ing the 30 days prior to the President's declara-
17	tion of an energy emergency; and
18	(II) grossly exceeds the prices at which the
19	same or similar crude oil gasoline or petroleum
20	distillate was readily obtainable by purchasers
21	from other suppliers in the same relevant geo-
22	graphic market within the affected area; or
23	(ii) represents an exercise of unfair leverage
24	or unconscionable means on the part of the sup-

1	plier, during a period of declared energy emer-
2	gency; and
3	(B) is not attributable to increased whole-
4	sale or operational costs, including replacement
5	costs, outside the control of the supplier, incurred
6	in connection with the sale of crude oil, gasoline,
7	or petroleum distillates; and is not attributable
8	to local, regional, national, or international
9	market conditions.
10	(5) Commission.—The term "Commission"
11	means the Federal Trade Commission.
12	SEC. 603. PROHIBITION ON PRICE GOUGING DURING EN-
13	ERGY EMERGENCIES.
14	(a) In General.—During any energy emergency de-
15	clared by the President under section 606 of this Act, it
16	is unlawful for any supplier to sell, or offer to sell crude
17	oil, gasoline or petroleum distillates subject to that declara-
18	tion in, or for use in, the area to which that declaration
19	applies at an unconscionably excessive price.
20	(b) Factors Considered.—In determining whether
21	a violation of subsection (a) has occurred, there shall be
22	taken into account, among other factors, whether—
23	(1) the price charged was a price that would rea-
24	sonably exist in a competitive and freely functioning
25	market; and

1	(2) the amount of gasoline or other petroleum
2	distillate the seller produced, distributed, or sold dur-
3	ing the period the Proclamation was in effect in-
4	creased over the average amount during the preceding
5	30 days.
6	SEC. 604. PROHIBITION ON MARKET MANIPULATION.
7	It is unlawful for any person, directly or indirectly,
8	to use or employ, in connection with the purchase or sale
9	of crude oil gasoline or petroleum distillates at wholesale,
10	any manipulative or deceptive device or contrivance, in
11	contravention of such rules and regulations as the Commis-
12	sion may prescribe as necessary or appropriate in the pub-
13	lic interest or for the protection of United States citizens.
14	SEC. 605. PROHIBITION ON FALSE INFORMATION.
15	(a) In General.—It is unlawful for any person to
16	report information related to the wholesale price of crude
17	oil gasoline or petroleum distillates to a Federal department
18	or agency if—
19	(1) that person knew, or reasonably should have
20	known, the information to be false or misleading;
21	(2) the information was required by law to be re-
22	ported; and
23	(3) the person intended the false or misleading
24	data to affect data compiled by the department or
25	agency for statistical or analytical purposes with re-

1	spect to the market for crude oil, gasoline, or petro-
2	leum distillates.
3	SEC. 606. PRESIDENTIAL DECLARATION OF ENERGY EMER-
4	GENCY.
5	(a) In General.—If the President finds that the
6	health, safety, welfare, or economic well-being of the citizens
7	of the United States is at risk because of a shortage or im-
8	minent shortage of adequate supplies of crude oil, gasoline
9	or petroleum distillates due to a disruption in the national
10	distribution system for crude oil, gasoline or petroleum dis-
11	tillates (including such a shortage related to a major dis-
12	aster (as defined in section 102(2) of the Robert T. Stafford
13	Disaster Relief and Emergency Assistance Act (42 U.S.C.
14	5122(2))), or significant pricing anomalies in national en-
15	ergy markets for crude oil, gasoline, or petroleum distillates,
16	the President may declare that a Federal energy emergency
17	exists.
18	(b) Scope and Duration.—The emergency declara-
19	tion shall specify—
20	(1) the period, not to exceed 30 days, for which
21	the declaration applies;
22	(2) the circumstance or condition necessitating
23	the declaration; and
24	(3) the area or region to which it applies which
25	may not be limited to a single State; and

1	(4) the product or products to which it applies.
2	(c) Extensions.—The President may—
3	(1) extend a declaration under subsection (a) for
4	a period of not more than 30 days;
5	(2) extend such a declaration more than once;
6	and
7	(3) discontinue such a declaration before its ex-
8	piration.
9	SEC. 607. ENFORCEMENT BY THE FEDERAL TRADE COMMIS-
10	SION.
11	(a) Enforcement.—This title shall be enforced by the
12	Federal Trade Commission in the same manner, by the
13	same means, and with the same jurisdiction as though all
14	applicable terms of the Federal Trade Commission Act were
15	incorporated into and made a part of this title. In enforcing
16	section 603 of this Act, the Commission shall give priority
17	to enforcement actions concerning companies with total
18	United States wholesale or retail sales of crude oil, gasoline,
19	and petroleum distillates in excess of \$500,000,000 per year
20	but shall not exclude enforcement actions against companies
21	with total United States wholesale sales of \$500,000,000 or
22	less per year.
23	(b) Violation Is Treated as Unfair or Deceptive
24	ACT OR PRACTICE.—The violation of any provision of this
25	title shall be treated as an unfair or deceptive act or prac-

1	tice proscribed under a rule is sued under section
2	18(a)(1)(B) of the Federal Trade Commission Act (15)
3	$U.S.C.\ 57a(a)(1)(B)).$
4	(c) Commission Actions.—Following the declaration
5	of an energy emergency by the President under section 606
6	of this Act, the Commission shall—
7	(1) maintain within the Commission—
8	(A) a toll-free hotline that a consumer may
9	call to report an incident of price gouging in the
10	affected area; and
11	(B) a program to develop and distribute to
12	the public informational materials to assist resi-
13	dents of the affected area in detecting, avoiding,
14	and reporting price gouging;
15	(2) consult with the Attorney General, the
16	United States Attorney for the districts in which a
17	disaster occurred (if the declaration is related to a
18	major disaster), and State and local law enforcement
19	officials to determine whether any supplier in the af-
20	fected area is charging or has charged an unconscion-
21	ably excessive price for crude oil, gasoline, or petro-
22	leum distillates in the affected area; and
23	(3) conduct investigations as appropriate to de-
24	termine whether any supplier in the affected area has
25	violated section 603 of this Act, and upon such find-

- 1 ing, take any action the Commission determines to be
- 2 appropriate to remedy the violation.

