

110TH CONGRESS
1ST SESSION

H. R. 2809

To ensure that the United States leads the world baseline in developing and manufacturing next generation energy technologies, to grow the economy of the United States, to create new highly trained, highly skilled American jobs, to eliminate American overdependence on foreign oil, and to address the threat of global warming.

IN THE HOUSE OF REPRESENTATIVES

JUNE 21, 2007

Mr. INSLEE (for himself, Mr. VAN HOLLEN, Mr. LANGEVIN, Mr. HONDA, Mr. SMITH of Washington, Mr. SCHIFF, Mr. DELAHUNT, Mr. ELLISON, Ms. BALDWIN, Mr. HINCHEY, Mr. FATTAH, Mr. ISRAEL, Mr. JEFFERSON, Mr. EMANUEL, Mr. DAVIS of Illinois, Ms. LEE, Mr. SHAYS, and Mr. WEINER) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Rules, Ways and Means, Education and Labor, Foreign Affairs, Judiciary, Financial Services, Science and Technology, Oversight and Government Reform, Natural Resources, Agriculture, and the Budget, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To ensure that the United States leads the world baseline in developing and manufacturing next generation energy technologies, to grow the economy of the United States, to create new highly trained, highly skilled American jobs, to eliminate American overdependence on foreign oil, and to address the threat of global warming.

1 *Be it enacted by the Senate and House of Representa-*
 2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) **SHORT TITLE.**—This Act may be cited as the
 5 “New Apollo Energy Act of 2007”.

6 (b) **TABLE OF CONTENTS.**—The table of contents of
 7 this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—FINDINGS AND PERFORMANCE GOALS

Sec. 101. Findings.

Sec. 102. Performance goals.

TITLE II—EFFICIENCY

Subtitle A—Green Buildings

Sec. 201. Short title.

Sec. 202. Findings.

Sec. 203. Definitions.

Sec. 204. Coordinating agency.

Sec. 205. Public education and training.

Sec. 206. Blue ribbon panel.

Sec. 207. Research and development report.

Sec. 208. Greenhouse gas emission standards.

Sec. 209. Study of use of FHA energy efficient mortgage program.

Sec. 210. Healthy, high-performance schools.

Sec. 211. Loan guarantees for public institutions of higher education.

Sec. 212. Accountability of Federal agencies.

Sec. 213. State and local government block grants.

Sec. 214. Authorization of appropriations.

Sec. 215. Increase and extension of energy efficient commercial buildings de-
 duction.

Subtitle B—Consumer Assistance

Sec. 221. Appliance standards.

Sec. 222. Energy Star certification for solar water heaters and tankless water
 heaters.

Subtitle C—Tax Provision

Sec. 231. Energy credit for combined heat and power system property.

TITLE III—TRANSPORTATION SECTOR

Sec. 301. Performance goals.

Subtitle A—Plug-In Hybrid Electric Vehicles

- Sec. 311. Short title.
- Sec. 312. Definition.
- Sec. 313. Research and development grants.
- Sec. 314. Pilot project.
- Sec. 315. Test site.
- Sec. 316. Plan.
- Sec. 317. Plug-in hybrid motor vehicle tax credit.

Subtitle B—Increase Ridership of Public Transportation

- Sec. 321. Increased uniform dollar limitation for all types of transportation fringe benefits.
- Sec. 322. Credit for employer costs of providing certain mass transportation fringe benefits to their employees.
- Sec. 323. Clarification of Federal employee benefits.
- Sec. 324. Extension of transportation fringe benefit to bicycle commuters.

Subtitle C—Emissions Reductions and Oil Savings

CHAPTER 1—BIOFUELS SECURITY

- Sec. 331. Short title.

SUBCHAPTER A—RENEWABLE FUELS

- Sec. 341. Renewable fuel program.
- Sec. 342. Installation of e-85 fuel pumps by major oil companies at owned stations and branded stations.
- Sec. 343. Minimum Federal fleet requirement.
- Sec. 344. Application of Gasohol Competition Act of 1980.

SUBCHAPTER B—DUAL FUELED AUTOMOBILES

- Sec. 351. Requirement to manufacture dual fueled automobiles.
- Sec. 352. Manufacturing incentives for dual fueled automobiles.

CHAPTER 2—EMISSIONS REDUCTIONS

- Sec. 361. Extension of biodiesel tax credits.
- Sec. 362. Low carbon fuel standard.
- Sec. 363. Loan guarantee program to demonstrate low carbon renewable fuel.
- Sec. 364. Require automakers to reduce tailpipe GHG emissions.
- Sec. 365. Elimination of 2-FLEET rule.

TITLE IV—ELECTRICITY SECTOR

Subtitle A—Tax Incentives

- Sec. 401. Extension through 2018 for placing qualified facilities in service for producing renewable electric energy.
- Sec. 402. Extension of energy credit.
- Sec. 403. Expansion and modification of renewable resource credit.
- Sec. 404. Energy credit for small wind, small geothermal, small biomass, and small kinetic hydropower.
- Sec. 405. Modifications for clean renewable energy bonds.
- Sec. 406. Expansion and increase for residential energy efficient property credit.
- Sec. 407. Expansion of renewable resource credit to include thermal energy.

Subtitle B—Promoting Energy Efficient Investments

- Sec. 411. Rate modifications promoting energy efficiency investments.
- Sec. 412. Feed-in tariff system study.

Subtitle C—National Renewable Energy Zones

- Sec. 421. New electricity transmission lines designed primarily to carry electricity from renewable energy resources.
- Sec. 422. Short title.
- Sec. 423. Findings.
- Sec. 424. National renewable energy zones.
- Sec. 425. Federal Power Marketing Administrations and TVA.
- Sec. 426. Consistency with environmental laws.

Subtitle D—Net Metering

- Sec. 431. Establishing minimum net metering and interconnection standards.
- Sec. 432. Retail electric and gas utility efficiency policies.

Subtitle E—Renewable Portfolio Standard

- Sec. 441. Renewable portfolio standard.

Subtitle F—Marine and Hydrokinetic Renewable Energy Promotion

- Sec. 451. Short title.
- Sec. 452. Definition.
- Sec. 453. Research and development.
- Sec. 454. Adaptive Management and Environmental Fund.
- Sec. 455. Programmatic environmental impact statement.

Subtitle G—Carbon Capture and Sequestration

- Sec. 461. Carbon capture and storage research, development, and demonstration program.

TITLE V—GREEN WORKFORCE

Subtitle A—Small Manufacturer Assistance

- Sec. 501. Small manufacturer assistance through Hollings Manufacturing Extension Partnership Program.

Subtitle B—Green Workforce Education Incentives

- Sec. 511. National Green Certification Standards.
- Sec. 512. Environmentally literate workforce grant program.
- Sec. 513. Carbon neutrality grants in institutions of higher educations.
- Sec. 514. National green ranking system grant.
- Sec. 515. Green building and zero-energy home design training grants.
- Sec. 516. Student loan forgiveness for green workforce members.
- Sec. 517. Definitions.

TITLE VI—FEDERAL GOVERNMENT LEVERAGE TO MOVE NEW TECHNOLOGIES TO MARKET

Subtitle A—Incentives for Clean Energy Technology

- Sec. 601. New Energy Technologies Commission.

- Sec. 602. Loan Guarantees Program.
- Sec. 603. Grant Program to Create Clean Energy Business Districts.

Subtitle B—Clean Energy Exports and International Investment

- Sec. 611. Clean energy technology exports program.
- Sec. 612. International energy technology deployment program.

Subtitle C—Export-Import Bank

- Sec. 621. Require the Export-Import Bank of the United States to meet renewable energy targets in its lending practices.
- Sec. 622. Increase in the amount of financing made available by the Export-Import Bank for transactions involving renewable energy and energy efficiency.
- Sec. 623. Office of renewable energy promotion.
- Sec. 624. Report on Export-Import Bank financing for transactions involving renewable energy or energy efficiency.
- Sec. 625. Report on effect of Export-Import Bank financing on greenhouse gas emissions.

Subtitle D—Emerging Clean Energy Technology Venture Capital Fund

- Sec. 631. Findings.
- Sec. 632. Establishment of fund.
- Sec. 633. Authorization of appropriations.

TITLE VII—GREENHOUSE GAS REDUCTIONS

Subtitle A—Global Climate Change

- Sec. 701. Global climate change.

Subtitle B—Climate Change Research Initiatives

- Sec. 711. Research grants through National Science Foundation.
- Sec. 712. Abrupt climate change research.
- Sec. 713. Development of new measurement technologies.
- Sec. 714. Technology development and diffusion.
- Sec. 715. Public land.
- Sec. 716. Sea level rise from polar ice sheet melting.

TITLE VIII—OFFSETS

Subtitle A—Denial of Oil and Gas Tax Benefits

- Sec. 801. Short title.
- Sec. 802. Denial of deduction for income attributable to domestic production of oil, natural gas, or primary products thereof.
- Sec. 803. 7-year amortization of geological and geophysical expenditures for certain major integrated oil companies.

Subtitle B—Royalties Under Offshore Oil and Gas Leases

- Sec. 811. Short title.
- Sec. 812. Price thresholds for royalty suspension provisions.
- Sec. 813. Clarification of authority to impose price thresholds for certain lease sales.

Sec. 814. Eligibility for new leases and the transfer of leases; conservation of resources fees.

Sec. 815. Repeal of certain taxpayer subsidized royalty relief for the oil and gas industry.

Subtitle C—Strategic Energy Efficiency and Renewable Reserve

Sec. 821. Strategic Energy Efficiency and Renewables Reserve for investments in renewable energy and energy efficiency.

1 **TITLE I—FINDINGS AND**
2 **PERFORMANCE GOALS**

3 **SEC. 101. FINDINGS.**

4 Congress finds the following:

5 (1) A bold new national energy plan can lead to
6 a surge of investment in, development of, and de-
7 ployment of clean energy and energy efficient tech-
8 nologies that would result in the creation of millions
9 of highly-trained manufacturing and technical jobs
10 throughout the United States economy.

11 (2) Climate change, national security and en-
12 ergy dependence are a related set of global chal-
13 lenges.

14 (3) The United States currently relies on oil for
15 over 95 percent of its transportation fuel needs.

16 (4) The United States currently imports 60
17 percent of the oil it consumes and consumes about
18 one fourth of the world’s daily oil production.

19 (5) A major portion of the world’s oil supply is
20 controlled by unstable governments and countries

1 that are known to finance, harbor, or otherwise sup-
2 port terrorism and terrorist activities.

3 (6) Since World War II, the United States has
4 made significant expenditures of American taxpayer
5 dollars in attempts to stabilize governments and pro-
6 tect United States interests in the Middle East.

7 (7) Countries such as Japan, Germany, Den-
8 mark, and Great Britain lead the United States in
9 manufacturing alternative energy technologies that
10 both decrease reliance on fossil fuels and do not con-
11 tribute to global warming.

12 (8) The United States has led the world in the
13 development of a wide array of technological ad-
14 vances and is now poised to lead the world, using its
15 unique national genius for innovation, in the devel-
16 opment of a host of new energy technologies.

17 (9) Development of renewable energy resources
18 in the United States offers a substantial opportunity
19 for economic development in rural, agriculture-de-
20 pendent areas.

21 (10) Human activities have caused rapid in-
22 creases in atmospheric concentrations of carbon di-
23 oxide and other greenhouse gases in the last century.

1 (11) According to the Intergovernmental Panel
2 on Climate Change and the National Research
3 Council—

4 (A) the earth has warmed in the last cen-
5 tury; and

6 (B) the majority of the observed warming
7 is attributable to human activities, including
8 fossil fuel-generated carbon dioxide emissions.

9 (12) To avoid catastrophic global warming, the
10 United States should take decisive action with other
11 nations to reduce greenhouse gas emissions by 80
12 percent by 2050.

13 (13) Projected climate change poses a serious
14 threat to United States national security.

15 (14) Projected climate change will add to ten-
16 sions even in stable regions of the world.

17 **SEC. 102. PERFORMANCE GOALS.**

18 In order to ensure that the national energy policy of
19 the United States is the most effective policy for pro-
20 tecting national and homeland security, expanding our
21 economy and creating jobs, addressing global warming and
22 environmental health concerns, and protecting the inter-
23 ests of United States consumers, Congress establishes the
24 New Apollo Energy Act Performance Goals, which the

1 President shall consider when formulating and enforcing
2 national energy policy. These goals are as follows:

3 (1) Reduce the projected demand for gasoline in
4 the United States by at least 70 billion gallons an-
5 nually by 2030.

6 (2) Create and retain 3,000,000 new highly
7 skilled, high-wage jobs in the United States by 2015.

8 (3) Meet 10 percent of the country's electricity
9 needs from electricity generated from renewable re-
10 sources by 2012, and meet 20 percent of the coun-
11 try's electricity needs from electricity generated from
12 renewable resources by 2020.

13 (4) Lower energy costs for consumers by meet-
14 ing at least 10 percent of projected electricity de-
15 mand and 5 percent of natural gas demand by 2020
16 through increased conservation and improved energy
17 efficiency.

18 (5) Freeze U.S. greenhouse gas emissions in
19 2010, at 2009 levels. Beginning in 2011, cuts emis-
20 sions to achieve 1990 emissions levels by 2020. After
21 2020, cut emissions each year to reach 80 percent
22 below 1990 levels by 2050.

23 (6) Encourage domestic manufacturing and
24 production of new energy and energy efficient tech-
25 nologies.

1 (7) Require that 100 percent of all domestically
2 manufactured automobiles be dual-fueled vehicles by
3 2017.

4 (8) Increase the Federal fleet requirement to
5 100 percent dual-fueled or plug-in hybrid vehicles by
6 2008.

7 (9) Redevelop and enhance existing industrial
8 facilities in areas of the country adversely impacted
9 by manufacturing job losses.

10 (10) Promote rural economic development.

11 **TITLE II—EFFICIENCY**

12 **Subtitle A—Green Buildings**

13 **SEC. 201. SHORT TITLE.**

14 This Act may be cited as the “Advanced Design in
15 Energy for Living Efficiently Act of 2007”.

16 **SEC. 202. FINDINGS.**

17 The Congress finds that—

18 (1) green building design practices have a posi-
19 tive effect on the reduction of greenhouse gases, the
20 health of the environment, increases in production of
21 workers, and improved water supply for commu-
22 nities;

23 (2) buildings account for 38 percent of carbon
24 dioxide emissions per year;

1 (3) buildings consume approximately 40 percent
2 of the energy and 70 percent of the electricity in the
3 United States per year;

4 (4) an up-front investment of 2 percent in
5 green building design, on average, results in life
6 cycle savings of 20 percent of the total operation
7 costs of a building;

8 (5) case studies show examples of a 2 to 16
9 percent increase in productivity in buildings that in-
10 corporate green building design;

11 (6) students with the most daylight in their
12 classrooms progressed 20 percent faster on mathe-
13 matics tests and 26 percent faster on reading tests
14 in one year than those with the least day lighting;

15 (7) the development of a research agenda for
16 green building design must consider whole building
17 performance, and such development should be found-
18 ed on achievable and measurable performance goals;

19 (8) the tools and knowledge are currently avail-
20 able to meet the goals of this Act; and

21 (9) green building design is a national priority,
22 and can reduce the long-term operating costs for in-
23 dividuals and enhance their ability to repay the
24 mortgage.

1 **SEC. 203. DEFINITIONS.**

2 For purposes of this Act—

3 (1) the term “Administrator” means the Ad-
4 ministrator of the Environmental Protection Agency;

5 (2) the term “green building” means a building
6 that uses sustainable design principles to reduce the
7 use of nonrenewable resources, minimize environ-
8 mental impact, and relate people with the natural
9 environment;

10 (3) the term “institution of higher education”
11 has the meaning given that term in section 101 of
12 the Higher Education Act of 1965 (20 U.S.C.
13 1001); and

14 (4) the term “State” means one of the several
15 States, the District of Columbia, the Commonwealth
16 of Puerto Rico, the United States Virgin Islands,
17 Guam, American Samoa, the Commonwealth of the
18 Northern Mariana Islands, or any other common-
19 wealth, territory, or possession of the United States.

20 **SEC. 204. COORDINATING AGENCY.**

21 (a) IN GENERAL.—The Administrator shall serve as
22 the coordinating agency for Federal information on green
23 building design and practices, including information re-
24 garding construction, use, and decommissioning of green
25 buildings, and shall obtain from all Federal agencies any

1 information relating thereto that is not protected from dis-
2 closure by law.

3 (b) AVAILABILITY OF INFORMATION.—The Adminis-
4 trator, in consultation with the National Institute of
5 Building Sciences, shall make the information obtained
6 under subsection (a) readily available to the building in-
7 dustry and consumers.

8 **SEC. 205. PUBLIC EDUCATION AND TRAINING.**

9 (a) IN GENERAL.—The Administrator, in coordina-
10 tion with the National Institute of Building Sciences and
11 in conjunction with private-sector building-related entities,
12 shall establish a program to create and distribute informa-
13 tional materials to increase the knowledge of the general
14 public about green building design principles.

15 (b) GREEN BUILDING TRAINING.—Not later than 6
16 months after the date of enactment of this Act, the Ad-
17 ministrator, working through a grant to the United States
18 Green Building Council, shall provide for the establish-
19 ment of criteria for appropriate education and training of
20 architects, engineers, and developers in green building de-
21 sign and application.

22 **SEC. 206. BLUE RIBBON PANEL.**

23 (a) ESTABLISHMENT.—The National Institute of
24 Building Sciences shall establish a blue ribbon panel to
25 provide independent advice and counsel to the Adminis-

1 trator on policy issues associated with the conservation of
2 energy in residential, commercial, and Federal buildings,
3 green building design systems, the health of the indoor
4 environment, and reduction of water use and waste out-
5 put.

6 (b) APPOINTMENT.—The blue ribbon panel shall be
7 appointed by the Board of Directors of the National Insti-
8 tute of Building Sciences. Appointees shall represent all
9 sectors that are knowledgeable about or affected by green
10 buildings, including architects, professional engineers, gov-
11 ernment officials, representatives of consumer organiza-
12 tions, representatives of construction labor organizations,
13 product manufacturers, builders, housing management ex-
14 perts, and experts in building standards, codes, research,
15 testing, and fire safety.

16 (c) REPORT TO CONGRESS.—Not later than 1 year
17 after the date of enactment of this Act, the blue ribbon
18 panel shall report to Congress on the results of study to
19 determine best practices for quantifying the information
20 necessary to make informed property investment decisions,
21 including with respect to buildings that meet carbon-neu-
22 tral emission standards and use green building design
23 practices.

1 **SEC. 207. RESEARCH AND DEVELOPMENT REPORT.**

2 Not later than 6 months after the date of enactment
3 of this Act, the National Institute of Building Sciences
4 shall report to Congress on the estimated amount of fund-
5 ing necessary for research and development on green
6 building design in the United States. Such report shall in-
7 clude recommendations on further policies needed to pro-
8 mote green building design.

9 **SEC. 208. GREENHOUSE GAS EMISSION STANDARDS.**

10 (a) **ESTABLISHMENT.**—Not later than 1 year after
11 the date of enactment of this Act, the National Institute
12 of Building Sciences shall establish standards for the con-
13 struction of new commercial and residential buildings that
14 will reduce carbon emissions, compared to emissions from
15 similar buildings in 2003, by—

- 16 (1) 40 percent by 2010; and
17 (2) 70 percent by 2020.

18 (b) **COMPLIANCE.**—

19 (1) **REQUIREMENT.**—Not later than 6 years
20 after the date of enactment of this Act, each State
21 shall demonstrate to the satisfaction of the Adminis-
22 trator that—

23 (A) such State (and all of the local juris-
24 dictions within such State) has—

25 (i) adopted the standards established
26 under subsection (a); and

1 (ii) fully implemented such standards;

2 or

3 (B) technical barriers exist that prevent
4 such adoption and implementation.

5 (2) SUPPORTING INFORMATION.—In order to
6 make a demonstration to the Administrator under
7 paragraph (1), a State shall receive, and submit to
8 the Administrator, reports from all local jurisdic-
9 tions in the State on how many building permits
10 were issued each year and how many of these per-
11 mits met the standards established under subsection
12 (a).

13 **SEC. 209. STUDY OF USE OF FHA ENERGY EFFICIENT MORT-**
14 **GAGE PROGRAM.**

15 (a) STUDY.—The Comptroller General of the United
16 States shall conduct a study of the program of the Sec-
17 retary of Housing and Urban Development for energy effi-
18 cient mortgages insured under title II of the National
19 Housing Act, established and operated pursuant to section
20 106 of the Energy Policy Act of 1992 (42 U.S.C. 12712
21 note) and expanded in 1995 pursuant to subsection (b)
22 of such section, to determine—

23 (1) the extent to which such program is utilized
24 by mortgagors in the United States;

1 (2) any impediments to wider or more efficient
2 use of such program, including any such impedi-
3 ments relating to—

4 (A) knowledge of or about the program;
5 and

6 (B) the terms, limitations, or operation of
7 the program;

8 (3) effective actions which may be taken to in-
9 crease utilization of the program by mortgagors in
10 the United States.

11 (b) REPORT.—Not later than the expiration of the
12 6-month period beginning on the date of the enactment
13 of this Act, the Comptroller General shall submit to the
14 Congress a report describing the findings of the study pur-
15 suant to subsection (a) and setting forth recommendations
16 for actions under subsection (a)(3).

17 **SEC. 210. HEALTHY, HIGH-PERFORMANCE SCHOOLS.**

18 (a) GRANT PROGRAM AUTHORIZED.—The Adminis-
19 trator of the Environmental Protection Agency, acting
20 through the National Institute of Building Sciences, in
21 consultation with the Secretary of Energy and the Sec-
22 retary of Education, is authorized to award grants to
23 State educational agencies to permit such State edu-
24 cational agencies to carry out this section.

25 (b) SUBGRANTS.—

1 (1) IN GENERAL.—A State educational agency
2 receiving a grant under this section shall use funds
3 made available under the grant to award subgrants
4 to local educational agencies to permit such local
5 educational agencies to carry out the activities de-
6 scribed in subsection (e).

7 (2) LIMITATION.—A State educational agency
8 shall award subgrants under this subsection to local
9 educational agencies that are the neediest, as deter-
10 mined by the State, and that have made a commit-
11 ment to develop healthy, high-performance school
12 buildings in accordance with the plan developed and
13 approved under subsection (c)(1).

14 (c) IMPLEMENTATION.—

15 (1) PLANS.—A State educational agency shall
16 award subgrants under this section only to local edu-
17 cational agencies that, in consultation with the State
18 educational agency and State agencies with respon-
19 sibilities relating to energy and health, have devel-
20 oped plans that the State educational agency deter-
21 mines to be feasible and appropriate in order to
22 achieve the purposes for which the subgrants are
23 made.

24 (2) SUPPLEMENTING GRANT FUNDS.—The
25 State educational agency shall encourage local edu-

1 cational agencies that receive subgrants under this
2 section to supplement their subgrant funds with
3 funds from other sources in order to implement their
4 plans.

5 (d) ADMINISTRATION.—A State educational agency
6 receiving a grant under this section shall use the grant
7 funds made available under this section for one or more
8 of the following:

9 (1) To evaluate compliance by local educational
10 agencies with the requirements of this section.

11 (2) To distribute information and materials on
12 healthy, high-performance school buildings for both
13 new and existing facilities.

14 (3) To organize and conduct programs for
15 school board members, school district personnel, and
16 others to disseminate information on healthy, high-
17 performance school buildings.

18 (4) To provide technical services and assistance
19 in planning and designing healthy, high-performance
20 school buildings.

21 (5) To collect and monitor information per-
22 taining to healthy, high-performance school building
23 projects.

24 (e) LOCAL USES OF FUNDS.—

1 (1) IN GENERAL.—A local educational agency
2 that receives a subgrant under this section shall use
3 the subgrant funds to plan and prepare for healthy,
4 high-performance school building projects that—

5 (A) reduce energy use to at least 30 per-
6 cent below that of a school constructed in com-
7 pliance with standards prescribed in chapter 8
8 of the 2000 International Energy Conservation
9 Code, or a similar State code intended to
10 achieve substantially equivalent results;

11 (B) meet Federal and State health and
12 safety codes; and

13 (C) support healthful, energy efficient, and
14 environmentally sound practices.

15 (2) USE OF FUNDS.—A local educational agen-
16 cy that receives a subgrant under this section shall
17 use funds for one or more of the following:

18 (A) To develop a comprehensive energy
19 audit of the energy consumption characteristics
20 of a building and the need for additional energy
21 conservation measures necessary to allow
22 schools to meet the guidelines set out in para-
23 graph (1).

1 (B) To produce a comprehensive analysis
2 of building strategies, designs, materials, and
3 equipment that—

4 (i) are cost effective, produce greater
5 energy efficiency, and enhance indoor air
6 quality; and

7 (ii) can be used when conducting
8 school construction and renovation or pur-
9 chasing materials and equipment.

10 (C) To obtain research and provide tech-
11 nical services and assistance in planning and
12 designing healthy, high-performance school
13 buildings, including developing a timeline for
14 implementation of such plans.

15 (f) INFORMATION AND ASSISTANCE.—The Adminis-
16 trator of the Environmental Protection Agency, acting
17 through the National Institute of Building Sciences, shall
18 provide information and assistance to local educational
19 agencies on sustainable design. The information and as-
20 sistance shall include—

21 (1) information on how benefits of sustainable
22 design can benefit life cycle costs to all school dis-
23 tricts at no cost to school districts; and

1 (2) assistance on how to create curriculum for
2 environmental science classes to study local effects
3 of sustainable design.

4 (g) REPORT TO CONGRESS.—The Administrator shall
5 conduct a biennial review of State actions implementing
6 this section and carrying out the plans developed under
7 this section through State and local funding, and shall
8 submit a report to Congress on the results of such reviews.

9 (h) LIMITATIONS.—No funds received under this sec-
10 tion may be used for any of the following:

11 (1) Payment of maintenance of costs in connec-
12 tion with any projects constructed in whole or in
13 part with Federal funds provided under this section.

14 (2) Construction, renovation, or repair of school
15 facilities.

16 (3) Construction, renovation, repair, or acquisi-
17 tion of a stadium or other facility primarily used for
18 athletic contests or exhibitions, or other events for
19 which admission is charged to the general public.

20 (i) DEFINITIONS.—In this section:

21 (1) The term “healthy, high-performance school
22 building” means a school building in which the de-
23 sign, construction, operation, and maintenance—

24 (A) use energy-efficient and affordable
25 practices and materials;

- 1 (B) are cost-effective;
2 (C) enhance indoor air quality; and
3 (D) protect and conserve water.

4 (2) The terms “local educational agency” and
5 “State educational agency” have the meaning given
6 those terms in section 9101 of the Elementary and
7 Secondary Education Act of 1965 (20 U.S.C. 7801).

8 (j) CONFORMING REPEAL.—Subpart 18 (20 U.S.C.
9 7277 et seq.) of part D of title V of the Elementary and
10 Secondary Education Act of 1965 is repealed.

11 **SEC. 211. LOAN GUARANTEES FOR PUBLIC INSTITUTIONS**
12 **OF HIGHER EDUCATION.**

13 (a) PROGRAM.—The Administrator shall establish a
14 program to make loan guarantees available to public insti-
15 tutions of higher education in a State for the construction
16 or renovation of permanent buildings that meet the stand-
17 ards established under section 8(a).

18 (b) QUALIFICATIONS.—The Administrator shall es-
19 tablish the qualifications necessary for an institution to
20 be eligible for a loan guarantee under this section, includ-
21 ing qualifications to protect the financial interests of the
22 Federal Government.

23 (c) APPROVAL.—The Administrator shall approve or
24 disapprove an application for a loan guarantee under this

1 section not later than 30 days after receiving a completed
2 application.

3 (d) AUTHORIZATION OF APPROPRIATIONS.—There
4 are authorized to be appropriated to the Administrator
5 such sums as may be necessary to carry out this section.

6 **SEC. 212. ACCOUNTABILITY OF FEDERAL AGENCIES.**

7 (a) AGENCY ACTIONS.—Each Federal agency shall—

8 (1) increase the energy efficiency of its facilities
9 and operations;

10 (2) annually transmit to the President and the
11 Congress a report on the energy efficiency increases
12 and carbon emission reductions associated with its
13 facilities and operation; and

14 (3) reward agency employees who make signifi-
15 cant contributions to the reduction of agency carbon
16 emissions.

17 (b) ENERGY MANAGER TRAINING.—The energy man-
18 ager, designated under section 304 of Executive Order No.
19 13123, of each Federal agency shall be required to receive
20 training approved by the Administrator on green building
21 design, construction, use, and decommissioning, and to re-
22 ceive an annual refresher course approved by the Adminis-
23 trator on those subjects.

24 (c) ENERGY EFFICIENCY BUDGET REPORT.—Not
25 later than 6 months after the date of enactment of this

1 Act, the Comptroller General shall transmit to the Con-
2 gress a report comparing the energy efficiency budget re-
3 quest by the President for each Federal agency for fiscal
4 years 2006 and 2007 with the requests from the agency
5 to the President for energy efficiency budget amounts for
6 those fiscal years.

7 **SEC. 213. STATE AND LOCAL GOVERNMENT BLOCK**
8 **GRANTS.**

9 (a) IN GENERAL.—The Administrator shall make
10 block grants to State and local governments. Such grants
11 may be used for—

12 (1) the renovation of existing buildings to
13 achieve the standards established by the National
14 Institute of Building Sciences under section 8(a);

15 (2) redesigning existing plans for new buildings
16 to enable those plans to meet such standards;

17 (3) research and development of technologies to
18 enable and support green building design and the
19 achievement of such standards; and

20 (4) public education and training, including
21 training for homeowners, business owners, first time
22 home buyers, and contractors, on green buildings
23 and their construction, use, and decommissioning.

1 (b) MANDATORY USE.—All block grants received
2 under this section shall be used, at least in part, for the
3 purpose described in subsection (a)(4).

4 (c) ELIGIBILITY.—No State or local government may
5 receive a block grant under this section unless it dem-
6 onstrates to the satisfaction of the Administrator that—

7 (1) the State or local government (and in the
8 case of a State, all the local jurisdictions within the
9 State) has—

10 (A) adopted the standards established
11 under section 8(a); and

12 (B) fully implemented such standards; or

13 (2) technical barriers exist that prevent such
14 adoption and implementation.

15 (d) RESEARCH AND DEVELOPMENT COORDINA-
16 TION.—The Administrator shall monitor activities de-
17 scribed in subsection (a)(3) to prevent unnecessary dupli-
18 cation of research and development efforts.

19 (e) AUTHORIZATION OF APPROPRIATIONS.—There
20 are authorized to be appropriated to the Administrator for
21 making grants under this section \$1,000,000,000 for the
22 period encompassing fiscal years 2009 through 2018.

23 **SEC. 214. AUTHORIZATION OF APPROPRIATIONS.**

24 There are authorized to be appropriated to the Ad-
25 ministrator for carrying out this Act, other than sections

1 11 and 13 \$50,000,000 for each of the fiscal years 2009
2 through 2013.

3 **SEC. 215. INCREASE AND EXTENSION OF ENERGY EFFI-**
4 **CIENT COMMERCIAL BUILDINGS DEDUCTION.**

5 (a) INCREASE.—Section 179D of the Internal Rev-
6 enue Code of 1986 (relating to energy efficient commercial
7 buildings deduction) is amended—

8 (1) in subsection (b)(1)(A) by striking “\$1.80”
9 and inserting “\$2.25”, and

10 (2) in subsection (d)(1)(A) by striking “by sub-
11 stituting” and all that follows through the period at
12 the end and inserting “by substituting ‘\$.75’ for
13 ‘\$2.25’.”.

14 (b) EXTENSION.—Subsection (h) of section 179D of
15 such Code (relating to termination) is amended by striking
16 “December 31, 2008” and inserting “December 31,
17 2013”.

18 (c) EFFECTIVE DATE.—The amendments made by
19 this section shall apply to property placed in service after
20 the date of the enactment of this Act, in taxable years
21 ending after such date.

22 **Subtitle B—Consumer Assistance**

23 **SEC. 221. APPLIANCE STANDARDS.**

24 (a) CONSUMER APPLIANCE REQUIREMENT.—Section
25 325 of the Energy Policy and Conservation Act (42 U.S.C.

1 6295) is amended by adding at the end the following new
2 subsection:

3 “(ii) STANDBY MODE.—

4 “(1) REQUIREMENT.—Except as provided in
5 paragraph (2), any final rule adopted after July 1,
6 2012, to set a new or revised energy efficiency
7 standard for a covered product shall specify that a
8 covered product manufactured on or after the effec-
9 tive date of such new or revised standard shall, when
10 in standby mode, operate with not more than 1 watt
11 of electric power.

12 “(2) EXCEPTIONS.—

13 “(A) EXTENSIONS.—The Secretary may
14 provide a single extension of up to 2 years for
15 compliance with paragraph (1) with respect to
16 a covered product if the Secretary finds that
17 such extension is appropriate.

18 “(B) EXEMPTIONS.—The Secretary may
19 provide an exemption from the requirement
20 under paragraph (1) for a covered product,
21 after public notice and opportunity for com-
22 ment, if the Secretary finds that—

23 “(i) achieving the requirement is not
24 technologically feasible and economically
25 justified for that covered product; or

1 “(ii) such an exemption is warranted
2 for medical or military reasons.

3 Any exemption provided under this subpara-
4 graph shall be reviewed at least once every 5
5 years.”.

6 (b) CONSUMER APPLIANCE TEST PROCEDURES.—
7 Section 323(b) of the Energy Policy and Conservation Act
8 (42 U.S.C. 6293(b)) is amended by adding at the end the
9 following new paragraph:

10 “(17) Not later than July 1, 2009, the Secretary
11 shall issue a final rule establishing test procedures for
12 standby power consumption for all covered products, ex-
13 cept for products for which the current test procedure al-
14 ready measures standby power consumption.”.

15 (c) REPEAL.—

16 (1) IN GENERAL.—Section 325(u) of the En-
17 ergy Policy and Conservation Act (42 U.S.C.
18 6295(u)) is amended—

19 (A) by striking paragraph (2); and

20 (B) by redesignating paragraphs (3)
21 through (5) as paragraphs (2) through (4), re-
22 spectively.

23 (2) EFFECTIVE DATE.—The amendments made
24 by paragraph (1) shall take effect on the date de-
25 scribed in section 325(ii)(I) of the Energy Policy

1 and Conservation Act as, added by subsection (a) of
2 this section.

3 (d) INDUSTRIAL EQUIPMENT REQUIREMENT.—Sec-
4 tion 342 of the Energy Policy and Conservation Act (42
5 U.S.C. 6313) is amended by adding at the end the fol-
6 lowing new subsection:

7 “(f) STANDBY POWER.—

8 “(1) REQUIREMENT.—Except as provided in
9 paragraph (2), any final rule adopted after July 1,
10 2012, to set a new or revised energy efficiency
11 standard for covered equipment shall specify that
12 covered equipment manufactured on or after the ef-
13 fective date of such new or revised standard shall,
14 when in standby mode, operate with not more than
15 1 watt of electric power.

16 “(2) EXCEPTIONS.—

17 “(A) EXTENSIONS.—The Secretary may
18 provide a single extension of up to 5 years for
19 compliance with paragraph (1) with respect to
20 a covered equipment if the Secretary finds that
21 such extension is appropriate.

22 “(B) EXEMPTIONS.—The Secretary may
23 provide an exemption from the requirement
24 under paragraph (1) for covered equipment,

1 after public notice and opportunity for com-
2 ment, if the Secretary finds that—

3 “(i) achieving the requirement is not
4 technologically feasible and economically
5 justified for that covered equipment; or

6 “(ii) such an exemption is warranted
7 for medical or military reasons.

8 Any exemption provided under this subpara-
9 graph shall be reviewed at least once every 5
10 years.”.

11 (e) INDUSTRIAL EQUIPMENT TEST PROCEDURES.—
12 Section 343(a) of the Energy Policy and Conservation Act
13 (42 U.S.C. 6314(a)) is amended by adding at the end the
14 following new paragraph:

15 “(9) Not later than July 1, 2009, the Secretary shall
16 issue a final rule establishing test procedures for standby
17 power consumption for all covered equipment, except for
18 equipment for which the current test procedure already
19 measures standby power consumption.”.

20 **SEC. 222. ENERGY STAR CERTIFICATION FOR SOLAR**
21 **WATER HEATERS AND TANKLESS WATER**
22 **HEATERS.**

23 Not later than January 1, 2009, the Secretary of En-
24 ergy, in consultation with the Administrator of the Envi-
25 ronmental Protection Agency, shall adopt regulations es-

1 tablishing Energy Star Program requirements and an En-
 2 ergy Star rating program for commercial and residential
 3 solar water heating devices and tankless water heating de-
 4 vices.

5 **Subtitle C—Tax Provision**

6 **SEC. 231. ENERGY CREDIT FOR COMBINED HEAT AND** 7 **POWER SYSTEM PROPERTY.**

8 (a) IN GENERAL.—Section 48(a)(3)(A) of the Inter-
 9 nal Revenue Code of 1986 (defining energy property) is
 10 by striking “or” at the end of clause (iii), by inserting
 11 “or” at the end of clause (iv), and by adding at the end
 12 the following new clause:

13 “(v) combined heat and power system
 14 property,”.

15 (b) COMBINED HEAT AND POWER SYSTEM PROP-
 16 erty.—Section 48 of such Code (relating to energy cred-
 17 it) is amended by adding at the end the following new sub-
 18 section:

19 “(d) COMBINED HEAT AND POWER SYSTEM PROP-
 20 erty.—For purposes of subsection (a)—

21 “(1) COMBINED HEAT AND POWER SYSTEM
 22 PROPERTY.—The term ‘combined heat and power
 23 system property’ means property comprising a sys-
 24 tem—

1 “(A) which uses the same energy source
2 for the simultaneous or sequential generation of
3 electrical power, mechanical shaft power, or
4 both, in combination with the generation of
5 steam or other forms of useful thermal energy
6 (including heating and cooling applications),

7 “(B) which has an electrical capacity of
8 not more than 50 megawatts or a mechanical
9 energy capacity of not more than 67,000 horse-
10 power or an equivalent combination of electrical
11 and mechanical energy capacities,

12 “(C) which produces—

13 “(i) at least 20 percent of its total
14 useful energy in the form of thermal en-
15 ergy which is not used to produce electrical
16 or mechanical power (or combination
17 thereof), and

18 “(ii) at least 20 percent of its total
19 useful energy in the form of electrical or
20 mechanical power (or combination thereof),

21 “(D) the energy efficiency percentage of
22 which exceeds 60 percent, and

23 “(E) which is placed in service before Jan-
24 uary 1, 2011.

25 “(2) SPECIAL RULES.—

1 “(A) ENERGY EFFICIENCY PERCENT-
2 AGE.—For purposes of this subsection, the en-
3 ergy efficiency percentage of a system is the
4 fraction—

5 “(i) the numerator of which is the
6 total useful electrical, thermal, and me-
7 chanical power produced by the system at
8 normal operating rates, and expected to be
9 consumed in its normal application, and

10 “(ii) the denominator of which is the
11 higher heating value of the primary fuel
12 sources for the system.