3 SEC. 608. ENFORCEMENT BY STATE ATTORNEYS GENERAL.

- 4 (a) In General.—A State, as parens patriae, may
- 5 bring a civil action on behalf of its residents in an appro-
- 6 priate district court of the United States to enforce the pro-
- 7 visions of section 603 of this Act, or to impose the civil
- 8 penalties authorized by section 609 for violations of section
- 9 603, whenever the attorney general of the State has reason
- 10 to believe that the interests of the residents of the State have
- 11 been or are being threatened or adversely affected by a sup-
- 12 plier engaged in the sale or resale, at retail or wholesale,
- 13 or distribution of crude oil, gasoline or petroleum distillates
- 14 in violation of section 603 of this Act.
- 15 (b) Notice.—The State shall serve written notice to
- 16 the Commission of any civil action under subsection (a)
- 17 prior to initiating the action. The notice shall include a
- 18 copy of the complaint to be filed to initiate the civil action,
- 19 except that if it is not feasible for the State to provide such
- 20 prior notice, the State shall provide such notice imme-
- 21 diately upon instituting the civil action.
- 22 (c) Authority To Intervene.—Upon receiving the
- 23 notice required by subsection (b), the Commission may in-
- 24 tervene in the civil action and, upon intervening—

1	(1) may be heard on all matters arising in such
2	civil action; and
3	(2) may file petitions for appeal of a decision in
4	such civil action.
5	(d) Construction.—For purposes of bringing any
6	civil action under subsection (a), nothing in this section
7	shall prevent the attorney general of a State from exercising
8	the powers conferred on the Attorney General by the laws
9	of such State to conduct investigations or to administer
10	oaths or affirmations or to compel the attendance of wit-
11	nesses or the production of documentary and other evidence.
12	(e) Venue; Service of Process.—In a civil action
13	brought under subsection (a)—
14	(1) the venue shall be a judicial district in
15	which—
16	(A) the defendant operates;
17	(B) the defendant was authorized to do
18	business; or
19	(C) where the defendant in the civil action
20	$is\ found;$
21	(2) process may be served without regard to the
22	territorial limits of the district or of the State in
23	which the civil action is instituted; and
24	(3) a person who participated with the defendant
25	in an alleged violation that is being litigated in the

1	civil action may be joined in the civil action without
2	regard to the residence of the person.
3	(f) Limitation on State Action While Federal
4	Action Is Pending.—If the Commission has instituted a
5	civil action or an administrative action for violation of this
6	title, a State attorney general, or official or agency of a
7	State, may not bring an action under this section during
8	the pendency of that action against any defendant named
9	in the complaint of the Commission or the other agency for
10	any violation of this title alleged in the Commission's civil
11	or administrative action.
12	(g) No Preemption.—Nothing contained in this sec-
13	tion shall prohibit an authorized State official from pro-
14	ceeding in State court to enforce a civil or criminal statute
15	of that State.
16	SEC. 609. PENALTIES.
17	(a) Civil Penalty.—
18	(1) In general.—In addition to any penalty
19	applicable under the Federal Trade Commission Act,
20	any supplier—
21	(A) that violates section 604 or section 605
22	of this Act is punishable by a civil penalty of not
23	more than \$1,000,000; and
24	(B) that violates section 603 of this Act is
25	punishable by a civil penalty of—

1	(i) not more than \$500,000, in the case
2	of an independent small business marketer
3	of gasoline (within the meaning of section
4	324(c) of the Clean Air Act (42 U.S.C.
5	7625(c))); and
6	(ii) not more than \$5,000,000 in the
7	case of any other supplier.
8	(2) Method.—The penalties provided by para-
9	graph (1) shall be obtained in the same manner as
10	civil penalties imposed under section 5 of the Federal
11	Trade Commission Act (15 U.S.C. 45).
12	(3) Multiple offenses; mitigating fac-
13	TORS.—In assessing the penalty provided by sub-
14	section (a)—
15	(A) each day of a continuing violation shall
16	be considered a separate violation; and
17	(B) the court shall take into consideration,
18	among other factors, the seriousness of the viola-
19	tion and the efforts of the person committing the
20	violation to remedy the harm caused by the vio-
21	lation in a timely manner.
22	(b) Criminal Penalty.—Violation of section 603 of
23	this Act is punishable by a fine of not more than
24	\$5,000,000, imprisonment for not more than 5 years, or
25	both.

1	SEC. 610. EFFECT ON OTHER LAWS.
2	(a) Other Authority of the Commission.—Noth-
3	ing in this title shall be construed to limit or affect in any
4	way the Commission's authority to bring enforcement ac-
5	tions or take any other measure under the Federal Trade
6	Commission Act (15 U.S.C. 41 et seq.) or any other provi-
7	sion of law.
8	(b) State Law.—Nothing in this title preempts any
9	State law.
10	TITLE VII—ENERGY DIPLOMACY
11	AND SECURITY
12	SEC. 701. SHORT TITLE.
13	This title may be cited as the "Energy Diplomacy and
14	Security Act of 2007".
15	SEC. 702. DEFINITIONS.
16	In this title:
17	(1) Major energy producer.—The term
18	"major energy producer" means a country that—
19	(A) had crude oil, oil sands, or natural gas
20	to liquids production of 1,000,000 barrels per
21	day or greater average in the previous year;
22	(B) has crude oil, shale oil, or oil sands re-
23	serves of 6,000,000,000 barrels or greater, as rec-
24	ognized by the Department of Energy;