13 “(B) DETERMINATIONS MADE ON BTU
14 BASIS.—The energy efficiency percentage and
15 the percentages under paragraph (1)(C) shall
16 be determined on a Btu basis.

17 “(C) INPUT AND OUTPUT PROPERTY NOT
18 INCLUDED.—The term ‘combined heat and
19 power system property’ does not include prop-
20 erty used to transport the energy source to the
21 facility or to distribute energy produced by the
22 facility.

23 “(D) CERTAIN EXCEPTION NOT TO
24 APPLY.—The first sentence of the matter in
25 subsection (a)(3) which follows subparagraph

1 (D) thereof shall not apply to combined heat
2 and power system property.

3 “(3) SYSTEMS USING BAGASSE.—If a system is
4 designed to use bagasse for at least 90 percent of
5 the energy source—

6 “(A) paragraph (1)(D) shall not apply, but

7 “(B) the amount of credit determined
8 under subsection (a) with respect to such sys-
9 tem shall not exceed the amount which bears
10 the same ratio to such amount of credit (deter-
11 mined without regard to this subparagraph) as
12 the energy efficiency percentage of such system
13 bears to 60 percent.

14 “(4) NONAPPLICATION OF CERTAIN RULES.—
15 For purposes of determining if the term ‘combined
16 heat and power system property’ includes tech-
17 nologies which generate electricity or mechanical
18 power using back-pressure steam turbines in place of
19 existing pressure-reducing valves or which make use
20 of waste heat from industrial processes such as by
21 using organic rankine, stirling, or kalina heat engine
22 systems, paragraph (1) shall be applied without re-
23 gard to subparagraphs (C) and (D) thereof .”.

24 (c) EFFECTIVE DATE.—The amendments made by
25 this section shall apply to periods after December 31,

1 2007, in taxable years ending after such date, under rules
2 similar to the rules of section 48(m) of the Internal Rev-
3 enue Code of 1986 (as in effect on the day before the date
4 of the enactment of the Revenue Reconciliation Act of
5 1990).

6 **TITLE III—TRANSPORTATION**
7 **SECTOR**

8 **SEC. 301. PERFORMANCE GOALS.**

9 Congress finds this title will:

10 (1) Reduce greenhouse gas emissions from the
11 use of motor vehicles by 22 percent below currently
12 projected levels.

13 (2) Prevent 662 million metric tons of carbon
14 dioxide from being produced, which is the equivalent
15 of taking 96 million of today’s automobiles off the
16 road in one year.

17 (3) Reduce United States oil consumption by
18 3.6 million barrels of oil per day.

19 **Subtitle A—Plug-in Hybrid Electric**
20 **Vehicles**

21 **SEC. 311. SHORT TITLE.**

22 This subtitle may be cited as the “Get Real Incentives
23 to Drive Plug-in Act”.

1 **SEC. 312. DEFINITION.**

2 For purposes of this subtitle, the term “plug-in hy-
3 brid electric vehicle” means an on-road or nonroad vehicle
4 that is propelled by an internal combustion engine or heat
5 engine using—

6 (1) any combustible fuel;

7 (2) an on-board, rechargeable storage device;

8 (3) a means of using an off-board source of
9 electricity; and

10 (4) fuel cell technology.

11 **SEC. 313. RESEARCH AND DEVELOPMENT GRANTS.**

12 (a) IN GENERAL.—The Secretary of Transportation
13 shall establish a program to make grants to owners of do-
14 mestic motor vehicle manufacturing or production facili-
15 ties for research, development, and demonstration on plug-
16 in hybrid electric vehicles.

17 (b) AUTHORIZATION OF APPROPRIATIONS.—There
18 are authorized to be appropriated to the Secretary of
19 Transportation for carrying out this section \$500,000,000
20 for the period encompassing fiscal years 2008 through
21 2012.

22 **SEC. 314. PILOT PROJECT.**

23 The Secretary of Transportation shall establish a
24 pilot project to determine how best to integrate plug-in
25 hybrid electric vehicles into the electric power grid and
26 into the overall transportation infrastructure.

1 **SEC. 315. TEST SITE.**

2 The Secretary of Transportation shall establish a test
3 site for the advancement of battery technologies for plug-
4 in hybrid electric vehicles, to be modeled after the Depart-
5 ment of Transportation’s NHTSA Vehicle Research and
6 Test Center in Ohio.

7 **SEC. 316. PLAN.**

8 Not later than 2 years after the date of enactment
9 of this subtitle, the Secretary of Transportation, in col-
10 laboration with the Secretary of Energy, shall transmit to
11 Congress a plan for the introduction and implementation
12 of a plug-in hybrid electric vehicle support infrastructure.

13 **SEC. 317. PLUG-IN HYBRID MOTOR VEHICLE TAX CREDIT.**

14 (a) IN GENERAL.—Section 30B of the Internal Rev-
15 enue Code of 1986 is amended by redesignating sub-
16 sections (i) and (j) as subsections (j) and (k), respectively,
17 and by inserting after subsection (h) the following new
18 subsection:

19 “(i) NEW PLUG-IN HYBRID MOTOR VEHICLE CRED-
20 IT.—

21 “(1) IN GENERAL.—For purposes of subsection
22 (a), the new plug-in hybrid motor vehicle credit de-
23 termined under this subsection with respect to a new
24 qualified plug-in hybrid motor vehicle placed in serv-
25 ice by the taxpayer during the taxable year is
26 \$2,500, if such vehicle is a new qualified plug-in hy-

1 brid motor vehicle with a gross vehicle weight rating
2 of not more than 8,500 pounds.

3 “(2) INCREASE FOR ADDITIONAL KILOWATT
4 HOURS.—The amount determined under paragraph
5 (1) shall be increased by \$500 for each whole num-
6 ber of kilowatt hours by which the storage capacity
7 of the on-board, rechargeable electricity storage de-
8 vice used by such vehicle exceeds 2.5 kilowatt hours,
9 but does not exceed 49.5 kilowatt hours.

10 “(3) NEW QUALIFIED PLUG-IN HYBRID MOTOR
11 VEHICLE.—For purposes of this subsection, the term
12 ‘new qualified plug-in hybrid motor vehicle’ means a
13 motor vehicle—

14 “(A) which is propelled by an internal
15 combustion engine or heat engine using—

16 “(i) any combustible fuel,

17 “(ii) an on-board, rechargeable stor-
18 age device with a storage capacity of at
19 least 2.5 kilowatt hours, and

20 “(iii) a means of using an off-board
21 source of electricity,

22 “(B) which, in the case of a passenger
23 automobile or light truck, has received on or
24 after the date of the enactment of this section
25 a certificate that such vehicle meets or exceeds

1 the Bin 5 Tier II emission level established in
2 regulations prescribed by the Administrator of
3 the Environmental Protection Agency under
4 section 202(i) of the Clean Air Act for that
5 make and model year vehicle,

6 “(C) the original use of which commences
7 with the taxpayer,

8 “(D) which is acquired for use or lease by
9 the taxpayer and not for resale, and

10 “(E) which is made by a manufacturer.”.

11 (b) CONFORMING AMENDMENTS.—

12 (1) Section 30B(a) of such Code is amended by
13 striking “and” at the end of paragraph (3), by strik-
14 ing the period at the end of paragraph (4) and in-
15 serting “, and”, and by adding at the end the fol-
16 lowing new paragraph:

17 “(5) the new plug-in hybrid motor vehicle credit
18 determined under subsection (i).”.

19 (2) Section 30B(k)(2) of such Code, as redesign-
20 nated by subsection (a), is amended—

21 (A) by striking “or” and inserting a
22 comma, and

23 (B) by inserting “, or a new qualified plug-
24 in hybrid motor vehicle (as described in sub-
25 section (i)(3))” after “subsection (d)(2)(A)”.

1 (c) EFFECTIVE DATE.—The amendments made by
2 this section shall apply to property placed in service after
3 the date of the enactment of this Act, in taxable years
4 ending after such date.

5 **Subtitle B—Increase Ridership of**
6 **Public Transportation**

7 **SEC. 321. INCREASED UNIFORM DOLLAR LIMITATION FOR**
8 **ALL TYPES OF TRANSPORTATION FRINGE**
9 **BENEFITS.**

10 (a) IN GENERAL.—Section 132(f)(2) of the Internal
11 Revenue Code of 1986 (relating to limitation on exclusion)
12 is amended—

13 (1) by striking “\$100” in subparagraph (A)
14 and inserting “\$200”, and

15 (2) by striking “\$175” in subparagraph (B)
16 and inserting “\$200”.

17 (b) INFLATION ADJUSTMENT CONFORMING AMEND-
18 MENTS.—Subparagraph (A) of section 132(f)(6) of such
19 Code (relating to inflation adjustment) is amended—

20 (1) by striking the last sentence,

21 (2) by striking “1999” and inserting “2008”,

22 and

23 (3) by striking “1998” and inserting “2007”.

1 (c) EFFECTIVE DATE.—The amendments made by
2 this subsection shall apply to taxable years beginning after
3 December 31, 2006.

4 **SEC. 322. CREDIT FOR EMPLOYER COSTS OF PROVIDING**
5 **CERTAIN MASS TRANSPORTATION FRINGE**
6 **BENEFITS TO THEIR EMPLOYEES.**

7 (a) IN GENERAL.—Subpart D of part IV of sub-
8 chapter A of chapter 1 of the Internal Revenue Code of
9 1986 (relating to business-related credits) is amended by
10 adding at the end the following new section:

11 **“SEC. 450. CREDIT FOR EMPLOYER COSTS OF PROVIDING**
12 **CERTAIN MASS TRANSPORTATION FRINGE**
13 **BENEFITS TO THEIR EMPLOYEES.**

14 “(a) IN GENERAL.—For purposes of section 38, the
15 mass transportation fringe credit is an amount equal to
16 25 percent of the cost paid or incurred by an employer
17 during the taxable year for providing any qualified trans-
18 portation fringe described in subparagraph (A) or (B) of
19 section 132(f)(1) to employees of such employer.

20 “(b) LIMITATION.—The amount of the credit under
21 subsection (a) for a month may not exceed the dollar
22 amount per month to which the amount of the fringe bene-
23 fits are limited under subparagraph (A) of section
24 132(f)(2).

1 “(c) ELECTION TO HAVE CREDIT NOT APPLY.—A
 2 taxpayer may elect to have this section not apply for any
 3 taxable year.”.

4 (b) CONFORMING AMENDMENTS.—

5 (1) CREDIT TO BE PART OF GENERAL BUSI-
 6 NESS CREDIT.—Subsection (b) of section 38 of such
 7 Code (relating to current year business credit) is
 8 amended by striking “plus” at the end of paragraph
 9 (30), by striking the period at the end of paragraph
 10 (31) and inserting “, plus”, and by adding at the
 11 end the following new paragraph:

12 “(32) the mass transportation fringe credit de-
 13 termined under section 450(a).”.

14 (2) CLERICAL AMENDMENT.—The table of sec-
 15 tions for subpart D of part IV of subchapter A of
 16 chapter 1 of such Code is amended by adding at the
 17 end the following new item:

“450. Credit for employer costs of providing certain mass transportation fringe
 benefits to their employees.”.

18 (c) EFFECTIVE DATE.—The amendments made by
 19 this section shall apply to taxable years beginning after
 20 December 31, 2007.

21 **SEC. 323. CLARIFICATION OF FEDERAL EMPLOYEE BENE-**
 22 **FITS.**

23 Section 7905 of title 5, United States Code, is
 24 amended—

1 (1) in subsection (a)—

2 (A) in paragraph (2)(C) by inserting
3 “and” after the semicolon;

4 (B) in paragraph (3) by striking “; and”
5 and inserting a period; and

6 (C) by striking paragraph (4); and

7 (2) in subsection (b)(2)(A) by amending sub-
8 paragraph (A) to read as follows:

9 “(A) a qualified transportation fringe as
10 defined in section 132(f)(1) of the Internal Rev-
11 enue Code of 1986;”.

12 **SEC. 324. EXTENSION OF TRANSPORTATION FRINGE BEN-**
13 **EFIT TO BICYCLE COMMUTERS.**

14 (a) **IN GENERAL.**—Paragraph (1) of section 132(f)
15 of the Internal Revenue Code of 1986 (relating to general
16 rule for qualified transportation fringe) is amended by
17 adding at the end the following:

18 “(D) **Bicycle commuting allowance.**”.

19 (b) **BICYCLE COMMUTING ALLOWANCE DEFINED.**—
20 Paragraph (5) of section 132(f) of such Code (relating to
21 definitions) is amended by adding at the end the following:

22 “(F) **BICYCLE COMMUTING ALLOWANCE.**—
23 The term ‘bicycle commuting allowance’ means
24 an amount provided to an employee for trans-
25 portation on a bicycle if such transportation is

1 in connection with travel between the employ-
2 ee’s residence and place of employment.”.

3 (c) LIMITATION ON EXCLUSION.—Paragraph (2) of
4 section 132(f) of such Code is amended by striking “sub-
5 paragraphs (A) and (B)” and inserting “subparagraphs
6 (A), (B), and (D)”.

7 (d) EFFECTIVE DATE.—The amendments made by
8 this section shall apply to taxable years beginning after
9 December 31, 2007.

10 **Subtitle C—Emissions Reductions** 11 **and Oil Savings**

12 **CHAPTER 1—BIOFUELS SECURITY**

13 **SEC. 331. SHORT TITLE.**

14 This chapter may be cited as the “Biofuels Security
15 Act of 2007”.

16 **Subchapter A—Renewable Fuels**

17 **SEC. 341. RENEWABLE FUEL PROGRAM.**

18 Section 211(o)(2) of the Clean Air Act (42 U.S.C.
19 7545(o)(2)) is amended by striking subparagraph (B) and
20 inserting the following:

21 “(B) APPLICABLE VOLUME.—

22 “(i) IN GENERAL.—For the purpose
23 of subparagraph (A), the applicable volume
24 for calendar year 2010 and each calendar
25 year thereafter shall be determined, by

1 rule, by the Administrator, in consultation
2 with the Secretary of Agriculture and the
3 Secretary of Energy, in a manner that en-
4 sures that—

5 “(I) the requirements described
6 in clause (ii) for specified calendar
7 years are met; and

8 “(II) the applicable volume for
9 each calendar year not specified in
10 clause (ii) is determined on an annual
11 basis.

12 “(ii) REQUIREMENTS.—The require-
13 ments referred to in clause (i) are—

14 “(I) for calendar year 2010, at
15 least 10,000,000,000 gallons of re-
16 newable fuel;

17 “(II) for calendar year 2020, at
18 least 30,000,000,000 gallons of re-
19 newable fuel; and

20 “(III) for calendar year 2030, at
21 least 60,000,000,000 gallons of re-
22 newable fuel.”.

1 **SEC. 342. INSTALLATION OF E-85 FUEL PUMPS BY MAJOR**
2 **OIL COMPANIES AT OWNED STATIONS AND**
3 **BRANDED STATIONS.**

4 Section 211(o) of the Clean Air Act (42 U.S.C.
5 7545(o)) is amended by adding at the end the following:

6 “(11) INSTALLATION OF E-85 FUEL PUMPS BY
7 MAJOR OIL COMPANIES AT OWNED STATIONS AND
8 BRANDED STATIONS.—

9 “(A) DEFINITIONS.—In this paragraph:

10 “(i) E-85 FUEL.—The term ‘E-85
11 fuel’ means a blend of gasoline approxi-
12 mately 85 percent of the content of which
13 is derived from ethanol produced in the
14 United States.

15 “(ii) MAJOR OIL COMPANY.—The
16 term ‘major oil company’ means any per-
17 son that, individually or together with any
18 other person with respect to which the per-
19 son has an affiliate relationship or signifi-
20 cant ownership interest, has not less than
21 4,500 retail station outlets according to
22 the latest publication of the Petroleum
23 News Annual Factbook.

24 “(iii) SECRETARY.—The term ‘Sec-
25 retary’ means the Secretary of Energy,
26 acting in consultation with the Adminis-

1 trator of the Environmental Protection
 2 Agency and the Secretary of Agriculture.

3 “(B) REGULATIONS.—The Secretary shall
 4 promulgate regulations to ensure that each
 5 major oil company that sells or introduces gaso-
 6 line into commerce in the United States
 7 through wholly-owned stations or branded sta-
 8 tions installs or otherwise makes available 1 or
 9 more pumps that dispense E-85 fuel (including
 10 any other equipment necessary, such as includ-
 11 ing tanks, to ensure that the pumps function
 12 properly) at not less than the applicable per-
 13 centage of the wholly-owned stations and the
 14 branded stations of the major oil company spec-
 15 ified in subparagraph (C).

16 “(C) APPLICABLE PERCENTAGE.—For the
 17 purpose of subparagraph (B), the applicable
 18 percentage of the wholly-owned stations and the
 19 branded stations shall be determined in accord-
 20 ance with the following table:

“Calendar year:	Applicable percentage of wholly-owned stations and branded stations (percent):
2008	5
2009	10
2010	15
2011	20
2012	25
2013	30
2014	35
2015	40

“Calendar year:	Applicable percentage of wholly-owned stations and branded stations (percent):
2016	45
2017 and each calendar year thereafter	50.

1 “(D) GEOGRAPHIC DISTRIBUTION.—

2 “ (i) IN GENERAL.—Subject to clause
3 (ii), in promulgating regulations under
4 subparagraph (B), the Secretary shall en-
5 sure that each major oil company described
6 in subparagraph (B) installs or otherwise
7 makes available 1 or more pumps that dis-
8 pense E-85 fuel at not less than a min-
9 imum percentage (specified in the regula-
10 tions) of the wholly-owned stations and the
11 branded stations of the major oil company
12 in each State.

13 “(ii) REQUIREMENT.—In specifying
14 the minimum percentage under clause (i),
15 the Secretary shall ensure that each major
16 oil company installs or otherwise makes
17 available 1 or more pumps described in
18 that clause in each State in which the
19 major oil company operates.

20 “(E) FINANCIAL RESPONSIBILITY.—In
21 promulgating regulations under subparagraph
22 (B), the Secretary shall ensure that each major

1 oil company described in that subparagraph as-
2 sumes full financial responsibility for the costs
3 of installing or otherwise making available the
4 pumps described in that subparagraph and any
5 other equipment necessary (including tanks) to
6 ensure that the pumps function properly.

7 “(F) PRODUCTION CREDITS FOR EXCEED-
8 ING E-85 FUEL PUMPS INSTALLATION REQUIRE-
9 MENT.—

10 “(i) EARNING AND PERIOD FOR AP-
11 PLYING CREDITS.—If the percentage of the
12 wholly-owned stations and the branded sta-
13 tions of a major oil company at which the
14 major oil company installs E-85 fuel
15 pumps in a particular calendar year ex-
16 ceeds the percentage required under sub-
17 paragraph (C), the major oil company
18 earns credits under this paragraph, which
19 may be applied to any of the 3 consecutive
20 calendar years immediately after the cal-
21 endar year for which the credits are
22 earned.

23 “(ii) TRADING CREDITS.—Subject to
24 clause (iii), a major oil company that has
25 earned credits under clause (i) may sell

1 credits to another major oil company to en-
2 able the purchaser to meet the requirement
3 under subparagraph (C).

4 “(iii) EXCEPTION.—A major oil com-
5 pany may not use credits purchased under
6 clause (ii) to fulfill the geographic distribu-
7 tion requirement in subparagraph (D).”.

8 **SEC. 343. MINIMUM FEDERAL FLEET REQUIREMENT.**

9 Section 303(b)(1) of the Energy Policy Act of 1992
10 (42 U.S.C. 13212(b)(1)) is amended—

11 (1) in subparagraph (C), by striking “and”
12 after the semicolon;

13 (2) in subparagraph (D), by striking “fiscal
14 year 1999 and thereafter,” and inserting “each of
15 fiscal years 1999 through 2007; and”;

16 (3) by inserting after subparagraph (D) the fol-
17 lowing:

18 “(E) 100 percent in fiscal year 2008 and
19 thereafter,”; and

20 (4) by inserting after the period at the end the
21 following: “For purposes of this subsection, the term
22 ‘alternative fueled vehicle’ shall include plug-in hy-
23 brid vehicles (as defined in section 30B of the Inter-
24 nal Revenue Code of 1986).”.

1 **SEC. 344. APPLICATION OF GASOHOL COMPETITION ACT OF**
2 **1980.**

3 Section 26 of the Clayton Act (15 U.S.C. 26a) is
4 amended—

5 (1) by redesignating subsection (c) as sub-
6 section (d);

7 (2) by inserting after subsection (b) the fol-
8 lowing:

9 “(c) For purposes of subsection (a), restricting the
10 right of a franchisee to install on the premises of that
11 franchisee a renewable fuel pump, such as one that dis-
12 penses E85, shall be considered an unlawful restriction.”;
13 and

14 (3) in subsection (d) (as redesignated by para-
15 graph (1))—

16 (A) by striking “section,” and inserting the
17 following: “section—

18 “(1) the term”;

19 (B) by striking the period at the end and
20 inserting “; and”; and

21 (C) by adding at the end the following:

22 “(2) the term ‘gasohol’ includes any blend of
23 ethanol and gasoline such as E-85.”.

1 **Subchapter B—Dual Fueled Automobiles**

2 **SEC. 351. REQUIREMENT TO MANUFACTURE DUAL FUELED**
 3 **AUTOMOBILES.**

4 (a) REQUIREMENT.—

5 (1) IN GENERAL.—Chapter 329 of title 49,
 6 United States Code, is amended by inserting after
 7 section 32902 the following:

8 **“§ 32902A. Requirement to manufacture dual fueled**
 9 **automobiles**

10 “(a) REQUIREMENT.—Each manufacturer of new
 11 automobiles that are capable of operating on gasoline or
 12 diesel fuel shall ensure that the percentage of such auto-
 13 mobiles, manufactured in any model year after model year
 14 2007 and distributed in commerce for sale in the United
 15 States, which are dual fueled automobiles is equal to not
 16 less than the applicable percentage set forth in the fol-
 17 lowing table:

“For each of the following model years:	The percentage of dual fueled auto- mobiles manufactured shall be not less than:
2008	10
2009	20
2010	30
2011	40
2012	50
2013	60
2014	70
2015	80
2016	90
2017 and beyond	100.

18 “(b) PRODUCTION CREDITS FOR EXCEEDING FLEXI-
 19 BLE FUEL AUTOMOBILE PRODUCTION REQUIREMENT.—

1 “(1) EARNING AND PERIOD FOR APPLYING
2 CREDITS.—If the number of dual fueled automobiles
3 manufactured by a manufacturer in a particular
4 model year exceeds the number required under sub-
5 section (a), the manufacturer earns credits under
6 this section, which may be applied to any of the 3
7 consecutive model years immediately after the model
8 year for which the credits are earned.

9 “(2) TRADING CREDITS.—A manufacturer that
10 has earned credits under paragraph (1) may sell
11 credits to another manufacturer to enable the pur-
12 chaser to meet the requirement under subsection
13 (a).”.

14 (2) TECHNICAL AMENDMENT.—The table of
15 sections for chapter 329 of title 49, United States
16 Code, is amended by inserting after the item relating
17 to section 32902 the following:

“32902A. Requirement to manufacture dual fueled automobiles.”.

18 (b) ACTIVITIES TO PROMOTE THE USE OF CERTAIN
19 ALTERNATIVE FUELS.—The Secretary of Transportation
20 shall carry out activities to promote the use of fuel mix-
21 tures containing gasoline or diesel fuel and 1 or more al-
22 ternative fuels, including a mixture containing at least 85
23 percent of methanol, denatured ethanol, and other alcohols
24 by volume with gasoline or other fuels, to power auto-
25 mobiles in the United States.

1 **SEC. 352. MANUFACTURING INCENTIVES FOR DUAL**
2 **FUELED AUTOMOBILES.**

3 Section 32905(b) of title 49, United States Code, is
4 amended—

5 (1) by redesignating paragraphs (1) and (2) as
6 subparagraphs (A) and (B), respectively;

7 (2) by inserting “(1)” before “Except”;

8 (3) by striking “model years 1993–2010” and
9 inserting “model year 1993 through the first model
10 year beginning not less than 18 months after the
11 date of enactment of the Biofuels Security Act of
12 2007”; and

13 (4) by adding at the end the following:

14 “(2) Except as provided in paragraph (5), subsection
15 (d), or section 32904(a)(2), the Administrator shall meas-
16 ure the fuel economy for each model of dual fueled auto-
17 mobiles manufactured by a manufacturer in the first
18 model year beginning not less than 30 months after the
19 date of enactment of the Biofuels Security Act of 2007
20 by dividing 1.0 by the sum of—

21 “(A) 0.7 divided by the fuel economy measured
22 under section 32904(c) when operating the model on
23 gasoline or diesel fuel; and

24 “(B) 0.3 divided by the fuel economy measured
25 under subsection (a) when operating the model on
26 alternative fuel.

1 “(3) Except as provided in paragraph (5), subsection
2 (d), or section 32904(a)(2), the Administrator shall meas-
3 ure the fuel economy for each model of dual fueled auto-
4 mobiles manufactured by a manufacturer in the first
5 model year beginning not less than 42 months after the
6 date of enactment of the Biofuels Security Act of 2007
7 by dividing 1.0 by the sum of—

8 “(A) 0.9 divided by the fuel economy measured
9 under section 32904(c) when operating the model on
10 gasoline or diesel fuel; and

11 “(B) 0.1 divided by the fuel economy measured
12 under subsection (a) when operating the model on
13 alternative fuel.

14 “(4) Except as provided in subsection (d) or section
15 32904(a)(2), the Administrator shall measure the fuel
16 economy for each model of dual fueled automobiles manu-
17 factured by a manufacturer in each model year beginning
18 not less than 54 months after the date of enactment of
19 the Biofuels Security Act of 2007 in accordance with sec-
20 tion 32904(c).

21 “(5) Notwithstanding paragraphs (2) through (4),
22 the fuel economy for all dual fueled automobiles manufac-
23 tured to comply with the requirements under section
24 32902A(a), including automobiles for which dual fueled
25 automobile credits have been used or traded under section

1 32902A(b), shall be measured in accordance with section
2 32904(c).”.

3 **CHAPTER 2—EMISSIONS REDUCTIONS**

4 **SEC. 361. EXTENSION OF BIODIESEL TAX CREDITS.**

5 (a) IN GENERAL.—Sections 40A(g), 6426(e)(6), and
6 6427(e)(5)(B) of the Internal Revenue Code of 1986 are
7 each amended by striking “2008” and inserting “2018”.

8 (b) EFFECTIVE DATE.—The amendments made by
9 this section shall take effect on the date of the enactment
10 of this Act.

11 **SEC. 362. LOW CARBON FUEL STANDARD.**

12 The Clean Air Act (42 U.S.C. 7401 et seq.) is amend-
13 ed by adding at the end the following:

14 **“TITLE VII—GREENHOUSE GAS** 15 **EMISSIONS FROM VEHICLE** 16 **AND AIRCRAFT FUELS**

17 **“SEC. 701. PURPOSE.**

18 “The purpose of this title is to provide a reduction
19 in the aggregate greenhouse gas emissions per unit of en-
20 ergy consumed by vehicles and aircraft.

21 **“SEC. 702. FINDINGS.**

22 “The Congress finds that:

23 “(1) The United States consumes a quarter of
24 the world’s oil and the oil used in transportation ac-

1 counts for a third of the United States emissions of
2 the greenhouse gases that cause global warming.

3 “(2) To avoid catastrophic global warming, the
4 United States should take decisive action with other
5 nations to reduce greenhouse gas emissions by 60 to
6 80 percent by 2050.

7 “(3) Transitioning our transportation sector to
8 more efficient use of oil and low-carbon petroleum
9 alternatives is essential to reducing global warming
10 pollution.

11 “(4) It is necessary and feasible to reduce emis-
12 sions of greenhouse gases, enhance national security
13 by reducing dependence on oil and promote economic
14 well-being without sacrificing land, water and air
15 quality, by enacting energy policies that motivate en-
16 vironmental performance.

17 **“SEC. 703. DEFINITIONS.**

18 “For purposes of this title:

19 “(1) ADMINISTRATOR.—The term ‘Adminis-
20 trator’ means the Administrator of the Environ-
21 mental Protection Agency.

22 “(2) CARBON DIOXIDE EQUIVALENT.—With re-
23 spect to each greenhouse gas, the term ‘carbon diox-
24 ide equivalent’ means the amount of the greenhouse
25 gas resulting from that fuel that traps the same

1 amount of heat as one metric ton of carbon dioxide,
2 as determined by the Administrator.

3 “(3) GREENHOUSE GAS.—The term ‘greenhouse
4 gas’ means carbon dioxide, hydrofluorocarbons,
5 methane, nitrous oxide, perfluorocarbons, sulfur
6 hexafluoride, and any other anthropogenically-emit-
7 ted gas that is determined by the Administrator,
8 after notice and comment, to contribute to global
9 warming to a non-negligible degree.

10 “(4) LIFECYCLE GREENHOUSE GAS EMIS-
11 SIONS.—The term ‘lifecycle greenhouse gas emis-
12 sions’ means greenhouse gases emitted during the
13 entire cycle of extraction, cultivation, production,
14 manufacturing, feedstock extraction, marketing, and
15 distribution for a fuel or other sources of energy, as
16 well as those emitted during the use of such fuels
17 and sources by vehicles and aircraft. The term in-
18 cludes changes in land use and land cover associated
19 with each phase of such cycle.

20 “(5) VEHICLE.—The term ‘vehicle’ means a
21 motor vehicle as defined in section 216 and any
22 other device used for the transportation of persons
23 or goods (other than an aircraft).

1 **“SEC. 704. LOW CARBON FUEL PERFORMANCE STANDARDS.**

2 “(a) VEHICLE FUEL STANDARD.—Not later than
3 January 1, 2010, the Administrator shall promulgate low
4 carbon fuel performance standards for fuels and other
5 sources of energy used to propel vehicles. Such standards
6 shall begin to apply in the year 2015.

7 “(b) GRADUATED REDUCTIONS FOR VEHICLE
8 FUEL.—The Administrator shall promulgate, by rule, a
9 declining standard for each 5 calendar year period begin-
10 ning in 2015. Each such standard shall represent a grad-
11 uated percentage reduction in aggregate emissions of
12 greenhouse gases per Btu in each 5-year period after 2014
13 through 2050 as provided in the following table. The re-
14 duction for each such period shall be measured from the
15 baseline for vehicle fuel, as determined by the Adminis-
16 trator under subsection (f).

“5-year period	Percent reduction
2015 through 2019	3 percent
2020 through 2024	6 percent
2025 through 2029	9 percent
2030 through 2034	12 percent
2035through 2039	15 percent
2040 through 2044	18 percent
2045 through 2049	21 percent

17 “(c) ADDITIONAL REDUCTIONS.—Each 5 years dur-
18 ing the period 2015 through 2050 the Administrator shall
19 review available control technology, safety considerations,
20 and land and other resources available for production of
21 fuels and other sources of energy used to propel vehicles.

1 Following such review, the Administrator may, by rule,
2 promulgate a more stringent standard than the standard
3 otherwise applicable under subsection (b) which more
4 stringent standard, based on such review, the Adminis-
5 trator determines to be requisite to protect the public
6 health and welfare from any known or anticipated adverse
7 effects associated with greenhouse gas emissions.

8 “(d) STANDARD FOR AIRCRAFT FUEL.—Not later
9 than January 1, 2010, the Administrator shall promulgate
10 a low carbon fuel performance standard for fuels and
11 other sources of energy used by aircraft. The performance
12 standard for such fuels and other sources of energy for
13 aircraft for each year after 2015 shall be the baseline for
14 that fuel, as determined by the Administrator under sub-
15 section (f). Such standard shall begin to apply in the year
16 2015 and continue to apply through the calendar year
17 2019. The standard shall remain in effect thereafter un-
18 less, for each 5 year period thereafter, beginning in 2020,
19 the Administrator and the Secretary of Transportation de-
20 termine that a more stringent standard is necessary to
21 carry out the purposes of this Act. Such determination
22 may be made only after a thorough review of available
23 technology and safety considerations. Following such de-
24 termination, the Administrator shall promulgate a rule es-
25 tablishing a more stringent standard.

1 “(e) TERMS OF STANDARDS.—Each standard under
2 this section shall be expressed in carbon dioxide, or carbon
3 dioxide equivalent, emissions per Btu of energy from the
4 aggregate of all fuels and other sources of energy used
5 by vehicles or by aircraft.

6 “(f) BASELINE.—

7 “(1) VEHICLE FUEL.—The baseline for vehicle
8 fuel for purposes of the standards under this section
9 shall be the aggregate greenhouse gas emissions per
10 Btu from all such fuel and other sources of energy
11 used by vehicles in calendar year 2007, as deter-
12 mined by the Administrator.

13 “(2) AIRCRAFT FUEL.—For fuel used by air-
14 craft, the baseline for purposes of the standard
15 under this section shall be the aggregate greenhouse
16 gas emissions per Btu from all such fuel and other
17 sources of energy used by aircraft in calendar year
18 2007, as determined by the Administrator.

19 **“SEC. 705. EPA REGULATIONS; CALCULATION OF EMIS-**
20 **SIONS PER BTU.**

21 “(a) REGULATIONS.—After consultation with the
22 Secretary of Energy and the Secretary of Commerce, and
23 a review of all compliance methods, the Administrator,
24 after notice and opportunity for comment, shall promul-
25 gate, not later than January 1, 2010, and may periodically

1 revise thereafter, regulations requiring compliance with
2 the annual performance standards established under sec-
3 tion 703.

4 “(b) CALCULATIONS OF GREENHOUSE EMISSION
5 RATE PER BTU.—

6 “(1) INDIVIDUAL CALCULATIONS UNDER
7 STANDARD METHODOLOGY.—The regulations under
8 this section shall provide standard, transparent and
9 public methods for each producer, importer, or
10 blender of a fuel or other source of energy used, di-
11 rectly or indirectly, as a fuel for vehicles or aircraft
12 to calculate the greenhouse gases emitted per Btu of
13 such fuel or other source of energy when so used.

14 “(2) LIFECYCLE GREENHOUSE GAS EMISSION
15 CALCULATION.—The regulations under this section
16 shall include appropriate methods for estimating the
17 lifecycle greenhouse gas emissions of each fuel and
18 other energy source. For purposes of such regula-
19 tions, the Administrator shall develop methods to
20 quantify the direct and indirect emissions resulting
21 from biofuel production.

22 “(3) SPECIAL ADJUSTMENT FOR ELECTRICITY
23 AND HYDROGEN.—In making the calculation under
24 this subsection, the Administrator shall adjust the
25 Btus of energy delivered from the use of electricity

1 and hydrogen used as a fuel or source of energy for
2 vehicles and aircraft. Such adjustment shall reflect
3 the greenhouse gas reductions on a per mile basis in
4 order to reflect the inherent energy efficiency of an
5 average battery electric, plug in hybrid electric vehi-
6 cle, or hydrogen fuel cell vehicle.

7 “(4) NAS REPORT.—The Administrator shall,
8 not less than 90 days after the enactment of this
9 Act, enter into a contract with the National Acad-
10 emy of Sciences to assess and recommend methods
11 to calculate the lifecycle greenhouse gas emissions
12 associated with the production and use of fuels and
13 other sources of energy used as a fuel for vehicles
14 and aircraft.

15 “(5) CONSULTATION.—In developing regula-
16 tions under this section, the Administrator shall con-
17 sult with State agencies and other government enti-
18 ties within and outside the United States having
19 programs for control of greenhouse gas emissions
20 from vehicle fuels and shall promulgate such regula-
21 tions after consideration of the report under para-
22 graph (4).

23 **“SEC. 706. COMPLIANCE WITH STANDARD.**

24 “(a) REQUIREMENT TO MEET STANDARD.—The reg-
25 ulations under this title shall provide that each producer,

1 importer or blender of a fuel or other source of energy
2 used for transportation by vehicles or aircraft shall be re-
3 quired to generate or obtain in each calendar year after
4 2009 credits equal to the excess, if any, of paragraph (1)
5 over paragraph (2) multiplied by paragraph (3). No pro-
6 ducer, importer, or blender shall be required to obtain
7 credits if the fuel or other source of energy meets the ag-
8 gregate performance standard under section 703 for the
9 calendar year concerned.

10 “(1) The greenhouse gases (expressed as carbon
11 dioxide or carbon dioxide equivalent) emitted per
12 Btu of fuel or other energy produced, imported, or
13 blended by such producer, importer, or blender in
14 the calendar year concerned.

15 “(2) The aggregate performance standard for
16 all such producers, importer, or blenders established
17 under section 703 for the calendar year concerned.

18 “(3) The total number of Btus used in vehicles
19 and aircraft that is provided by the fuel or other en-
20 ergy produced, imported, or blended by such pro-
21 ducer, importer or blender in the year concerned.

22 “(b) GENERATION, TRADING, AND BANKING OF
23 CREDITS.—

24 “(1) CREDIT GENERATION.—For each calendar
25 year after the calendar year 2014, each producer,

1 importer, or blender of each fuel or other source of
2 energy used for transportation by vehicles or aircraft
3 shall be credited with greenhouse gas emission cred-
4 its equal to the excess, if any, of paragraph (2) of
5 subsection (a) over paragraph (1) of subsection (a)
6 multiplied by paragraph (3) of subsection (a).

7 “(2) TRADING.—The regulations under this
8 section shall allow purchase, sale, and trading of
9 such allowance producers, importers and blenders,
10 and other persons. Credits generated this section
11 may be held and traded by any person. Credits
12 under this section do not constitute a property right,
13 and nothing in any provision of law shall be con-
14 strued to limit the authority of the United States to
15 terminate or limit any such credit.

16 “(3) BANKING.—Credits generated under this
17 section may be used in the year in which they are
18 generated and in the following calendar year.

19 “(c) MONITORING.—The Administrator shall promul-
20 gate rules to ensure that greenhouse gas emissions and
21 the use of credits generated under this section are accu-
22 rately tracked, reported, and verified.

23 “(d) ENFORCEMENT.—

24 “(1) IN GENERAL.—If any fuel or other source
25 of energy used, directly or indirectly, by vehicles ex-

1 ceeds in any calendar year the standard established
2 under this section and the producer, importer or
3 blender thereof has not acquired credits to offset
4 such excess, the producer, importer or blender shall
5 pay a civil penalty in an amount determined under
6 paragraph (2).

7 “(2) AMOUNT OF CIVIL PENALTY.—The amount
8 of the civil penalty under this subsection shall be
9 twice the market price for the credits that would be
10 necessary for such producer, blender, or importer to
11 meet the standard for the fuel or energy source con-
12 cerned. The Administrator shall establish the meth-
13 od of determining such market price.

14 “(3) NO DEMAND REQUIRED.—A civil penalty
15 under this subsection shall be due and payable to
16 the Administrator without demand.

17 “(4) CIVIL ACTION.—The Administrator may
18 bring a civil action in the appropriate United States
19 district court to recover the amount of any civil pen-
20 alty due and payable under this subsection.

21 **“SEC. 707. CERTIFICATION AND LABELING OF LOW-CARBON**
22 **TRANSPORTATION FUELS.**

23 “(a) IDENTIFICATION.—Not later than January 1,
24 2009, the Administrator shall identify and label low-car-
25 bon transportation fuels based on the following criteria.

1 “(1) The fuel is responsible for at least 20 per-
2 cent lower lifecycle greenhouse gas emissions per
3 BTU delivered compared to the 2007 baseline.