1	(C) had natural gas production of
2	30,000,000,000 cubic meters or greater in the
3	previous year;
4	(D) has natural gas reserves of
5	1,250,000,000,000 cubic meters or greater, as rec-
6	ognized by the Department of Energy; or
7	(E) is a direct supplier of natural gas or
8	liquefied natural gas to the United States.
9	(2) Major energy consumer.—The term
10	"major energy consumer" means a country that—
11	(A) had an oil consumption average of
12	1,000,000 barrels per day or greater in the pre-
13	vious year;
14	(B) had an oil consumption growth rate of
15	8 percent or greater in the previous year;
16	(C) had a natural gas consumption of
17	30,000,000,000 cubic meters or greater in the
18	previous year; or
19	(D) had a natural gas consumption growth
20	rate of 15 percent or greater in the previous
21	year.
22	SEC. 703. SENSE OF CONGRESS ON ENERGY DIPLOMACY
23	AND SECURITY.
24	(a) FINDINGS.—Congress makes the following findings:

- (1) It is imperative to the national security and prosperity of the United States to have reliable, affordable, clean, sufficient, and sustainable sources of energy.
 - (2) United States dependence on oil imports causes tremendous costs to the United States national security, economy, foreign policy, military, and environmental sustainability.
 - (3) Energy security is a priority for the governments of many foreign countries and increasingly plays a central role in the relations of the United States Government with foreign governments. Global reserves of oil and natural gas are concentrated in a small number of countries. Access to these oil and natural gas supplies depends on the political will of these producing states. Competition between governments for access to oil and natural gas reserves can lead to economic, political, and armed conflict. Oil exporting states have received dramatically increased revenues due to high global prices, enhancing the ability of some of these states to act in a manner threatening to global stability.
 - (4) Efforts to combat poverty and protect the environment are hindered by the continued predominance of oil and natural gas in meeting global energy

- needs. Development of renewable energy through sustainable practices will help lead to a reduction in greenhouse gas emissions and enhance international development.
 - (5) Cooperation on energy issues between the United States Government and the governments of foreign countries is critical for securing the strategic and economic interests of the United States and of partner governments. In the current global energy situation, the energy policies and activities of the governments of foreign countries can have dramatic impacts on United States energy security.
- 13 (b) Sense of Congress.—It is the sense of Congress 14 that—
 - (1) United States national security requires that the United States Government have an energy policy that pursues the strategic goal of achieving energy security through access to clean, affordable, sufficient, reliable, and sustainable sources of energy;
 - (2) achieving energy security is a priority for United States foreign policy and requires continued and enhanced engagement with foreign governments and entities in a variety of areas, including activities relating to the promotion of alternative and renewable fuels, trade and investment in oil, coal, and natural

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1	gas, energy efficiency, climate and environmental pro-
2	tection, data transparency, advanced scientific re-
3	search, public-private partnerships, and energy ac-
4	tivities in international development;
5	(3) the President should ensure that the inter-

- (3) the President should ensure that the international energy activities of the United States Government are given clear focus to support the national security needs of the United States, and to this end, there should be established a mechanism to coordinate the implementation of United States international energy policy among the Federal agencies engaged in relevant agreements and activities; and
- (4) the Secretary of State should ensure that energy security is integrated into the core mission of the Department of State, and to this end, there should be established within the Office of the Secretary of State a Coordinator for International Energy Affairs with responsibility for—
 - (A) developing United States international energy policy in coordination with the Department of Energy and other relevant Federal agencies;
- 23 (B) working with appropriate United 24 States Government officials to develop and up-

1	date analyses of the national security implica-
2	tions of global energy developments;
3	(C) incorporating energy security priorities
4	into the activities of the Department;
5	(D) coordinating activities with relevant
6	Federal agencies; and
7	(E) coordinating energy security and other
8	relevant functions currently undertaken by of-
9	fices within the Bureau of Economic, Business,
10	and Agricultural Affairs, the Bureau of Democ-
11	racy and Global Affairs, and other offices within
12	the Department of State.
13	(5) the Department of Energy should be des-
14	ignated as the lead United States Government agency
15	in charge of formulating and coordinating the na-
16	tional energy security policy of the United States,
17	and in furtherance of these goals, there should be es-
18	tablished within the Department of Energy an Assist-
19	ant Secretary of Energy for Energy Security whose
20	responsibilities should include—
21	(A) directing the development of the na-
22	tional energy security strategy of the United
23	States;
24	(B) coordinating the national energy secu-
25	rity policy of the United States with the Depart-

- ment of Defense, the Department of State, and the National Security Council, as appropriate, to address the impact of, and integrate national security and foreign policy on, the national energy security policy of the United States;
 - (C) monitoring international and domestic energy developments to gauge their impact on the national energy security policy of the United States and implementing changes in such policy as necessary to maintain the national security and energy security of the United States;
 - (D) identifying foreign sources of energy critical to the national energy security of the United States and developing strategies in conjunction with the Department of State for ensuring United States access to critical foreign energy resources;
 - (E) developing strategies for reducing United States dependence on foreign sources of energy, including demand reduction, efficiency improvement, and development of alternative and new sources of domestic energy; and
 - (F) developing strategies in conjunction with the Department of State for working with major international producers and consumers,

including China, Russia, the European Union,
 and Africa, to minimize politicization of global
 energy resources while ensuring access through
 global energy markets.