4 “(2) The fuel is likely to have fewer adverse im-
5 pacts on wildlife habitat, biodiversity, water quality
6 or air quality over the lifecycle of the fuel, than con-
7 ventional transportation fuels.

8 “(3) The fuel achieves reduction in petroleum
9 content over its lifecycle.

10 In the case of electric energy and hydrogen used, directly
11 or indirectly, as a fuel or source of energy for vehicles,
12 the Administrator shall apply the special adjustment fac-
13 tor referred to in section 705(b)(3) in identifying low-car-
14 bon transportation fuels.

15 “(b) CERTIFICATION.—Not later than January 1,
16 2009, the Administrator shall establish a low-carbon fuel
17 certification process to certify fuels that the Administrator
18 has identified as low-carbon fuels, make that certification
19 information available to consumers. Under regulations
20 promulgated by the Administrator any person manufac-
21 turing, importing, or distributing low-carbon fuels may
22 provide labeling for such fuels in accordance with regula-
23 tions promulgated by the Administrator and promote pub-
24 lic awareness of those fuels.

1 **“SEC. 708. FUEL SAFEGUARDS.**

2 “(a) DEFINITIONS.—As used in this section:

3 “(1) The term ‘Community Fire Safety Zone’
4 means the immediate vicinity of buildings and other
5 areas regularly occupied by people, or of infrastruc-
6 ture, at risk of wildfire.

7 “(2) The term ‘Ecosystem conversion’ means
8 altering the native habitat to such an extent that it
9 no longer supports most characteristic native species
10 and ecological processes.

11 “(3) The term ‘native habitat’ means dynamic
12 groupings of native plant and animal communities
13 that occur together on the landscape or in the water
14 and are tied together by similar ecological processes,
15 underlying environmental features such as geology,
16 or environmental gradients such as elevation, but
17 does not include land that is currently in agricul-
18 tural production.

19 “(4) NATIONAL INTEREST LANDS.—The term
20 ‘National interest lands’ means areas designated as
21 national wildlife refuges, national forests, or national
22 grasslands, areas managed by the National Park
23 Service (including national parks and monuments),
24 and lands managed by the Bureau of Land Manage-
25 ment.

1 “(5) The term ‘Community Fire Safety Zone’
2 means the immediate vicinity of buildings and other
3 areas regularly occupied by people, or of infrastruc-
4 ture, at risk of wildfire.

5 “(6) The term ‘Sensitive Lands’ means old
6 growth forests; roadless areas on national forests,
7 wilderness study areas; native grasslands; intact,
8 rare, threatened or endangered ecosystems; and any
9 area containing significant concentrations of bio-
10 diversity values including endemism, endangered
11 species, high species richness, and refugia.

12 “(b) IN GENERAL.—Under regulations of the Admin-
13 istrator, no transportation fuel sold in interstate com-
14 merce after January 1, 2010 may be derived all or in part
15 from biomass from the following sources:

16 “(1) Lands where the Administrator determines
17 that ecosystem conversion has occurred after the
18 date of the enactment of this Act.

19 “(2) Sensitive Lands.

20 “(3) Land enrolled in the Conservation Reserve
21 Program established under subchapter B of chapter
22 1 of subtitle D of title XII of the Food Security Act
23 of 1985 (16 U.S.C. 3831 et seq.) or the wetlands re-
24 serves program established under subchapter C of
25 chapter 1 of subtitle D of title XII of the Food Se-

1 security Act of 1985 (16 U.S.C. 3837 et seq.), unless
2 the biomass is produced in a manner consistent with
3 all applicable guidelines and terms, and conditions
4 under the program.

5 “(4) National interest lands with the exception
6 of either of the following:

7 “(A) Harvest residue, mill waste, or pre-
8 commercial thinnings, from lands assigned to
9 timber production.

10 “(B) Biomass obtained from a Community
11 Fire Safety Zone.

12 “(5) Recyclable postconsumer waste paper,
13 painted, treated, or pressurized wood, wood contami-
14 nated with plastic or metals.

15 “(6) Municipal solid waste (as defined in the
16 Solid Waste Disposal Act).

17 “(7) Materials produced, harvested, acquired,
18 transported, or processed pursuant to an exemption
19 from otherwise applicable environmental laws or
20 rules.

21 **“SEC. 709. AIR QUALITY IMPACTS.**

22 “(a) IN GENERAL.—The Administrator shall ensure,
23 under regulation, that no transportation fuel sold or intro-
24 duced in interstate commerce after January 1, 2010, shall
25 result in—

1 “(1) average per gallon vehicle emissions (meas-
2 ured on a mass basis) of air pollutants in excess of
3 the quantity of those emissions attributable to gaso-
4 line sold or introduced into commerce in the United
5 States during calendar year 2007; or

6 “(2) a violation of any motor vehicle emission
7 or fuel content limitation under any other provision
8 of this Act.

9 **“SEC. 710. RESEARCH AND DEVELOPMENT FUNDING.**

10 “‘There is authorized to be appropriated to the Sec-
11 retary of Energy such sums as may be necessary carry
12 out a cooperative program of research and development
13 relating to lower carbon alternatives for aircraft jet fuel
14 and fuel for other vehicles. The program shall provide for
15 matching Federal grants to private entities carrying out
16 such research and development.

17 **“SEC. 711. STATE LAWS.**

18 “‘Nothing in this title shall be interpreted to preempt
19 or limit State actions to address climate change.’”.

20 **SEC. 363. LOAN GUARANTEE PROGRAM TO DEMONSTRATE**
21 **LOW CARBON RENEWABLE FUEL.**

22 (a) IN GENERAL.—Section 1703 of the Energy Policy
23 Act of 2005 is amended by adding the following new sub-
24 section after subsection (b) and redesignating subsections
25 (c) through (e) as (d) through (f):

1 “(c) LOW CARBON RENEWABLE FUEL PROJECTS.—

2 “(1) DEFINITIONS.—In this subsection:

3 “(A) LOW CARBON RENEWABLE FUEL.—

4 The term ‘low carbon renewable fuel’ means
5 transportation fuel that is not an ether and
6 that is produced from renewable biomass; or is
7 natural gas produced from a biogas source, in-
8 cluding a landfill, sewage waste treatment
9 plant, feedlot, or other place where decaying or-
10 ganic material is found; is used to replace or re-
11 duce the quantity of fossil fuel present in a fuel
12 mixture used for transportation; and has a
13 lifecycle greenhouse gas emissions, per unit of
14 energy, that is at least 60 percent less than the
15 baseline defined in section 704 of the Clean Air
16 Act.

17 “(B) TRANSPORTATION FUEL.—The term

18 ‘transportation fuel’ means fuel used to power
19 motor vehicles, nonroad engines, or aircraft.

20 “(C) RENEWABLE BIOMASS.—The term

21 ‘renewable biomass’ is any organic matter that
22 is available on a renewable or recurring basis,
23 including dedicated energy crops and trees, ag-
24 ricultural food and feed crop residues, aquatic
25 plants, animal wastes, wood and wood residues,

1 and other vegetative waste materials. Biomass
2 sources that are covered under this definition
3 are subject to the limitations set forth section
4 708 of the Clean Air Act.

5 “(2) PROJECTS.—The Secretary may make
6 loan guarantees under this section to carry out com-
7 mercial demonstration projects to demonstrate the
8 feasibility and viability of producing low carbon re-
9 newable fuel until the technology becomes commer-
10 cially viable and feasible.

11 “(3) DESIGN CAPACITY.—Each project for
12 which a loan guarantee is provided under this sub-
13 section shall have a design capacity to produce at
14 least 30,000,000 gallons of renewable fuel each year.

15 “(4) APPLICANT ASSURANCES.—An applicant
16 for a loan guarantee under this subsection shall pro-
17 vide assurances, satisfactory to the Secretary, that—

18 “(A) the project design has been validated
19 through the operation of a continuous process
20 facility with a cumulative output of at least
21 50,000 gallons of renewable fuel;

22 “(B) the project has been subject to a full
23 technical review;

24 “(C) the project is covered by adequate
25 project performance guarantees;

1 “(D) the project, with the loan guarantee,
2 is economically viable; and

3 “(E) there is a reasonable assurance of re-
4 payment of the guaranteed loan.”.

5 (b) FUNDING.—Section 1704(a) of such Act is
6 amended by adding the following at the end thereof: “Not
7 less than 30 percent of the funds made available under
8 this section shall be used for purposes of loan guarantees
9 under section 1703(c) for low carbon renewable fuel. The
10 aggregate amount of guarantees under section 1703(c) at
11 any one time shall not exceed \$20,000,000,000”.

12 **SEC. 364. REQUIRE AUTOMAKERS TO REDUCE TAILPIPE**
13 **GHG EMISSIONS.**

14 Title II of the Clean Air Act (42 U.S.C. 7581 et seq.)
15 is amended by adding at the following:

16 **“PART D—GREENHOUSE GAS EMISSION**
17 **REDUCTIONS**

18 **“SEC. 251. DEFINITIONS.**

19 “In this part:

20 “(1) GREENHOUSE GAS.—The term ‘greenhouse
21 gas’ means——

22 “(A) carbon dioxide;

23 “(B) methane;

24 “(C) nitrous oxide;

25 “(D) hydrofluorocarbons;

1 “(E) perfluorocarbons; and

2 “(F) sulfur hexafluoride.

3 “(2) MOTOR VEHICLE.—The term ‘motor vehi-
4 cle’ has the meaning given to such term in section
5 216.

6 **“SEC. 252. GREENHOUSE GAS EMISSION REDUCTIONS**
7 **FROM AUTOMOBILES.**

8 “(a) VEHICLE EMISSIONS BASELINE.—Not later
9 than January 1, 2009, based on the aggregate quantity
10 and variety of new automobiles sold in the United States
11 during model year 2002 and the average greenhouse gas
12 emissions from those new automobiles, the Administrator
13 shall determine the average quantity of greenhouse gas
14 emissions per vehicle mile (referred to in this section as
15 the ‘new vehicle emissions baseline’).

16 “(b) SUBSEQUENT AVERAGE EMISSIONS FROM NEW
17 AUTOMOBILES.—Not later than June 1, 2015, and annu-
18 ally thereafter, based on the aggregate quantity and vari-
19 ety of new automobiles sold in the United States during
20 the preceding model year and the average greenhouse gas
21 emissions from those new automobiles during the pre-
22 ceding model year, the Administrator shall determine the
23 average quantity of greenhouse gas emissions per vehicle
24 mile for the model year.

1 “(c) REQUIRED REDUCTIONS IN GREENHOUSE GAS
2 EMISSIONS FROM AUTOMOBILES.—

3 “(1) IN GENERAL.—The Administrator shall,
4 by regulation, require each manufacturer of auto-
5 mobiles for sale in the United States to reduce the
6 average quantity of greenhouse gas emissions per ve-
7 hicle mile of the aggregate quantity and variety of
8 automobiles manufactured by the manufacturer to a
9 level that is——

10 “(A) for automobiles manufactured in
11 model year 2016, 30 percent less than the new
12 vehicle emissions baseline; and

13 “(B) not later than every fifth model year
14 thereafter, such percent as shall be specified by
15 the Administrator that is less than the average
16 quantity of greenhouse gas emissions per vehi-
17 cle mile required for the model year preceding
18 that fifth model year, as determined by the Ad-
19 ministrator under subsection (b).”.

20 **SEC. 365. ELIMINATION OF 2-FLEET RULE.**

21 (a) IN GENERAL.—Section 32904 of title 49, United
22 States Code, is amended—

23 (1) by striking subsection (b); and

24 (2) by redesignating subsections (c) through (e)
25 as subsections (b) through (d), respectively.

1 (b) EFFECTIVE DATE.—The amendments made by
2 subsection (a) shall apply to model year 2010 and subse-
3 quent model years.

4 **TITLE IV—ELECTRICITY SECTOR**
5 **Subtitle A—Tax Incentives**

6 **SEC. 401. EXTENSION THROUGH 2018 FOR PLACING QUALI-**
7 **FIED FACILITIES IN SERVICE FOR PRO-**
8 **DUCING RENEWABLE ELECTRIC ENERGY.**

9 (a) IN GENERAL.—Subsection (d) of section 45 of the
10 Internal Revenue Code of 1986 (relating to qualified facili-
11 ties) is amended by striking “January 1, 2009” each place
12 it appears and inserting “January 1, 2019”.

13 (b) EFFECTIVE DATE.—The amendments made by
14 this section shall apply to property originally placed in
15 service on or after January 1, 2009.

16 **SEC. 402. EXTENSION OF ENERGY CREDIT.**

17 (a) IN GENERAL.—Section 48 of such Code (relating
18 to energy credit) is amended—

19 (1) by striking “January 1, 2009” in both
20 places it appears and inserting “January 1, 1019”,
21 and

22 (2) by striking “December 31, 2008” in both
23 places it appears and inserting “December 31,
24 2018”.

1 **SEC. 403. EXPANSION AND MODIFICATION OF RENEWABLE**
2 **RESOURCE CREDIT.**

3 (a) **ADDITIONAL QUALIFIED ENERGY RESOURCES.—**

4 (1) **IN GENERAL.—**Section 45(c)(1) of such
5 Code (relating to resources) is amended by striking
6 “and” at the end of subparagraph (F), by striking
7 the period at the end of subparagraph (G), and by
8 adding at the end the following new subparagraphs:

9 “(I) incremental geothermal production,
10 and

11 “(J) marine and hydrokinetic renewable
12 energy.”.

13 (2) **DEFINITION OF RESOURCES.—**Section 45(c)
14 of such Code is amended by adding at the end the
15 following new paragraphs:

16 “(10) **INCREMENTAL GEOTHERMAL PRODUC-**
17 **TION.—**

18 “(A) **IN GENERAL.—**In the case of an in-
19 cremental geothermal facility described in sub-
20 section (d)(9), the term ‘incremental geothermal
21 production’ means for any taxable year the ex-
22 cess of—

23 “(i) the total kilowatt hours of elec-
24 tricity produced from such facility for the
25 taxable year, over

1 “(ii) the average annual kilowatt
2 hours produced at such facility for 5 of the
3 previous 7 calendar years before the date
4 of the enactment of this paragraph after
5 eliminating the highest and the lowest kilo-
6 watt hour production years in such 7-year
7 period.

8 “(B) SPECIAL RULE.—A facility described
9 in subsection (d)(9) which was placed in service
10 at least 7 years before the date of the enact-
11 ment of this paragraph shall commencing with
12 the year in which such date of enactment oc-
13 curs, reduce the amount calculated under sub-
14 paragraph (A)(ii) each year, on a cumulative
15 basis, by the average percentage decrease in the
16 annual kilowatt hour production for the 7-year
17 period described in subparagraph (A)(ii) with
18 such cumulative sum not to exceed 30 percent.

19 “(11) MARINE AND HYDROKINETIC RENEW-
20 ABLE ENERGY.—

21 “(A) IN GENERAL.—The term ‘marine and
22 hydrokinetic renewable energy’ means energy
23 derived from—

24 “(i) waves, tides, or currents in
25 oceans, estuaries, or tidal areas,

1 “(ii) free flowing water in rivers,
2 lakes, or streams,

3 “(iii) free flowing water in man-made
4 channels, including projects that utilize
5 nonmechanical structures to accelerate the
6 flow of water for electric power production
7 purposes, or

8 “(iv) differentials in ocean tempera-
9 ture.

10 “(B) EXCEPTIONS.—Such term shall not
11 include any energy which is—

12 “(i) described in subparagraphs (A)
13 through (I) of paragraph (1), or

14 “(ii) derived from any source that uti-
15 lizes a dam, diversionary structure, or im-
16 poundment for electric power production
17 purposes, except as provided in subpara-
18 graph (A)(iii).”.

19 (3) DEFINITION OF FACILITIES.—Section 45(d)
20 of such Code (relating to qualified facilities) is
21 amended by adding at the end the following new
22 paragraphs:

23 “(11) INCREMENTAL GEOTHERMAL FACILI-
24 TIES.—In the case of a facility using incremental
25 geothermal to produce electricity, the term ‘qualified

1 facility’ means any facility owned by the taxpayer
2 which is originally placed in service before the date
3 of the enactment of this paragraph, but only to the
4 extent of its incremental geothermal production. In
5 the case of a qualified facility described in the pre-
6 ceding sentence, the 10-year period referred to in
7 subsection (a) shall be treated as beginning not ear-
8 lier than such date of enactment. Such term shall
9 not include any property described in section
10 48(a)(3) the basis of which is taken into account by
11 the taxpayer for purposes of determining the energy
12 credit under section 48.

13 “(12) MARINE AND HYDROKINETIC RENEW-
14 ABLE ENERGY.—In the case of a facility producing
15 electricity from marine and hydrokinetic renewable
16 energy, the term ‘qualified facility’ means any facil-
17 ity owned by the taxpayer which is originally placed
18 in service after the date of the enactment of this
19 paragraph and before January 1, 2019.”.

20 (b) FULL CREDIT RATE FOR QUALIFIED HYDRO-
21 POWER FACILITY.—Subparagraph (A) of section 45(b)(4)
22 of such Code is amended by striking “(7), or (9)” and
23 inserting “or (7)”.

24 (c) EFFECTIVE DATE.—The amendments made by
25 this section shall apply to electricity produced and sold

1 in taxable years beginning after the date of the enactment
2 of this Act.

3 **SEC. 404. ENERGY CREDIT FOR SMALL WIND, SMALL GEO-**
4 **THERMAL, SMALL BIOMASS, AND SMALL KI-**
5 **NETIC HYDROPOWER.**

6 (a) IN GENERAL.—

7 (1) ENERGY PROPERTIES.—Subparagraph (A)
8 of section 48(a)(3) of such Code, as amended by this
9 title, is amended by striking “or” at the end of
10 clause (iii), by inserting “or” at the end of clause
11 (iv), and by adding at the end the following new
12 clause:

13 “(v) equipment which uses wind, a
14 geothermal deposit, biomass, or marine
15 and hydrokinetic energy to generate elec-
16 tricity, if such equipment has a nameplate
17 capacity of 2 megawatts or less and the
18 principal consumer of such electricity is
19 the taxpayer,”.

20 (2) ENERGY PERCENTAGE.—Subclause (II) of
21 section 48(a)(2)(A)(i) of such Code is amended by
22 striking “paragraph (3)(A)(i)” and inserting “clause
23 (i) or (vi) of paragraph (3)(A)”.

24 (3) GEOTHERMAL; BIOMASS; MARINE AND
25 HYDROKINETIC ENERGY DEFINED.—Section 48 of

1 such Code is amended by adding at the end the fol-
2 lowing new subsection:

3 “(d) GEOTHERMAL; BIOMASS; MARINE AND
4 HYDROKINETIC ENERGY.—For purposes of this section—

5 “(1) GEOTHERMAL.—The term ‘geothermal de-
6 posit’ has the meaning given such term by section
7 613(e)(2).

8 “(2) BIOMASS.—The term ‘biomass’ has the
9 meaning given such term by section 45K(c)(3).

10 “(3) MARINE AND HYDROKINETIC ENERGY.—
11 The term ‘marine and hydrokinetic energy’ has the
12 meaning given such term by section 45(c)(11).”.

13 (b) EFFECTIVE DATE.—The amendments made by
14 this section shall apply to property placed in service after
15 the date of the enactment of this Act, in taxable years
16 ending after such date.

17 **SEC. 405. MODIFICATIONS FOR CLEAN RENEWABLE EN-**
18 **ERGY BONDS.**

19 (a) IN GENERAL.—

20 (1) INCREASE IN LIMITATION AND CHANGE TO
21 ANNUAL LIMIT.—Paragraph (1) of section 54(f) of
22 such Code (relating to limitation on amount of
23 bonds designated) is amended by striking “of
24 \$1,200,000,000” in subsection (f)(1) and inserting
25 “for each calendar year of \$2,000,000,000”—

1 (2) EXTENSION OF TERMINATION.—Subsection
2 (m) of section 54 (relating to termination) is amend-
3 ed by striking “2008” subsection (m) and inserting
4 “2018”.

5 (3) MODIFICATION IN ALLOCATION OF NA-
6 TIONAL ANNUAL BOND LIMITATION.—Paragraph (2)
7 of section 54 of such Code is amended—

8 (A) by striking “may not allocate” and all
9 that follows through the period and inserting
10 “shall allocate—” , and

11 (B) by adding the end the following new
12 subparagraphs:

13 “(A) \$1,187,500,000 of the annual na-
14 tional clean renewable energy bond limitation to
15 finance qualified projects of qualified borrowers
16 which are public power entities,

17 “(B) \$750,000,000 of such limitation to fi-
18 nance qualified projects of qualified borrowers
19 which are cooperative electric companies, and

20 “(C) \$62,500,000 of such limitation to fi-
21 nance qualified projects of qualified borrowers
22 which are governmental bodies.”.

23 (4) PUBLIC POWER ENTITY DEFINED.—Sub-
24 section (j) of section 54 of such Code (defining Co-
25 operative electric company; qualified energy tax

1 credit bond lender; governmental body; qualified bor-
2 rower) is amended—

3 (A) by redesignating paragraphs (4) and
4 (5) as paragraphs (5) and (6), respectively, and
5 by inserting after paragraph (3) the following
6 new paragraph:

7 “(4) PUBLIC POWER ENTITY.—The term ‘public
8 power entity’ means a State utility with a service ob-
9 ligation, as such terms are defined in section 217 of
10 the Federal Power Act (as in effect on the date of
11 enactment of this paragraph).”.

12 (B) in paragraph (5), as so redesignated,
13 by striking “or” at the end of subparagraph
14 (B), by striking the period at the end of sub-
15 paragraph (C) and inserting “, or”, and by
16 adding at the end the following new subpara-
17 graph:

18 “(D) a public power entity.”, and

19 (C) in paragraph (6), as so redesignated,
20 by striking “or” at the end of subparagraph
21 (A), by striking the period at the end of sub-
22 paragraph (B) and inserting “, or”, and by
23 adding at the end the following new subpara-
24 graph:

25 “(C) a public power entity.”.

1 (b) EFFECTIVE DATE.—The amendments made by
2 this section shall apply to bonds issued after December
3 31, 2007.

4 **SEC. 406. EXPANSION AND INCREASE FOR RESIDENTIAL**
5 **ENERGY EFFICIENT PROPERTY CREDIT.**

6 (a) INCREASE IN CREDIT LIMITATION FOR RESIDEN-
7 TIAL SOLAR PROPERTY.—Paragraph (1) of section
8 25D(b) of the Internal Revenue Code (relating to limita-
9 tions) is amended—

10 (1) by striking “\$2,000” in subparagraph (B)
11 and inserting “\$4,000”, and

12 (2) by striking subparagraph (A) and redesignig-
13 nating subparagraphs (B) and (C) and subpara-
14 graphs (A) and (B), respectively.

15 (b) INCLUSION OF WIND.—

16 (1) IN GENERAL.—Subsection (a) of section
17 25D of such Code (relating to allowance of credit)
18 is amended by striking “and” at the end of para-
19 graph (2), by striking the period at the end of para-
20 graph (3), and by adding at the end the following
21 new paragraph:

22 “(4) 30 percent of the qualified wind property
23 expenditures made by the taxpayer during such
24 year,”.

1 (2) DEFINITION.—Subsection (d) of section
 2 25D of such Code (relating to definitions) is amend-
 3 ed by adding at the end the following new para-
 4 graphs:

5 “(4) QUALIFIED WIND PROPERTY EXPENDI-
 6 TURES.—The term ‘qualified wind property expendi-
 7 tures’ means an expenditure for property which uses
 8 wind to generate electricity for use in a dwelling unit
 9 located in the United States and used as a principal
 10 residence (within the meaning of section 121) by the
 11 taxpayer.”.

12 (c) EFFECTIVE DATE.—The amendments made by
 13 this section shall apply to property placed in service in
 14 taxable years beginning after December 31, 2007.

15 **SEC. 407. EXPANSION OF RENEWABLE RESOURCE CREDIT**
 16 **TO INCLUDE THERMAL ENERGY.**

17 (a) IN GENERAL.—

18 (1) PRODUCTION OF THERMAL ENERGY.—Para-
 19 graph (2) of section 45(a) of the Internal Revenue
 20 Code of 1986 is amended by inserting after “elec-
 21 tricity” the following: “or each 3,413 British Ther-
 22 mal Units of thermal energy (or fraction thereof)”.

23 (2) RECYCLED ENERGY AS QUALIFIED ENERGY
 24 RESOURCE.—Paragraph (1) of section 45(c) of such
 25 Code, as amended by this Act, is amended by strik-

1 ing “and” at the end of subparagraph (I), by strik-
2 ing the period at the end of subparagraph (J) and
3 inserting “and”, and by adding at the end the fol-
4 lowing new subparagraph:

5 “(K) recycled energy.”.

6 (3) DEFINITION OF RESOURCE.—Subsection (c)
7 of section 45 of such Code is amended by adding at
8 the end the following new paragraph:

9 “(12) RECYCLED ENERGY.—

10 “(A) IN GENERAL.—The term ‘recycled en-
11 ergy’ means electricity or thermal energy de-
12 rived from combined heat and power, industrial
13 waste heat, or municipal waste heat.

14 “(B) DEFINITIONS.—For purposes of this
15 paragraph—

16 “(i) COMBINED HEAT AND POWER.—
17 The term ‘combined heat and power’
18 means a system which uses the same en-
19 ergy source, which may be non-renewable
20 fuel, for the simultaneous or sequential
21 generation of electrical power, mechanical
22 shaft power, or both, in combination with
23 the generation of steam or other forms of
24 useful thermal energy (including heating
25 and cooling applications).

1 “(ii) INDUSTRIAL WASTE HEAT.—The
2 term ‘industrial waste heat’ means heat
3 which—

4 “(I) is a byproduct of a manufac-
5 turing process, and

6 “(II) is normally not recovered or
7 used.

8 “(iii) MUNICIPAL WASTE HEAT.—The
9 term ‘municipal waste heat’ means heat
10 which—

11 “(I) is a byproduct of a munic-
12 ipal sewage treatment or other munic-
13 ipal process, and

14 “(II) is normally not recovered or
15 used.”.

16 (4) DEFINITION OF FACILITY.—Subsection (d)
17 of section 45 of such Code is amended by adding at
18 the end the following:

19 “(13) RECYCLED ENERGY.—

20 “(A) IN GENERAL.—In the case of a facil-
21 ity using recycled energy to produce electricity
22 or thermal energy, the term ‘qualified facility’
23 means a facility which—

1 “(i) is a combined heat and power fa-
2 cility, an industrial waste heat facility, or
3 a municipal waste heat facility, and

4 “(ii) which is placed in service after
5 the date of the enactment of this para-
6 graph and before January 1, 2014.

7 “(B) COMBINED HEAT AND POWER.—For
8 purposes of this paragraph, the term ‘combined
9 heat and power facility’ means any facility—

10 “(i) owned by the taxpayer,

11 “(ii) which produces—

12 “(I) at least 20 percent of its
13 total useful energy in the form of
14 thermal energy, and

15 “(II) at least 20 percent of its
16 total useful energy in the form of elec-
17 trical or mechanical power (or a com-
18 bination thereof), and

19 “(iii) the energy efficiency percentage
20 of which exceeds 60 percent.

21 “(C) INDUSTRIAL WASTE HEAT OR MUNIC-
22 IPAL WASTE HEAT.—For purposes of this para-
23 graph, the term ‘industrial waste heat facility’
24 means any facility which uses industrial waste
25 heat to produce electricity or thermal energy.

1 “(D) MUNICIPAL WASTE HEAT FACIL-
2 ITY.—For purposes of this paragraph, the term
3 municipal waste heat facility means any facility
4 which uses municipal waste heat to produce
5 electricity or thermal energy.

6 “(E) ENERGY EFFICIENCY PERCENT-
7 AGE.—For purposes of subparagraph (B), the
8 term ‘energy efficiency percentage’, with respect
9 to a facility, means the percentage determined
10 by dividing—

11 “(i) the total useful electrical, ther-
12 mal, and mechanical power, calculated in
13 British Thermal Units, produced by the
14 system at normal operating rates, by

15 “(ii) the lower heating value, cal-
16 culated in British Thermal Units, of the
17 primary fuel source for the system.”.

18 (5) REDUCED CREDIT.—Subparagraph (A) of
19 section 45(b)(4) of such Code (relating to credit rate
20 and period for electricity produced and sold from
21 certain facilities) is amended—

22 (A) by striking “or (7)” inserting “(7), or
23 (13)”, and

24 (B) by inserting “or thermal energy sold in
25 any calendar year after 2007 at a facility de-

1 scribed in subsection (d)(13),” after “sub-
2 section (d),”.

3 (6) CONFORMING AMENDMENTS.—

4 (A) Subsection (a) of section 45 of such
5 Code is amended by inserting “and thermal en-
6 ergy” after “renewable electricity”.

7 (B) Paragraph (2) of section 45(e) of such
8 Code is amended by inserting “or thermal en-
9 ergy” after “electricity”.

10 (C) Subsection (d) of section 45 of such
11 Code is amended by inserting “or thermal en-
12 ergy” after “electricity” in each place it ap-
13 pears.

14 (D) Subsection (e) of section 45 of such
15 Code is amended by inserting “or thermal en-
16 ergy” after “electricity” each place it appears
17 in paragraphs (1) and (4).

18 (E) Paragraph (8) of section 38(b) of such
19 Code is amended by inserting “or thermal en-
20 ergy” after “electricity”.

21 (F) The heading of section 45 of such
22 Code is amended by inserting “**OR THERMAL**
23 **ENERGY**” after “**ELECTRICITY**”.

24 (G) The table of sections for subpart D of
25 part IV of subchapter A of chapter 1 is amend-

1 ed by striking the item relating to section 45
2 and inserting the following new item:

“Sec. 45. Electricity or thermal energy produced from certain renewable re-
sources, etc.”.

3 (b) **EFFECTIVE DATE.**—The amendments made by
4 this section shall apply to electricity or thermal energy
5 produced and sold after the date of the enactment of his
6 Act.

7 **Subtitle B—Promoting Energy**
8 **Efficient Investments**

9 **SEC. 411. RATE MODIFICATIONS PROMOTING ENERGY EFFI-**
10 **CIENCY INVESTMENTS.**

11 (a) **ELECTRIC UTILITIES.**—Section 111(d) of the
12 Public Utility Regulatory Policies Act of 1978 is amended
13 by inserting at the end thereof:

14 “(16) **RATE DESIGN MODIFICATIONS TO PRO-**
15 **MOTE ENERGY EFFICIENCY INVESTMENTS.**—

16 “(A) **IN GENERAL.**—The rates allowed to
17 be charged by any electric utility shall—

18 “(i) align utility incentives with the
19 delivery of cost-effective energy efficiency;
20 and

21 “(ii) promote energy efficiency invest-
22 ments.

23 “(B) **POLICY OPTIONS.**—In complying with
24 subparagraph (A), each State regulatory au-

1 thority and each nonregulated utility shall con-
2 sider—

3 “(i) removing the throughput incen-
4 tive and other regulatory and management
5 disincentives 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 adoption
10 of energy efficiency as 1 of the goals of re-
11 tail rate design, recognizing that energy ef-
12 ficiency must be balanced with other objec-
13 tives;

14 “(iv) adopting rate designs that en-
15 courage energy efficiency for each cus-
16 tomer class; and

17 “(v) allowing timely recovery of en-
18 ergy efficiency-related costs.”.

19 (b) NATURAL GAS UTILITY.—Section 303 of the
20 Public Utility Regulatory Policies Act of 1978 (16 U.S.C.
21 3203(b)) is amended by adding the following at the end
22 of subsection (b):

23 “(5) ENERGY EFFICIENCY.—Each natural gas
24 utility shall—

1 “(A) integrate energy efficiency resources
2 into the plans and planning processes of the
3 natural gas utility; and

4 “(B) adopt policies that establish energy
5 efficiency as a priority resource in the plans
6 and planning processes of the natural gas util-
7 ity.

8 “(6) RATE DESIGN MODIFICATIONS TO PRO-
9 MOTE ENERGY EFFICIENCY.—The rates allowed to
10 be charged by a natural gas utility shall align utility
11 incentives with the deployment of cost-effective en-
12 ergy efficiency. In complying with the standard
13 under this paragraph, each State regulatory author-
14 ity and each nonregulated utility shall consider—

15 “(A) separating fixed-cost revenue recovery
16 from the volume of transportation or sales serv-
17 ice provided to the customer;

18 “(B) providing to utilities incentives for
19 the successful management of energy efficiency
20 programs, such as allowing utilities to retain a
21 portion of the cost-reducing benefits accruing
22 from the programs;

23 “(C) promoting the impact on adoption of
24 energy efficiency as 1 of the goals of retail rate

1 design, recognizing that energy efficiency must
2 be balanced with other objectives; and

3 “(D) adopting rate designs that encourage
4 energy efficiency for each customer class.”.

5 (c) COMPLIANCE.—

6 (1) TIME LIMITATIONS.—Section 112(b) of the
7 Public Utility Regulatory Policies Act of 1978 (16
8 U.S.C. 2622(b)) is amended by adding at the end
9 the following:

10 “(6)(A) Not later than 1 year after the enact-
11 ment of this paragraph, each State regulatory au-
12 thority (with respect to each electric utility for which
13 it has ratemaking authority) and each nonregulated
14 utility shall commence the consideration referred to
15 in section 111, or set a hearing date for consider-
16 ation, with respect to the standard established by
17 paragraph (16) of section 111(d).

18 “(B) Not later than two years after the date of
19 the enactment of the this paragraph, each State reg-
20 ulatory authority (with respect to each electric utility
21 for which it has ratemaking authority), and each
22 nonregulated electric utility, shall complete the con-
23 sideration, and shall make the determination, re-
24 ferred to in section 111 with respect to each stand-
25 ard established by paragraph (1) of section 111(d)”.

1 (2) FAILURE TO COMPLY.—Section 112(d) of
2 the Public Utility Regulatory Policies Act of 1978
3 (16 U.S.C. 2622(e)) is amended by adding at the
4 end the following: “In the case of the standard es-
5 tablished by paragraph (15), the reference contained
6 in this subsection to the date of enactment of this
7 Act shall be deemed to be a reference to the date of
8 enactment of paragraph (16).”.

9 (3) PRIOR STATE ACTION.—

10 (A) IN GENERAL.—Section 112 of the
11 Public Utility Regulatory Policies Act of 1978
12 (16 U.S.C. 2622) is amended by adding at the
13 end the following:

14 “(f) PRIOR STATE ACTIONS.—Subsections (b) and
15 (c) of this section shall not apply to the standard estab-
16 lished by paragraph (15) of section 111(d) in the case of
17 any electric utility in a State if, before the enactment of
18 this subsection—

19 “(1) the State has implemented for such utility
20 the standard concerned (or a comparable standard);

21 “(2) the State regulatory authority for such
22 State or relevant nonregulated electric utility has
23 conducted a proceeding to consider implementation
24 of the standard concerned (or a comparable stand-
25 ard) for such utility; or

1 “(3) the State legislature has voted on the im-
2 plementation of such standard (or a comparable
3 standard) for such utility.”.

4 (B) CROSS REFERENCE.—Section 124 of
5 such Act (16 U.S.C. 2634) is amended by add-
6 ing the following at the end thereof: “In the
7 case of each standard established by paragraph
8 (16) of section 111(d), the reference contained
9 in this subsection to the date of enactment of
10 the Act shall be deemed to be a reference to the
11 date of enactment of paragraph (16).”.

12 (d) COMPLIANCE DATE.—Section 303 of the Public
13 Utility Regulatory Policies Act of 1978 is amended by
14 striking “Not later than 2 years after the date of the en-
15 actment of this Act (or after the enactment of the Energy
16 Policy Act of 1992 in the case of standards under para-
17 graphs (3) and (4) of subsection (b))” and inserting “Not
18 later than 2 years after the date of the enactment of the
19 standard concerned”.

20 (e) PRIOR STATE ACTIONS.—Section 310 of the Pub-
21 lic Utility Regulatory Policies Act of 1978 is amended by
22 striking “of this Act” in each place it appears and insert-
23 ing “the standard under section 303(b)”.

1 **SEC. 412. FEED-IN TARIFF SYSTEM STUDY.**

2 (a) STUDY AND REPORT.—Not later than 1 year
3 after the date of enactment of this Act, the Lawrence
4 Berkeley National Laboratory shall transmit to Congress
5 a report on the results of a study on feed-in tariff systems,
6 which shall include recommendations for an appropriate
7 pricing structure to best ensure that investors in renew-
8 able energy technologies can receive a reasonable return
9 on their investment.

10 (b) DEFINITION.—In this section:

11 (1) The term “feed-in tariff system” means a
12 system under which—

13 (A) renewable energy technologies have
14 priority access to the electricity market; and

15 (B) for a fixed period of time, electric utili-
16 ties are required to pay predetermined amounts
17 for electric power sold to the utility by pro-
18 ducers using renewable energy sources.

19 (2) The term “renewable energy” has the
20 meaning given to such term in section 203 of the
21 Energy Policy Act of 2005.

22 (c) AUTHORIZATION OF APPROPRIATIONS.—There
23 are authorized to be appropriated such sums as are nec-
24 essary to carry out this report.

1 **Subtitle C—National Renewable**
2 **Energy Zones**

3 **SEC. 421. NEW ELECTRICITY TRANSMISSION LINES DE-**
4 **SIGNED PRIMARILY TO CARRY ELECTRICITY**
5 **FROM RENEWABLE ENERGY RESOURCES.**

6 The Secretary of the Treasury, in consultation with
7 the Secretary of Energy, the Secretary of Commerce, and
8 the Administrator of the Environmental Protection Agen-
9 cy, shall establish an appropriate investment tax credit for
10 the construction of new electricity transmission lines de-
11 signed primarily to carry electricity from renewable energy
12 resources. Such credit shall be sufficient to encourage the
13 development of promising rural renewable energy domestic
14 resources that otherwise would likely not be developed.

15 **SEC. 422. SHORT TITLE.**

16 This title may be cited as the “Rural Clean Energy
17 Superhighways Act”.

18 **SEC. 423. FINDINGS.**

19 The Congress finds that—

20 (1) electricity produced from renewable re-
21 sources helps to reduce greenhouse gas emissions,
22 and limits emissions of other pollutants regulated
23 pursuant to the Clean Air Act, enhances national en-
24 ergy security, and provides substantial economic
25 benefits;

1 (2) the potential exists for a far greater per-
2 centage of electric production in the United States
3 to be generated through the use of renewable re-
4 sources than current levels;

5 (3) many of the best potential renewable energy
6 resources are located in rural areas far from popu-
7 lation centers;

8 (4) the lack of adequate electric transmission
9 capacity is one of the primary obstacles to the devel-
10 opment of electric generation facilities fueled by re-
11 newable energy resources;

12 (5) the economies of many rural areas would
13 substantially benefit from the increased development
14 of electric generation facilities fueled by renewable
15 energy resources; and

16 (6) it is in the national interest for the Federal
17 government to implement policies that will enhance
18 the amount of electric transmission capacity avail-
19 able to take full advantage of renewable energy re-
20 sources to generate electricity.