5 SEC. 704. STRATEGIC ENERGY PARTNERSHIPS.

- (a) FINDINGS.—Congress makes the following findings:
- (1) United States Government partnership with foreign governments and entities, including partnership with the private sector, for securing reliable and sustainable energy is imperative to ensuring United States security and economic interests, promoting international peace and security, expanding international development, supporting democratic reform, fostering economic growth, and safeguarding the environment.
- (2) Democracy and freedom should be promoted globally by partnership with foreign governments, including in particular governments of emerging democracies such as those of Ukraine and Georgia, in their efforts to reduce their dependency on oil and natural gas imports.
- (3) The United States Government and the governments of foreign countries have common needs for adequate, reliable, affordable, clean, and sustainable energy in order to ensure national security, economic

1	growth, and high standards of living in their coun-
2	tries. Cooperation by the United States Government
3	with foreign governments on meeting energy security
4	needs is mutually beneficial. United States Govern-
5	ment partnership with foreign governments should in-
6	clude cooperation with major energy consuming coun-
7	tries, major energy producing countries, and other
8	governments seeking to advance global energy security
9	through reliable and sustainable means.
10	(4) The United States Government participates
11	in hundreds of bilateral and multilateral energy
12	agreements and activities with foreign governments
13	and entities. These agreements and activities should
14	reflect the strategic need for energy security.
15	(b) Statement of Policy.—It is the policy of the
16	United States—
17	(1) to advance global energy security through co-
18	operation with foreign governments and entities;
19	(2) to promote reliable, diverse, and sustainable
20	sources of all types of energy;
21	(3) to increase global availability of renewable
22	and clean sources of energy;
23	(4) to decrease global dependence on oil and nat-
24	ural gas energy sources; and

1	(5) to engage in energy cooperation to strengthen
2	strategic partnerships that advance peace, security,
3	and democratic prosperity.
4	(c) Authority.—The Secretary of State, in coordina-
5	tion with the Secretary of Energy, should immediately seek
6	to establish and expand strategic energy partnerships with
7	the governments of major energy producers and major en-
8	ergy consumers, and with governments of other countries
9	(but excluding any countries that are ineligible to receive
10	United States economic or military assistance).
11	(d) Purposes.—The purposes of the strategic energy
12	partnerships established pursuant to subsection (c) are—
13	(1) to strengthen global relationships to promote
14	international peace and security through fostering co-
15	operation in the energy sector on a mutually bene-
16	ficial basis in accordance with respective national en-
17	ergy policies;
18	(2) to promote the policy set forth in subsection
19	(b), including activities to advance—
20	(A) the mutual understanding of each coun-
21	try's energy needs, priorities, and policies, in-
22	$cluding\ interparliamentary\ understanding;$
23	(B) measures to respond to acute energy
24	supply disruptions, particularly in regard to pe-
25	troleum and natural gas resources;

1	(C) long-term reliability and sustainability
2	in energy supply;
3	(D) the safeguarding and safe handling of
4	nuclear fuel;
5	(E) human and environmental protection;
6	(F) renewable energy production;
7	(G) access to reliable and affordable energy
8	for underdeveloped areas, in particular energy
9	access for the poor;
10	(H) appropriate commercial cooperation;
11	(I) information reliability and trans-
12	parency; and
13	(I) research and training collaboration;
14	(3) to advance the national security priority of
15	developing sustainable and clean energy sources, in-
16	cluding through research and development related to,
17	and deployment of—
18	(A) renewable electrical energy sources, in-
19	cluding biomass, wind, and solar;
20	(B) renewable transportation fuels, includ-
21	ing biofuels;
22	(C) clean coal technologies;
23	(D) carbon sequestration, including in con-
24	junction with power generation, agriculture, and
25	forestry; and

1	(E) energy and fuel efficiency, including
2	hybrids and plug-in hybrids, flexible fuel, ad-
3	vanced composites, hydrogen, and other transpor-
4	tation technologies; and
5	(4) to provide strategic focus for current and fu-
6	ture United States Government activities in energy
7	cooperation to meet the global need for energy secu-
8	rity.
9	(e) Determination of Agendas.—In general, the
10	specific agenda with respect to a particular strategic energy
11	partnership, and the Federal agencies designated to imple-
12	ment related activities, shall be determined by the Secretary
13	of State and the Secretary of Energy.
14	(f) Use of Current Agreements To Establish
15	Partnerships.—Some or all of the purposes of the stra-
16	tegic energy partnerships established under subsection (c)
17	may be pursued through existing bilateral or multilateral
18	agreements and activities. Such agreements and activities
19	shall be subject to the reporting requirements in subsection
20	(g).
21	(g) Reports Required.—
22	(1) Initial progress report.—Not later than
23	180 days after the date of the enactment of this Act,
24	the Secretary of State shall submit to the appropriate
25	congressional committees a report on progress made

1	in developing the strategic energy partnerships au-
2	thorized under this section.
3	(2) Annual progress reports.—
4	(A) In general.—Not later than one year
5	after the date of the enactment of this Act, and
6	annually thereafter for 20 years, the Secretary of
7	State shall submit to the appropriate congres-
8	sional committees an annual report on agree-
9	ments entered into and activities undertaken
10	pursuant to this section, including international
11	environment activities.
12	(B) Content.—Each report submitted
13	under this paragraph shall include details on—
14	(i) agreements and activities pursued
15	by the United States Government with for-
16	eign governments and entities, the imple-
17	mentation plans for such agreements and
18	progress measurement benchmarks, United
19	States Government resources used in pur-
20	suit of such agreements and activities, and
21	legislative changes recommended for im-
22	proved partnership; and
23	(ii) polices and actions in the energy
24	sector of partnership countries pertinent to

1	United States economic, security, and envi-
2	$ronmental\ interests.$
3	SEC. 705. INTERNATIONAL ENERGY CRISIS RESPONSE
4	MECHANISMS.
5	(a) Findings.—Congress makes the following findings:
6	(1) Cooperation between the United States Gov-
7	ernment and governments of other countries during
8	energy crises promotes the national security of the
9	United States.
10	(2) The participation of the United States in the
11	International Energy Program established under the
12	Agreement on an International Energy Program,
13	done at Paris November 18, 1974 (27 UST 1685), in-
14	cluding in the coordination of national strategic pe-
15	troleum reserves, is a national security asset that—
16	(A) protects the consumers and the economy
17	of the United States in the event of a major dis-
18	ruption in petroleum supply;
19	(B) maximizes the effectiveness of the
20	United States strategic petroleum reserve through
21	cooperation in accessing global reserves of var-
22	ious petroleum products;
23	(C) provides market reassurance in coun-
24	tries that are members of the International En-
25	ergy Program; and

- 1 (D) strengthens United States Government 2 relationships with members of the International 3 Energy Program.
 - (3) The International Energy Agency projects that the largest growth in demand for petroleum products, other than demand from the United States, will come from China and India, which are not members of the International Energy Program. The Governments of China and India vigorously pursue access to global oil reserves and are attempting to develop national petroleum reserves. Participation of the Governments of China and India in an international petroleum reserve mechanism would promote global energy security, but such participation should be conditional on the Governments of China and India abiding by customary petroleum reserve management practices.
 - (4) In the Western Hemisphere, only the United States and Canada are members of the International Energy Program. The vulnerability of most Western Hemisphere countries to supply disruptions from political, natural, or terrorism causes may introduce instability in the hemisphere and can be a source of conflict, despite the existence of major oil reserves in the hemisphere.

1	(5) Countries that are not members of the Inter-
2	national Energy Program and are unable to main-
3	tain their own national strategic reserves are vulner-
4	able to petroleum supply disruption. Disruption in
5	petroleum supply and spikes in petroleum costs could
6	devastate the economies of developing countries and
7	could cause internal or interstate conflict.
8	(6) The involvement of the United States Govern-
9	ment in the extension of international mechanisms to
10	coordinate strategic petroleum reserves and the exten-
11	sion of other emergency preparedness measures should
12	strengthen the current International Energy Program.
13	(b) Energy Crisis Response Mechanisms With
14	India and China.—
15	(1) Authority.—The Secretary of State, in co-
16	ordination with the Secretary of Energy, should im-
17	mediately seek to establish a petroleum crisis response
18	mechanism or mechanisms with the Governments of
19	China and India.
20	(2) Scope.—The mechanism or mechanisms es-
21	tablished under paragraph (1) should include—
22	(A) technical assistance in the development
23	and management of national strategic petroleum
24	reserves;

1	(B) agreements for coordinating drawdowns
2	of strategic petroleum reserves with the United
3	States, conditional upon reserve holdings and
4	management conditions established by the Sec-
5	retary of Energy;
6	(C) emergency demand restraint measures;
7	(D) fuel switching preparedness and alter-
8	native fuel production capacity; and
9	(E) ongoing demand intensity reduction
10	programs.
11	(3) Use of existing agreements to estab-
12	LISH MECHANISM.—The Secretary may, after con-
13	sultation with Congress and in accordance with exist-
14	ing international agreements, including the Inter-
15	national Energy Program, include China and India
16	in a petroleum crisis response mechanism through ex-
17	isting or new agreements.
18	(c) Energy Crisis Response Mechanism for the
19	Western Hemisphere.—
20	(1) Authority.—The Secretary of State, in co-
21	ordination with the Secretary of Energy, should im-
22	mediately seek to establish a Western Hemisphere en-
23	ergy crisis response mechanism.
24	(2) Scope.—The mechanism established under
25	paragraph (1) should include—

1	(A) an information sharing and coordi-
2	nating mechanism in case of energy supply
3	emergencies;
4	(B) technical assistance in the development
5	and management of national strategic petroleum
6	reserves within countries of the Western Hemi-
7	sphere;
8	(C) technical assistance in developing na-
9	tional programs to meet the requirements of
10	membership in a future international energy ap-
11	plication procedure as described in subsection
12	(d);
13	(D) emergency demand restraint measures;
14	(E) energy switching preparedness and al-
15	ternative energy production capacity; and
16	(F) ongoing demand intensity reduction
17	programs.
18	(3) Membership.—The Secretary should seek to
19	include in the Western Hemisphere energy crisis re-
20	sponse mechanism membership for each major energy
21	producer and major energy consumer in the Western
22	Hemisphere and other members of the Hemisphere
23	Energy Cooperation Forum authorized under section
24	706.

1	(d) International Energy Program Application
2	Procedure.—

- (1) AUTHORITY.—The President should place on the agenda for discussion at the Governing Board of the International Energy Agency, as soon as practicable, the merits of establishing an international energy program application procedure.
 - (2) Purpose.—The purpose of such procedure is to allow countries that are not members of the International Energy Program to apply to the Governing Board of the International Energy Agency for allocation of petroleum reserve stocks in times of emergency on a grant or loan basis. Such countries should also receive technical assistance for, and be subject to, conditions requiring development and management of national programs for energy emergency preparedness, including demand restraint, fuel switching preparedness, and development of alternative fuels production capacity.

(e) Reports Required.—

(1) Petroleum reserves.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Energy shall submit to the appropriate congressional committees a report that evaluates the options for adapting the United States national stra-

- tegic petroleum reserve and the international petro leum reserve coordinating mechanism in order to
 carry out this section.
 - (2) Crisis response mechanisms.—Not later than 180 days after the date of the enactment of this Act, the Secretary of State, in coordination with the Secretary of Energy, shall submit to the appropriate congressional committees a report on the status of the establishment of the international petroleum crisis response mechanisms described in subsections (b) and (c). The report shall include recommendations of the Secretary of State and the Secretary of Energy for any legislation necessary to establish or carry out such mechanisms.
 - (3) EMERGENCY APPLICATION PROCEDURE.—Not later than 60 days after a discussion by the Governing Board of the International Energy Agency of the application procedure described under subsection (d), the President should submit to Congress a report that describes—
 - (A) the actions the United States Government has taken pursuant to such subsection; and
 - (B) a summary of the debate on the matter before the Governing Board of the International Energy Agency, including any decision that has

been reached by the Governing Board with respect to the matter.