21 **SEC. 424. NATIONAL RENEWABLE ENERGY ZONES.**

22 (a) IN GENERAL.—Title II of the Federal Power Act
23 (16 U.S.C. 824 et seq.) is amended—

24 (1) by inserting before the section heading of
25 section 201 (16 U.S.C. 824 et seq.) the following:

“SUBTITLE A—REGULATION OF ELECTRIC UTILITY COMPANIES”; AND

1 (2) by adding at the end the following:

2 **“Subtitle B—National Renewable**
3 **Energy Zones**

4 **“SEC. 231. DEFINITIONS.**

5 “In this subtitle:

6 “(1) The term ‘Commission’ means the Federal
7 Energy Regulatory Commission.

8 “(2) The term ‘electricity from renewable
9 energy’ means electric energy generated from__

10 “(A) solar, wind, geothermal or ocean en-
11 ergy;

12 “(B) biomass (as defined in section 203(a)
13 of the Energy Policy Act of 2005);

14 “(C) landfill gas; or

15 “(D) incremental hydropower.

16 “(3) The term ‘Federal Power Marketing Ad-
17 ministration’ means any agency or instrumentality
18 of the United States (other than the Tennessee Val-
19 ley Authority) which sells electric energy.

20 “(4) The term ‘Federal Transmitting Utility’
21 means a Federal Power Marketing Administration
22 that owns or operates electric transmission facilities
23 or the Tennessee Valley Authority.

24 “(5) The term ‘geothermal energy’ means en-
25 ergy derived from a geothermal deposit (within the

1 meaning of section 613(e)(2) of the Internal Rev-
2 enue Code of 1986).

3 “(6) The term ‘renewable energy trunkline’
4 shall mean a radial transmission line at a voltage of
5 115 kV or above, including all associated trans-
6 mission facilities and equipment within a National
7 Renewable Energy Zone that is used to deliver elec-
8 tricity from renewable energy to the point where the
9 trunkline connects to a high-voltage electric trans-
10 mission facility, including any modifications, addi-
11 tions or upgrades to such facilities and equipment.
12 A renewable energy trunkline shall not include net-
13 work upgrades.

14 “(7) The term ‘high-voltage electric trans-
15 mission facility’ means those electric facilities with a
16 capability in excess of 200 kilovolts.

17 “(8) The term ‘network upgrades’ shall mean
18 the additions or modifications to the transmission
19 provider’s high-voltage transmission system other
20 than renewable energy trunkline facilities.

21 “(9) The term ‘President’ means the President
22 of the United States.

23 “(10) The term ‘Indian lands’ means—

24 “(A) any land within the limits of any In-
25 dian reservation, pueblo or Rancheria,

1 “(B) any land not within the limits of any
2 Indian reservation, pueblo or Rancheria title to
3 which was on the date of passage of this Act ei-
4 ther held in trust by the United States for the
5 benefit of any Indian tribe or individual or held
6 by any Indian tribe or individual subject to re-
7 striction by the United States against alien-
8 ation,

9 “(C) any dependent Indian community,
10 and

11 “(D) any land conveyed to any Alaska Na-
12 tive corporation under the Alaska Native
13 Claims Settlement Act.

14 “(11) The term ‘electricity consuming area’
15 means the area within which electricity from renew-
16 able energy would be consumed if new high-voltage
17 electric transmission facilities were to be constructed
18 to deliver electricity from renewable energy gen-
19 erated in a National Renewable Energy Zone.

20 **“SEC. 232. DESIGNATION OF NATIONAL RENEWABLE EN-**
21 **ERGY ZONES.**

22 “(a) DESIGNATION.—Within six months after the
23 date of enactment of this Act, the President or the Presi-
24 dent’s designee shall designate as a National Renewable

1 Energy Zone each area that meets each of the following
2 conditions:

3 “(1) The potential to generate in excess of one
4 gigawatt of electricity from renewable energy with-
5 out having a material detrimental impact on reli-
6 ability.

7 “(2) An insufficient level of electric trans-
8 mission capacity to achieve the potential identified
9 pursuant to paragraph (1).

10 “(3) Access, for renewable energy to be gen-
11 erated in the National Renewable Energy Zone, to
12 one or more electricity consuming areas if there were
13 a sufficient level of transmission capacity.

14 “(b) FACTORS.—In making the designations required
15 by subsection (a), the Secretary take into account the fol-
16 lowing:

17 “(1) State and Federal requirements for utili-
18 ties to incorporate renewable energy as part of serv-
19 ing load; and

20 “(2) The impact of electric transmission facility
21 development on the aesthetic and environmental val-
22 ues of land contained in an area eligible for National
23 Renewable Energy Zone designation.

24 “(c) ADDITIONAL FACILITIES.—Within six months of
25 the designation of a National Renewable Energy Zone, the

1 President or the President’s designee shall identify, and
2 provide public notice of, specific additional high-voltage
3 electric transmission facilities and other nontransmission
4 alternatives required to substantially increase the genera-
5 tion of electricity from renewable energy within each Na-
6 tional Renewable Energy Zone.

7 “(d) PUBLIC VIEWS.—Before designating an area as
8 a National Renewable Energy Zone, the President or the
9 President’s designee shall afford each affected State, In-
10 dian Tribe and other interested persons a reasonable op-
11 portunity to present their views and recommendations be-
12 fore a designation shall be effective.

13 “(e) EXPANSION.—The President or the President’s
14 designee shall every three years after the date of enact-
15 ment consider whether to expand an existing National Re-
16 newable Energy Zone or designate a new National Renew-
17 able Energy Zone pursuant to the criteria set forth in sub-
18 section (a).

19 **“SEC. 233. ENCOURAGING CLEAN ENERGY SUPERHIGHWAY**
20 **DEVELOPMENT IN NATIONAL RENEWABLE**
21 **ENERGY ZONES.**

22 “(a) COST RECOVERY.—(1) The Commission shall
23 issue and enforce such regulations as are necessary to en-
24 sure that a public utility transmission provider that fi-
25 nances transmission capacity to transmit electricity from

1 renewable energy from a National Renewable Energy Zone
2 to an electricity consuming area after the date of enact-
3 ment of this subtitle recovers through its rates for trans-
4 mission service all costs and a reasonable return on equity
5 associated with the construction and operation of such new
6 transmission capacity.

7 “(2) A regulation under paragraph (1) shall be en-
8 forceable in accordance with the provisions of law applica-
9 ble to enforcement of regulations under this Act.

10 “(b) ALTERNATIVE TRANSMISSION FINANCING
11 MECHANISM.—The Commission shall permit a renewable
12 energy trunkline built by a public utility transmission pro-
13 vider in a National Renewable Energy Zone to, in advance
14 of generation interconnection requests, be initially funded
15 through a transmission charge imposed upon all trans-
16 mission customers of the transmission provider or, if the
17 renewable energy trunkline is built in an area served by
18 a regional transmission organization or independent sys-
19 tem operator, all of the transmission customers of such
20 transmission operator, if the Commission makes each of
21 the following findings:

22 “(1) The renewable energy resources that would
23 utilize the renewable energy trunkline are remote
24 from the grid and load centers.

1 “(2) The renewable energy trunkline will likely
2 result in multiple individual renewable energy elec-
3 tric generation projects being developed by multiple
4 competing developers. The renewable energy trunk-
5 line has at least one project subscribed through an
6 executed generation interconnection agreement with
7 the transmission provider and has tangible dem-
8 onstration of additional interest.

9 As new electric generation projects are constructed and
10 interconnected to the renewable energy trunkline, the
11 transmission services contract holder for such generation
12 project will, on a going forward basis, pay a pro-rata share
13 of the renewable energy trunkline facility’s costs, thus re-
14 ducing the effect on the rates of customers of the public
15 utility transmission provider.”.

16 (b) TRANSMISSION COST ALLOCATION.—Section 206
17 of the Federal Power Act (16 U.S.C. 824e) is amended
18 by adding the following new subsection at the end thereof:

19 “(e)(1) Within six months of the date the President
20 designates an area as a National Renewable Energy Zone,
21 the State utility commissions or other appropriate bodies
22 having jurisdiction over the public utilities providing serv-
23 ice in the National Renewable Energy Zone or an adjacent
24 electricity consuming area may jointly propose to the Com-
25 mission a cost allocation plan for high-voltage electric

1 transmission facilities built by a public utility transmission
2 provider that would serve the electricity consuming area.

3 “(2) The Commission may approve the plan proposed
4 by the States pursuant to paragraph (1) if, taking into
5 account the users of the transmission facilities, the plan
6 will result in rates that are just and reasonable and not
7 unduly discriminatory or preferential and the plan would
8 not unduly inhibit the development of renewable energy
9 electric generation projects.

10 “(3) Unless a plan has been approved by the Commis-
11 sion pursuant to paragraph (2), the Commission shall fair-
12 ly allocate the costs of new high-voltage electric trans-
13 mission facilities built in the area by one or more public
14 utility transmission providers (recognizing the national
15 and regional benefits associated with increased access to
16 electricity from renewable energy) pursuant to a rolled-
17 in transmission charge. nothing in this subsection shall ex-
18 pand, directly or indirectly, the jurisdiction of the Com-
19 mission with respect to any Federal Transmitting Util-
20 ity.”.

21 (c) FEDERAL TRANSMITTING UTILITIES.—(1) If no
22 privately or publicly funded entity commits within one
23 year of the identification required in section 232(c) of the
24 Federal Power Act to finance (either on its own or through
25 a third party financing arrangement with a Federal

1 Transmitting Utility) a high-voltage electric transmission
2 facility identified in such notice, a Federal Transmitting
3 Utility shall finance the construction of the high-voltage
4 electric transmission facility and operate and maintain
5 such facility if the Federal Transmitting Utility deter-
6 mines—

7 (A) the facility would be located within the
8 area in which the Federal Transmitting Utility
9 is statutorily authorized to construct trans-
10 mission facilities;

11 (B) the facility may be constructed and op-
12 erated without having a material detrimental
13 impact on reliability; and

14 (C) equally effective nontransmission op-
15 tions are unavailable.

16 (2)(A) Subject to the availability of appropriated
17 funds, the Department of Energy is authorized to issue
18 and sell bonds, notes, and other evidence of indebtedness
19 to the Secretary of Treasury from time to time in an
20 amount not to exceed \$10,000,000,000 outstanding at any
21 one time. The Department of Energy shall deposit the
22 amounts raised pursuant to this subsection to a Trans-
23 mission Fund, which shall be located in the U.S. Treasury.

24 (B) Amounts deposited in the Transmission Fund
25 shall be available without further appropriation or fiscal

1 year limitation to a Federal Transmitting Utility to fund
2 the construction, operation and maintenance of high-volt-
3 age electric transmission facilities authorized by sub-
4 section (1). Except as specified in subparagraph (C),
5 amounts used for construction, operation and maintenance
6 shall be recovered by the Federal Transmitting Utility and
7 repaid to the Transmission Fund over a period of 50
8 years.

9 (C) If a Federal Transmitting Utility determines that
10 revenue from users of the high-voltage electric trans-
11 mission facility may not be sufficient to recover its costs
12 over time, it may set a transmission rate for its use sepa-
13 rate from rates charged for the use of the Federal Trans-
14 mitting Utility's other transmission facilities. In such
15 event, power and transmission customers of the Federal
16 Transmitting Utility shall not be liable for the costs of
17 the high-voltage transmission facility except for the
18 amount of transmission capacity such customers utilize as
19 determined by each Federal Transmitting Utility. Any
20 amounts that cannot be so recovered from such separate
21 rate over a period of 50 years shall not be required to
22 be repaid by the Federal Transmitting Utility to the
23 Transmission Fund in the United States Treasury.

24 (3) The regulations promulgated pursuant to this Act
25 shall, to the maximum extent practicable, ensure that not

1 less than 75 percent of the capacity of any high-voltage
2 electric transmission line constructed by a Federal trans-
3 mitting utility pursuant to this section is used for elec-
4 tricity from renewable energy.

5 **SEC. 425. FEDERAL POWER MARKETING ADMINISTRATIONS**
6 **AND TVA.**

7 (a) **PROMOTION OF RENEWABLE ENERGY AND EN-**
8 **ERGY EFFICIENCY.**—The Western Area Power Adminis-
9 tration, the Southeastern Area Power Administration, the
10 Southwestern Area Power Administration and the Ten-
11 nessee Valley Authority shall each identify and, to the ex-
12 tent economically feasible and not inconsistent with other
13 statutory obligations, take steps to promote energy con-
14 servation and renewable energy electric resource develop-
15 ment in the regions served by such utility.

16 (b) **ACQUISITION OF RENEWABLE ENERGY AND RE-**
17 **NEWABLE ENERGY CREDITS.**—Each Federal Power Mar-
18 keting Administration and the Tennessee Valley Authority
19 may, subject to advance payment arrangements by the
20 Federal Government being in place that assure the Fed-
21 eral Power Marketing Administration is held financially
22 harmless for its actions pursuant to this section, use its
23 purchasing power to acquire on behalf of the Federal gov-
24 ernment electricity from renewable energy and renewable
25 energy credits in sufficient amounts to meet the require-

1 ments of section 203 of the Energy Policy Act of 2005.
2 The Federal agencies on behalf of which a Federal Power
3 Marketing Administration or the Tennessee Valley Au-
4 thority acquires renewable energy or renewable energy
5 credits shall fully reimburse the Federal Power Marketing
6 Administration or the Tennessee Valley Authority for such
7 transactions.

8 (c) TRIBAL RENEWABLE ENERGY.—Each Federal
9 Power Marketing Administration and the Tennessee Val-
10 ley Authority shall identify opportunities for promoting
11 the development of facilities generating electricity from re-
12 newable energy on Indian lands.

13 (d) NONREIMBURSABLE FUNDS.—The amounts ex-
14 pended by a Federal Power Marketing Administration or
15 the Tennessee Valley Authority pursuant to this section
16 shall not be subject to reimbursement by the customers
17 of such utility.

18 **SEC. 426. CONSISTENCY WITH ENVIRONMENTAL LAWS.**

19 Nothing in this Act shall be deemed to waive any ex-
20 isting Federal or State environmental protection provision,
21 including the requirements of—

22 (1) the National Forest Management Act of
23 1976 (16 U.S.C. 472a et seq.);

24 (2) the Endangered Species Act of 1973 (16
25 U.S.C. 1531 et seq.);

1 (3) the National Environmental Policy Act of
2 1969 (42 U.S.C. 4231 et. seq.);

3 (4) the Federal Water Pollution Control Act of
4 1969 (33 U.S.C. 1251 et . seq.); and

5 (5) the Federal Land Policy and Management
6 Act of 1976 (43 U.S.C. 1701 et seq.).

7 **Subtitle D—Net Metering**

8 **SEC. 431. ESTABLISHING MINIMUM NET METERING AND** 9 **INTERCONNECTION STANDARDS.**

10 (a) FINDINGS.—The Congress finds that it is in the
11 public interest to:

12 (1) Enable small businesses, residences, schools,
13 churches, farms with small electric generation units,
14 and other retail electric customers who generate
15 electric energy to return or sell surplus electric en-
16 ergy on the open market.

17 (2) Encourage private investment in renewable
18 and alternate energy resources.

19 (3) Stimulate the economic growth.

20 (4) Enhance the continued diversification sec-
21 tion of energy resources used in the United States.

22 (5) Remove regulatory barriers for net meter-
23 ing.

24 (b) NET METERING AND INTERCONNECTION STAND-
25 ARDS.—Section 113 of the Public Utility Regulatory Poli-

1 cies Act of 1978 is amended by adding the following new
2 subsections at the end thereof:

3 “(d) NET METERING.—

4 “(1) DEFINITIONS.—As used in this subsection:

5 “(A) The term ‘customer-generator’ means
6 the owner or operator of a qualified generation
7 unit.

8 “(B) The term ‘net metering’ means meas-
9 uring the difference between the electricity sup-
10 plied to a customer-generator and the electricity
11 generated by a customer-generator that is deliv-
12 ered to a local distribution section system at the
13 same point of interconnection during an appli-
14 cable billing period and providing an energy
15 credit to a customer-generator in the form of a
16 kilowatt-hour credit for each kilowatt-hour of
17 energy produced by a customer-generator from
18 a qualified generation unit.

19 “(C) The term ‘qualified generation unit’
20 means an electric energy generation unit that
21 meets each of the following requirements:

22 “(i) The unit is a fuel cell or uses as
23 its energy source either solar, wind, bio-
24 mass, geothermal, anaerobic digestion or

1 landfill gas, or a combination of the fore-
2 going.

3 “(ii) The unit has a generating capac-
4 ity of not more than 1,000 kilowatts.

5 “(iii) The unit is located on premises
6 that are owned, operated, leased, or other-
7 wise controlled by the customer-generator.

8 “(iv) The unit operates in parallel
9 with the retail electric supplier.

10 “(v) The unit is intended primarily to
11 offset part or all of the customer-genera-
12 tor’s requirements for electric energy.

13 “(D) The term ‘retail electric supplier’
14 means any electric utility that sells electric en-
15 ergy to the ultimate consumer thereof.

16 “(E) The term ‘local distribution system’
17 means any system for the distribution section of
18 electric energy to the ultimate consumer there-
19 of, whether or not the owner or operator of
20 such system is also a retail electric supplier.

21 “(2) ADOPTION.—Not later than one year after
22 the enactment of this subsection, each State regu-
23 latory authority (with respect to each electric utility
24 for which it has ratemaking authority), and each
25 nonregulated electric utility, shall provide public no-

1 tice and conduct a hearing respecting the standards
2 established by paragraph (3) and, on the basis of
3 such hearing, shall adopt such standard.

4 “(3) ESTABLISHMENT OF NET METERING
5 STANDARD.—Each retail electric supplier shall offer
6 to arrange (either directly or through a local dis-
7 tribution company or other third party) to make net
8 metering available, on a first-come-first-served basis,
9 to each of its retail customers in accordance with the
10 provisions of this subsection and each of the fol-
11 lowing requirements:

12 “(A) Rates and charges and contract
13 terms and conditions for the sale of electric en-
14 ergy to customer-generators shall be the same
15 as the rates and charges and contract terms
16 and conditions that would be applicable if the
17 customer-generator did not own or operate a
18 qualified generation unit and use a net meter-
19 ing system.

20 “(B) Each retail electric supplier shall no-
21 tify all of its retail customers of the standard
22 established under this paragraph upon adoption
23 of such standard.

24 “(4) NET ENERGY MEASUREMENT.—Each re-
25 tail electric supplier shall arrange to provide to cus-

1 tomer-generators who qualify for net metering under
2 subsection (b) an electrical energy meter capable of
3 net metering and measuring the flow of electricity
4 either to or from the customer and using a single
5 meter and single register, except where it is not
6 practical to do so. Where it is not practical to pro-
7 vide the meter to the customer-generator, the retail
8 electric supplier (either directly or through a local
9 distribution company or other third party) shall, at
10 its own expense, install one or more of such electric
11 energy meters for the customer-generator concerned.

12 “(5) BILLING.—Each retail electric supplier
13 subject to subsection (b) shall calculate the electric
14 energy consumption for a customer using a net me-
15 tering system in the following manner:

16 “(A) The retail electric supplier shall
17 measure the net electricity produced or con-
18 sumed during the billing period using the me-
19 tering installed as provided in paragraph (4).

20 “(B) If the electricity supplied by the retail
21 electric supplier exceeds the electricity gen-
22 erated by the customer-generator during the
23 billing period, the customer-generator shall be
24 billed for the net electric energy supplied by the

1 retail electric supplier in accordance with nor-
2 mal billing practices

3 “(C)(i) If electric energy generated by the
4 customer-generator exceeds the electric energy
5 supplied by the retail electric supplier, the cus-
6 tomer-generator shall be billed for the appro-
7 priate customer charges for that billing period
8 and credited for the excess electric energy gen-
9 erated during the billing period, with this credit
10 appearing as a kilowatt-hour credit on the bill
11 for the following billing period. The kilowatt-
12 hour credits shall be applied to customer-gener-
13 ator electric energy consumption on the fol-
14 lowing billing period bill (except for a billing pe-
15 riod that ends in the next calendar year). At
16 the beginning of each calendar year, any re-
17 maining unused kilowatt-hour credits shall be
18 extinguished.