3 SEC. 706. HEMISPHERE ENERGY COOPERATION FORUM.

- (a) FINDINGS.—Congress makes the following findings:
- (1) The engagement of the United States Government with governments of countries in the Western Hemisphere is a strategic priority for reducing the potential for tension over energy resources, maintaining and expanding reliable energy supplies, expanding use of renewable energy, and reducing the detrimental effects of energy import dependence within the hemisphere. Current energy dialogues should be expanded and refocused as needed to meet this challenge.
 - (2) Countries of the Western Hemisphere can most effectively meet their common needs for energy security and sustainability through partnership and cooperation. Cooperation between governments on energy issues will enhance bilateral relationships among countries of the hemisphere. The Western Hemisphere is rich in natural resources, including biomass, oil, natural gas, coal, and has significant opportunity for production of renewable hydro, solar, wind, and other energies. Countries of the Western Hemisphere can

1	provide convenient and reliable markets for trade in	\imath
2	energy goods and services.	

- (3) Development of sustainable energy alternatives in the countries of the Western Hemisphere can improve energy security, balance of trade, and environmental quality and provide markets for energy technology and agricultural products. Brazil and the United States have led the world in the production of ethanol, and deeper cooperation on biofuels with other countries of the hemisphere would extend economic and security benefits.
- (4) Private sector partnership and investment in all sources of energy is critical to providing energy security in the Western Hemisphere.

(b) Hemisphere Energy Cooperation Forum.—

- (1) ESTABLISHMENT.—The Secretary of State, in coordination with the Secretary of Energy, should immediately seek to establish a regional-based ministerial forum to be known as the Hemisphere Energy Cooperation Forum.
- (2) Purposes.—The Hemisphere Energy Cooperation Forum should seek—
- 23 (A) to strengthen relationships between the 24 United States and other countries of the Western

1	Hemisphere through cooperation on energy
2	issues;
3	(B) to enhance cooperation between major
4	energy producers and major energy consumers in
5	the Western Hemisphere, particularly among the
6	governments of Brazil, Canada, Mexico, the
7	United States, and Venezuela;
8	(C) to ensure that energy contributes to the
9	economic, social, and environmental enhance-
10	ment of the countries of the Western Hemisphere;
11	(D) to provide an opportunity for open dia-
12	logue and joint commitments between member
13	governments and with private industry; and
14	(E) to provide participating countries the
15	flexibility necessary to cooperatively address
16	broad challenges posed to the energy supply of
17	the Western Hemisphere that are practical in
18	policy terms and politically acceptable.
19	(3) Activities.—The Hemisphere Energy Co-
20	operation Forum should implement the following ac-
21	tivities:
22	(A) An Energy Crisis Initiative that will
23	establish measures to respond to temporary en-
24	ergy supply disruptions, including through—

1	(i) strengthening sea-lane and infra-
2	$structure\ security;$
3	(ii) implementing a real-time emer-
4	gency information sharing system;
5	(iii) encouraging members to have
6	emergency mechanisms and contingency
7	plans in place; and
8	(iv) establishing a Western Hemisphere
9	energy crisis response mechanism as author-
10	$ized\ under\ section\ 705(c).$
11	(B) An Energy Sustainability Initiative to
12	facilitate long-term supply security through fos-
13	tering reliable supply sources of fuels, including
14	development, deployment, and commercialization
15	of technologies for sustainable renewable fuels
16	within the region, including activities that—
17	(i) promote production and trade in
18	sustainable energy, including energy from
19	biomass;
20	(ii) facilitate investment, trade, and
21	technology cooperation in energy infrastruc-
22	ture, petroleum products, natural gas (in-
23	cluding liquefied natural gas), energy effi-
24	ciency (including automotive efficiency),

1	clean fossil energy, renewable energy, and
2	$carbon\ sequestration;$
3	(iii) promote regional infrastructure
4	and market integration;
5	(iv) develop effective and stable regu-
6	latory frameworks;
7	(v) develop renewable fuels standards
8	and renewable portfolio standards;
9	(vi) establish educational training and
10	exchange programs between member coun-
11	tries; and
12	(vii) identify and remove barriers to
13	trade in technology, services, and commod-
14	ities.
15	(C) An Energy for Development Initiative
16	to promote energy access for underdeveloped
17	areas through energy policy and infrastructure
18	development, including activities that—
19	(i) increase access to energy services for
20	$the \ poor;$
21	(ii) improve energy sector market con-
22	ditions;
23	(iii) promote rural development though
24	biomass energy production and use;

1	(iv) increase transparency of, and par-
2	ticipation in, energy infrastructure projects,
3	(v) promote development and deploy-
4	ment of technology for clean and sustainable
5	energy development, including biofuel and
6	clean coal technologies; and
7	(vi) facilitate use of carbon sequestra-
8	tion methods in agriculture and forestry
9	and linking greenhouse gas emissions reduc-
10	tion programs to international carbon mar-
11	kets.
12	(c) Hemisphere Energy Industry Group.—
13	(1) AUTHORITY.—The Secretary of State, in co-
14	ordination with the Secretary of Commerce and the
15	Secretary of Energy, should approach the govern-
16	ments of other countries in the Western Hemisphere
17	to seek cooperation in establishing a Hemisphere En-
18	ergy Industry Group, to be coordinated by the United
19	States Government, involving industry representatives
20	and government representatives from the Western
21	Hemisphere.
22	(2) Purpose.—The purpose of the forum should
23	be to increase public-private partnerships, foster pri-
24	vate investment, and enable countries of the Western

1	Hemisphere to devise energy agendas compatible with
2	industry capacity and cognizant of industry goals.
3	(3) Topics of dialogues.—Topics for the
4	forum should include—
5	(A) promotion of a secure investment cli-
6	mate;
7	(B) development and deployment of biofuels
8	and other alternative fuels and clean electrical
9	production facilities, including clean coal and
10	$carbon\ sequestration;$
11	(C) development and deployment of energy
12	efficient technologies and practices, including in
13	the industrial, residential, and transportation
14	sectors;
15	(D) investment in oil and natural gas pro-
16	duction and distribution;
17	(E) transparency of energy production and
18	reserves data;
19	(F) research promotion; and
20	(G) training and education exchange pro-
21	grams.
22	(d) Annual Report.—The Secretary of State, in co-
23	ordination with the Secretary of Energy, shall submit to
24	the appropriate congressional committees an annual report
25	on the implementation of this section, including the strategy

1	and benchmarks for measurement of progress developed
2	under this section.
3	SEC. 707. NATIONAL SECURITY COUNCIL REORGANIZATION.
4	Section 101(a) of the National Security Act of 1947
5	(50 U.S.C. 402(a)) is amended—
6	(1) by redesignating paragraphs (5), (6), and (7)
7	as paragraphs (6), (7), and (8), respectively; and
8	(2) by inserting after paragraph (4) the fol-
9	lowing:
10	"(5) the Secretary of Energy;".
11	SEC. 708. ANNUAL NATIONAL ENERGY SECURITY STRATEGY
12	REPORT.
13	(a) Reports.—
14	(1) In general.—Subject to paragraph (2), on
15	the date on which the President submits to Congress
16	the budget for the following fiscal year under section
17	1105 of title 31, United States Code, the President
18	shall submit to Congress a comprehensive report on
19	the national energy security of the United States.
20	(2) New presidents.—In addition to the re-
21	ports required under paragraph (1), the President
22	shall submit a comprehensive report on the national
23	energy security of the United States by not later than
24	150 days after the date on which the President as-

1	sumes the office of President after a presidential elec-
2	tion.
3	(b) Contents.—Each report under this section shall
4	describe the national energy security strategy of the United
5	States, including a comprehensive description of—
6	(1) the worldwide interests, goals, and objectives
7	of the United States that are vital to the national en-
8	ergy security of the United States;
9	(2) the foreign policy, worldwide commitments,
10	and national defense capabilities of the United States
11	necessary—
12	(A) to deter political manipulation of world
13	energy resources; and
14	(B) to implement the national energy secu-
15	rity strategy of the United States;
16	(3) the proposed short-term and long-term uses of
17	the political, economic, military, and other authori-
18	ties of the United States—
19	(A) to protect or promote energy security;
20	and
21	(B) to achieve the goals and objectives de-
22	scribed in paragraph (1);
23	(4) the adequacy of the capabilities of the United
24	States to protect the national energy security of the
25	United States, including an evaluation of the balance

1	among the capabilities of all elements of the national
2	authority of the United States to support the imple-
3	mentation of the national energy security strategy;
4	and
5	(5) such other information as the President de-
6	termines to be necessary to inform Congress on mat-
7	ters relating to the national energy security of the
8	United States.
9	(c) Classified and Unclassified Form.—Each na-
10	tional energy security strategy report shall be submitted to
11	Congress in—
12	(1) a classified form; and
13	(2) an unclassified form.
14	SEC. 709. APPROPRIATE CONGRESSIONAL COMMITTEES DE-
15	FINED.
16	In this title, the term "appropriate congressional com-
17	mittees" means the Committee on Foreign Relations and
18	the Committee on Energy and Natural Resources of the Sen-
19	ate and the Committee on Foreign Affairs and the Com-
20	mittee on Energy and Commerce of the House of Represent-
21	atives.

1	SEC. 710. NO OIL PRODUCING AND EXPORTING CARTELS
2	ACT OF 2007.
3	(a) Short Title.—This section may be cited as the
4	"No Oil Producing and Exporting Cartels Act of 2007" or
5	"NOPEC".
6	(b) Sherman Act.—The Sherman Act (15 U.S.C. 1
7	et seq.) is amended by adding after section 7 the following:
8	"SEC. 7A. OIL PRODUCING CARTELS.
9	"(a) In General.—It shall be illegal and a violation
10	of this Act for any foreign state, or any instrumentality
11	or agent of any foreign state, to act collectively or in com-
12	bination with any other foreign state, any instrumentality
13	or agent of any other foreign state, or any other person,
14	whether by cartel or any other association or form of co-
15	operation or joint action—
16	"(1) to limit the production or distribution of
17	oil, natural gas, or any other petroleum product;
18	"(2) to set or maintain the price of oil, natural
19	gas, or any petroleum product; or
20	"(3) to otherwise take any action in restraint of
21	trade for oil, natural gas, or any petroleum product;
22	when such action, combination, or collective action has a
23	direct, substantial, and reasonably foreseeable effect on the
24	market, supply, price, or distribution of oil, natural gas,
25	or other petroleum product in the United States.

1	"(b) Sovereign Immunity.—A foreign state engaged
2	in conduct in violation of subsection (a) shall not be im-
3	mune under the doctrine of sovereign immunity from the
4	jurisdiction or judgments of the courts of the United States
5	in any action brought to enforce this section.
6	"(c) Inapplicability of Act of State Doctrine.—
7	No court of the United States shall decline, based on the
8	act of state doctrine, to make a determination on the merits
9	in an action brought under this section.
10	"(d) Enforcement.—The Attorney General of the
11	United States may bring an action to enforce this section
12	in any district court of the United States as provided under
13	the antitrust laws.".
14	(c) Sovereign Immunity.—Section 1605(a) of title
15	28, United States Code, is amended—
16	(1) in paragraph (6), by striking "or" after the
17	semicolon;
18	(2) in paragraph (7), by striking the period and
19	inserting "; or"; and
20	(3) by adding at the end the following:
21	"(8) in which the action is brought under section
22	7A of the Sherman Act.".

1	SEC. 711. CONVENTION ON SUPPLEMENTARY COMPENSA-
2	TION FOR NUCLEAR DAMAGE CONTINGENT
3	COST ALLOCATION.
4	(a) Findings and Purpose.—
5	(1) FINDINGS.—Congress finds that—
6	(A) section 170 of the Atomic Energy Act of
7	1954 (42 U.S.C. 2210) (commonly known as the
8	"Price-Anderson Act")—
9	(i) provides a predictable legal frame-
10	work necessary for nuclear projects; and
11	(ii) ensures prompt and equitable com-
12	pensation in the event of a nuclear incident
13	in the United States;
14	(B) section 170 of that Act, in effect, pro-
15	vides operators of nuclear powerplants with in-
16	surance for damage arising out of a nuclear in-
17	cident and funds the insurance primarily
18	through the assessment of a retrospective pre-
19	mium from each operator after the occurrence of
20	a nuclear incident;
21	(C) the Convention on Supplementary Com-
22	pensation for Nuclear Damage, done at Vienna
23	on September 12, 1997, will establish a global
24	system—

1	(i) to provide a predictable legal
2	framework necessary for nuclear energy
3	projects; and
4	(ii) to ensure prompt and equitable
5	compensation in the event of a nuclear inci-
6	dent;
7	(D) the Convention benefits United States
8	nuclear suppliers that face potentially unlimited
9	liability for a nuclear incidents outside the cov-
10	erage of section 170 of the Atomic Energy Act of
11	1954 (42 U.S.C. 2210) by replacing a potentially
12	open-ended liability with a predictable liability
13	regime that, in effect, provides nuclear suppliers
14	with insurance for damage arising out of such
15	an incident;
16	(E) the Convention also benefits United
17	States nuclear facility operators that may be
18	publicly liable for a Price-Anderson incident by
19	providing an additional early source for a Price-
20	Anderson incident by providing an additional
21	early source of funds to compensate damage aris-
22	ing out of the Price-Anderson incident;
23	(F) the combined operation of the Conven-
24	tion, section 170 of the Atomic Energy Act of
25	1954 (42 U.S.C. 2210), and this section will

- augment the quantity of assured funds available
 for victims in a wider variety of nuclear incidents while reducing the potential liability of
 United States suppliers without increasing potential costs to United States operators;

 (G) the cost of those benefits is the obliga-
 - (G) the cost of those benefits is the obligation of the United States to contribute to the supplementary compensation fund established by the Convention;
 - (H) any such contribution should be funded in a manner that neither upsets settled expectations based on the liability regime established under section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) nor shifts to Federal taxpayers liability risks for nuclear incidents at foreign installations;
 - (I) with respect to a Price-Anderson incident, funds already available under section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) should be used; and
 - (J) with respect to a nuclear incident outside the United States not covered by section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210), a retrospective premium should be prorated among nuclear suppliers relieved from po-

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1	tential liability for which insurance is not avail-
2	able.
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 og
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 in para-
11	graph (2), each nuclear supplier shall participate in
12	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 enactment of this Act,
8	and every 5 years thereafter, the Secretary
9	shall, by regulation, determine the risk-in-
10	formed assessment formula for the allocation
11	among nuclear suppliers of the contingent
12	cost resulting from a covered incident that
13	is not a Price-Anderson incident, taking
14	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 enactment of this Act and
14	every 5 years thereafter, the Secretary shall
15	submit to the Committee on Environment
16	and Public Works of the Senate and the
17	Committee on Energy and Commerce of the
18	House of Representatives a report on wheth-
19	er 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	in clause (ii), not later than 60 days after
17	receipt of a notification under subpara-
18	graph (A), a nuclear supplier shall pay to
19	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 a
2	the prime rate prevailing at the time the
3	first payment is due).
4	(C) Vouchers.—A nuclear supplier shal
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

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from the nuclear supplier—

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) Effect of Paragraph.—Nothing in
19	this paragraph limits, modifies, extinguishes, or
20	otherwise affects any cause of action that would
21	have existed in the absence of enactment of this
22	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	$a\ successor\ regulation).$
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 takes effect on the
15	date of enactment of this Act.
16	TITLE VIII—MISCELLANEOUS
17	SEC. 801. STUDY OF THE EFFECT OF PRIVATE WIRE LAWS
18	ON THE DEVELOPMENT OF COMBINED HEAT
19	AND POWER FACILITIES.
20	(a) Study.—
21	(1) In General.—The Secretary, in consultation
22	with the States and other appropriate entities, shall
23	conduct a study of the laws (including regulations)
24	affecting the siting of privately owned electric dis-
25	tribution wires on and across public rights-of-way

1	(2) Requirements.—The study under para-
2	graph (1) shall include—
3	(A) an evaluation of—
4	(i) the purposes of the laws; and
5	(ii) the effect the laws have on the de-
6	velopment of combined heat and power fa-
7	cilities;
8	(B) a determination of whether a change in
9	the laws would have any operating, reliability,
10	cost, or other impacts on electric utilities and the
11	customers of the electric utilities; and
12	(C) an assessment of—
13	(i) whether privately owned electric
14	distribution wires would result in duplica-
15	tive facilities; and
16	(ii) whether duplicative facilities are
17	necessary or desirable.
18	(b) Report.—Not later than 1 year after the date of
19	enactment of this Act, the Secretary shall submit to Con-
20	gress a report that describes the results of the study con-
21	ducted under subsection (a).
	Amend the title so as to read: "An Act to move the

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 from price gouging, to increase the energy 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:

Secretary.

110TH CONGRESS H. R. 6

AMENDMENTS