19 “(ii) Except as provided in this clause, if
20 the customer-generator is using a meter and re-
21 tail billing arrangement that has time differen-
22 tiated rates, (a ‘time-of-use meter’), the kilo-
23 watt-hour credit shall be based on the ratio rep-
24 resenting the difference in retail rates for each
25 time of use rate or the credits shall be shown

1 on the customer-generator's bill as a monetary
2 credit reflecting retail rates at the time of gen-
3 eration of the electric energy by the customer-
4 generator. Notwithstanding the standard estab-
5 lished under section 11(d)(14), the supplier
6 may require, at the supplier's option, the cus-
7 tomer-generator with net metering to take elec-
8 tric service under a non-time differentiated en-
9 ergy rate tariff or service that it offers to cus-
10 tomers in the same rate class as the customer-
11 generator.

12 “(6) PERCENT LIMITATIONS.—

13 “(A) TWO PERCENT LIMITATION.—The
14 standard established under this subsection shall
15 not apply for a calendar year in the case of a
16 customer-generator served by a local distribu-
17 tion company when the total generating capac-
18 ity of all customer-generators with net metering
19 systems served by that local distribution com-
20 pany in that calendar year is equal to or in ex-
21 cess of 2 percent of the capacity necessary to
22 meet the local distribution company's average
23 forecasted aggregate customer peak demand for
24 that calendar year.

1 “(B) ONE PERCENT LIMITATION.—The
2 standard established under this subsection shall
3 not apply for a calendar year in the case of a
4 customer-generator served by a local distribu-
5 tion company when the total generating capaci-
6 ty of all customer-generators with net metering
7 systems served by that local distribution com-
8 pany in that calendar year using a single type
9 of qualified generation units (as listed in para-
10 graph (1)(C)(i)) is equal to or in excess of 1
11 percent of the capacity necessary to meet the
12 company’s average forecasted aggregate cus-
13 tomer peak demand for that calendar year.

14 “(C) RECORDS AND NOTICE.— Each re-
15 tail electric supplier shall maintain, and make
16 available to the public, records of the total gen-
17 erating capacity of customer-generators of such
18 system that are using net metering, the type of
19 generating systems and energy source used by
20 the electric generating systems used by such
21 customer-generators. Each such retail electric
22 supplier shall notify the State regulatory au-
23 thority and the Federal Energy Regulatory
24 Commission when the total generating capacity
25 of such customer-generators is equal to or in

1 excess of the limitations set forth in subpara-
2 graph (B).

3 “(7) OWNERSHIP OF CREDITS.—For purposes
4 of Federal and State laws providing renewable en-
5 ergy credits or greenhouse gas credits, the customer-
6 generator with a qualified generating unit and net
7 metering shall be treated as owning and having title
8 to the renewable energy attributes, renewable energy
9 credits and greenhouse gas emission credits related
10 to any electricity produced by the qualified gener-
11 ating unit. No retail electric supplier shall claim title
12 to or ownership of any renewable energy attributes,
13 renewable energy credits or greenhouse gas emission
14 credits of the customer-generator as a result of
15 interconnecting the customer-generator or providing
16 or offering the customer-generator net metering.

17 “(8) SAFETY AND PERFORMANCE STAND-
18 ARDS.—(A) A qualified generation unit and net me-
19 tering system used by a customer-generator shall
20 meet all applicable safety and performance and reli-
21 ability standards established by the national elec-
22 trical code, the Institute of Electrical and Elec-
23 tronics Engineers, Underwriters Laboratories, or the
24 American National Standards Institute.

1 “(B) The Commission shall, after consultation
2 with State regulatory authorities and nonregulated
3 local distribution systems and after notice and op-
4 portunity for comment, prohibit by regulation the
5 imposition of additional charges by electric suppliers
6 and local distribution systems for equipment or serv-
7 ices for safety or performance that are additional to
8 those necessary to meet the standards and require-
9 ments referred to in subparagraph (A) of this para-
10 graph and subsection (e) of this section (relating to
11 interconnection).

12 “(9) DETERMINATION OF COMPLIANCE.—Any
13 State regulatory authority (with respect to each elec-
14 tric utility for which it has ratemaking authority),
15 and each nonregulated electric utility may apply to
16 the Commission for a determination that any State
17 net metering requirement or regulations complies
18 with the requirements of this subsection. In the ab-
19 sence of such a determination, the Commission, on
20 its own motion or pursuant to the petition of any in-
21 terested person, may, after notice and opportunity
22 for a hearing on the record, issue an order requiring
23 against any retail electric supplier or local distribu-
24 tion company, or both, to require compliance with
25 this subsection. Any person who violates any require-

1 ment of this subsection or any order of the Commis-
2 sion under this subsection shall be subject to civil
3 penalties in the amount of \$10,000 for each day
4 that such violation continues. Such penalties may be
5 assessed by the Commission, after notice and oppor-
6 tunity for hearing, in the same manner as penalties
7 are assessed under section 31(d) of the Federal
8 Power Act.

9 “(e) INTERCONNECTION STANDARDS.—

10 “(1) DEFINITIONS.—For purposes of this sub-
11 section, the terms defined in subsection (d) shall
12 apply.

13 “(2) MODEL STANDARDS.—(A) Within one year
14 after the enactment of this subsection the Commis-
15 sion shall publish model standards for the physical
16 connection between local distribution systems and
17 qualified generation units and electric generation
18 units that meet the requirements of subsection
19 (d)(1)(C) other than clause (ii) thereof and that do
20 not exceed 20,000 kilowatts of capacity. Such model
21 standards shall be designed to encourage the use of
22 qualified generation units and to ensure the safety
23 and reliability of such units and the local distribu-
24 tion systems interconnected with such units.

1 “(B) The model standards shall have two sepa-
2 rate expedited procedures for interconnecting quali-
3 fied generation units up to 15 kilowatts and a sepa-
4 rate standard that expedites interconnection for
5 qualified generation units up to 2000 kilowatts.
6 Such expedited procedures shall be based on those
7 best practices among the States that have adopted
8 interconnection standards. In designing such expe-
9 dited procedures, the Commission shall consider
10 Interstate Renewable Energy Council Model Rule
11 MR–I2005.

12 “(C) Within 2 years after the enactment of this
13 subsection, each State shall adopt the model stand-
14 ards published under this paragraph, with or with-
15 out modification, and submit such standards to the
16 Commission for approval. The Commission shall ap-
17 prove a modification of the model standards only if
18 the Commission determines that such modification is
19 consistent with or superior to the purpose of such
20 standards and is required by reason of local condi-
21 tions.

22 “(D) If standards have not been approved
23 under this paragraph by the Commission for any
24 State within 2 years after the enactment of this sub-
25 section, the Commission shall, by rule or order, en-

1 force the Commission’s model standards in such
2 State until such time as State standards are ap-
3 proved by the Commission.

4 “(E) Within two years after the enactment of
5 this subsection, and after notice and opportunity for
6 comment, the Commission shall publish an update of
7 such model standards, considering changes in the
8 underlying standards and technologies. Such updates
9 shall be made available to State regulatory authori-
10 ties for their consideration.

11 “(3) SAFETY, RELIABILITY, PERFORMANCE,
12 AND COST.—The standards under this section shall
13 establish those measures for the safety and reli-
14 ability of the affected equipment and local distribu-
15 tion systems as may be appropriate. Such standards
16 shall be consistent with all applicable safety and per-
17 formance standards established by the national elec-
18 trical code, the Institute of Electrical and Elec-
19 tronics Engineers, Underwriters Laboratories, or the
20 American National Standards Institute yet con-
21 stitute the minimum cost and technical burdens to
22 the interconnecting customer generator as the Com-
23 mission shall, by rule, prescribe.

24 “(4) ADDITIONAL CHARGES.—The model stand-
25 ards under this subsection prohibit the imposition of

1 additional charges by local distribution systems for
2 equipment or services for interconnection that are
3 additional to those necessary to meet such standards
4 and that are in excess of the charges and equipment
5 requirements identified in the best practices of
6 states with interconnection standards.

7 “(5) RELATIONSHIP TO EXISTING LAW REGARD-
8 ING INTERCONNECTION.—Nothing in this subsection
9 affects the application of section 111(d)(15) relating
10 to interconnection.

11 “(6) CONSUMER FRIENDLY CONTRACTS.—The
12 Commission shall promulgate regulations insuring
13 that simplified contracts will be used for the inter-
14 connection of electric energy by electric energy
15 transmission or distribution systems and generating
16 facilities that have a power production capacity not
17 greater than 2000 kilowatts and shall consider the
18 best practices for consumer friendly contracts adopt-
19 ed by States or national associations of state regu-
20 lators. Such contracts shall not require liability or
21 other insurance in excess of what is typically carried
22 by customer-generators for general liability.

23 “(7) ENFORCEMENT.—Any person who violates
24 any requirement of this subsection shall be subject
25 to civil penalties in the amount of \$10,000 for each

1 day that such violation continues. Such penalties
2 may be assessed by the Commission, after notice and
3 opportunity for hearing, in the same manner as pen-
4 alties are assessed under section 31(d) of the Fed-
5 eral Power Act.”.

6 (c) RELATIONSHIP TO STATE LAW.—Section 117 of
7 the Public Utility Regulatory Policies Act of 1978 is
8 amended by striking “Nothing” and inserting “(1) Except
9 as provided in paragraph (2), nothing” and by adding the
10 following at the end thereof:

11 “(2) No State or nonregulated utility may adopt or
12 enforce any standard or requirement concerning net me-
13 tering or interconnection that restricts access to the elec-
14 tric power transmission or distribution system by qualified
15 generators beyond those standards and requirements iden-
16 tified in section 113(d). Nothing in this Act shall preclude
17 a State from adopting or enforcing incentives or require-
18 ments to encourage qualified generation and net metering
19 that are additional to or equivalent to those required
20 under section 113(d) or that afford greater access to the
21 electric power transmission and distribution system by
22 qualified generators as defined in section 113(d) or afford
23 greater compensation or credit for electricity generated by
24 such generators.”.

1 **SEC. 432. RETAIL ELECTRIC AND GAS UTILITY EFFICIENCY**
2 **POLICIES.**

3 (a) IN GENERAL.—The Public Utility Regulatory
4 Policies Act of 1978 is amended by adding the following
5 after section 609:

6 **“SEC. 610. EFFICIENCY RESOURCE STANDARDS FOR RE-**
7 **TAIL ELECTRICITY AND NATURAL GAS DIS-**
8 **TRIBUTORS.**

9 “(a) DEFINITIONS.—In this section:

10 “(1) BASE QUANTITY.—The term ‘base quan-
11 tity’, with respect to a retail electricity or natural
12 gas distributor, means the total quantity of electric
13 energy or natural gas delivered by the retail elec-
14 tricity or natural gas distributor to retail customers
15 during the most recent calendar year for which in-
16 formation is available.

17 “(2) COMBINED HEAT AND POWER SYSTEM.—
18 The terms ‘combined heat and power system’ and
19 ‘CHP system’ mean a system that—

20 “(A) uses the same energy source for the
21 simultaneous or sequential generation of elec-
22 trical power, mechanical power, or both, in com-
23 bination with the generation of steam or other
24 forms of useful thermal energy (including heat-
25 ing and cooling applications);

1 “(B) produces at least 20 percent of its
2 total useful energy in the form of thermal en-
3 ergy, and at least 15 percent of its total useful
4 energy in the form of electrical or mechanical
5 power (or a combination thereof);

6 “(C) except for systems designed for oper-
7 ation on cellulosic biomass fuel, has a marginal
8 net heat rate of no more than 7,500 Btu/kWh,
9 calculated on a higher heating value basis;

10 “(D) is designed for continuous operation;
11 and

12 “(E) if generating electricity provides such
13 electricity primarily for use for a facility or
14 group of facilities located near the point where
15 the electricity is generated, and from which net
16 wholesale sales of electricity are not in excess of
17 50 percent of total annual generation.

18 “(3) CUSTOMER FACILITY.—The term ‘cus-
19 tomer facility’ means an end-use consumer of elec-
20 tricity or natural gas served by a retail electricity or
21 natural gas distributor.

22 “(4) DEEMED SAVINGS.—The term ‘deemed
23 savings’ means an estimate of the average per unit
24 savings from installation of specific common energy
25 efficiency measures. Deemed savings estimates shall

1 be based on field studies or billing analyses of sav-
2 ings at a sample of sites where the specific measure
3 is installed.

4 “(5) ELECTRIC AND NATURAL GAS SAVINGS
5 CORPORATION .—The term ‘Electric and Natural
6 Gas Savings Corporation ’ means the corporation
7 certified pursuant to subsection (d)(7)(C).

8 “(6) ELECTRICITY.—(A) The term ‘electricity
9 savings’ means any of the following:

10 “(i) Reductions in end-use electricity con-
11 sumption achieved by a customer facility rel-
12 ative to__

13 “(I) consumption at the same facility
14 in a base year, as defined in rules issued
15 by the Secretary;

16 “(II) in the case of replacement of
17 equipment at the end of its life or of new
18 equipment that does not replace existing
19 equipment, consumption of new equipment
20 of average efficiency, as defined in rules
21 issued by the Secretary; or

22 “(III) in the case of a new facility,
23 consumption at a reference facility, as de-
24 fined in rules issued by the Secretary.

1 “(ii) Reductions in distribution system
2 losses of electricity achieved by a retail elec-
3 tricity distributor relative to losses attributable
4 to new or replacement distribution system
5 equipment of average efficiency, as defined in
6 rules issued by the Secretary.

7 “(iii) Any combination of the foregoing.

8 “(B) The reductions referred to in subpara-
9 graph (A) may be due to—

10 “(i) energy efficiency measures, including
11 demand response measures that result in im-
12 proved energy efficiency;

13 “(ii) combined heat and power systems as
14 calculated under subparagraph (D);

15 “(iii) recycled energy; or

16 “(iv) in the case of distribution system
17 losses, upgraded distribution transformers, up-
18 graded electrical connectors, high temperature
19 superconductors, or other measures to reduce
20 such losses as specified in rules issued by the
21 Secretary.

22 “(C) The reductions in end-use electricity con-
23 sumption at a customer facility shall be reduced on
24 a Btu basis by the Btu equivalent of any associated
25 increases in fuel consumption at such facility. The

1 conversion of any such fuel consumption increase to
2 an equivalent amount of electricity on a Btu basis
3 shall be determined by the Secretary based on the
4 average heat rate of central station generation in the
5 region (accounting for average transmission and dis-
6 tribution losses in the region), as determined in
7 rules issued by the Secretary.

8 “(D) For a combined heat and power (CHP)
9 system, the electricity savings shall be the electricity
10 and mechanical power generated by the CHP system
11 net of fuel used by the system, where the fuel used
12 is the product of—

13 “(i) the electricity and mechanical power
14 generated by the CHP system;

15 “(ii) the net-effective heat rate for the
16 CHP system; and

17 “(iii) the inverse of the average heat rate
18 of central station generation in the region, tak-
19 ing into consideration avoided transmission and
20 distribution losses resulting from on-site gen-
21 eration as determined under subparagraph (C).

22 “(7) NATURAL GAS SAVINGS.—(A) The term
23 ‘natural gas savings’ means—

1 “(i) reductions in end-use natural gas con-
2 sumption achieved by a customer facility rel-
3 ative to—

4 “(I) consumption at the same facility
5 in a base year, as defined in rules issued
6 by the Secretary;

7 “(II) in the case of replacement of
8 equipment at the end of its life or of new
9 equipment that does not replace existing
10 equipment, consumption of new equipment
11 of average efficiency, as defined in rules
12 issued by the Secretary; or

13 “(III) in the case of a new facility,
14 consumption at a reference facility, as de-
15 fined in rules issued by the Secretary;

16 “(ii) reductions in leakage, operational
17 losses, and gas fuel consumption in the oper-
18 ation of a gas distribution system achieved by
19 a retail gas distributor relative to such losses in
20 a base year, as defined in rules issued by the
21 Secretary; or

22 “(iii) any combination of the foregoing.

23 “(B) The natural gas savings may be due to—

24 “(i) energy efficiency measures;

25 “(ii) recycled energy; or

1 “(iii) in the case of gas distribution system
2 losses, technologies and practices as specified in
3 rules issued by the Secretary including meas-
4 ures recommended for gas distribution systems
5 by the Natural Gas STAR Program adminis-
6 tered by the Environmental Protection Agency.

7 “(C) The reductions in natural gas consump-
8 tion shall be reduced on a Btu equivalent basis by
9 any associated increases in the consumption of elec-
10 tricity or other substitute fuels by a customer facility
11 or a natural gas distributor, as determined under
12 rules issued by the Secretary. The conversion of any
13 such increase in the consumption of electricity or
14 other fuels to an equivalent amount of natural gas
15 consumption on a Btu basis shall be determined by
16 the Secretary based on the average heat rate of cen-
17 tral station electric generation in the region and av-
18 erage transmission and distribution losses in the re-
19 gion, as determined under rules issued by the Sec-
20 retary.

21 “(8) NET EFFECTIVE HEAT RATE.—The term
22 ‘net effective heat rate’ means a ratio, the numer-
23 ator of which is the higher heating value of the in-
24 crement of fuel required by a CHP system to
25 produce electricity and mechanical power, over and

1 above the fuel that would be required to produce the
2 equivalent thermal output of the CHP system by a
3 system without power generation, expressed in Brit-
4 ish thermal units, and the denominator of which is
5 the power output of the CHP system, expressed in
6 kilowatt-hours.

7 “(9) PERFORMANCE STANDARD.—The term
8 ‘performance standard’ means the performance
9 standard for energy savings established under sub-
10 section (b).

11 “(10) RECYCLED ENERGY.—The term ‘recycled
12 energy’ means electrical or mechanical power, or
13 both, or thermal energy produced by modifying an
14 industrial or commercial system that was in place
15 prior to January 1, 2007, such that the modified
16 system—

17 “(A) recaptures energy that would other-
18 wise be wasted from sources, including—

19 “(i) waste heat from industrial proc-
20 esses, natural gas compressor stations, and
21 other sources;

22 “(ii) pressure in a fluid or gas system
23 including but not limited to steam, natural
24 gas, and water; and

1 “(iii) blast furnace, coke oven, carbon
2 black, and petrochemical process waste
3 gas, or pollution control projects, including
4 thermal oxidizers and gas flares; and

5 “(B) uses equipment and technologies in-
6 cluding—

7 “(i) back-pressure turbines in parallel
8 with existing pressure-reducing valves in
9 steam, water and gas systems;

10 “(ii) organic Rankine, Stirling, or
11 Kalina cycle heat engine systems driven by
12 waste heat; or

13 “(iii) heat recovery steam generators
14 with steam turbine generators that recover
15 waste heat.

16 “(11) RETAIL ELECTRICITY OR NATURAL GAS
17 DISTRIBUTOR.—The term ‘retail electricity or nat-
18 ural gas distributor’ means a person (including a
19 Federal, State, or local entity) that—

20 “(A) distributes electric energy or natural
21 gas to consumers in the United States for a cal-
22 endar year, including electricity or natural gas
23 supplied by unregulated suppliers, regardless of
24 whether such suppliers are affiliated or unaffili-
25 ated with the distributor; and

1 “(B) sold not less than 800,000 megawatt-
2 hours of electric energy or 1 billion cubic feet
3 of natural gas to consumers in the United
4 States for purposes other than resale during the
5 preceding calendar year.

6 For purposes of this paragraph, electricity or nat-
7 ural gas sold at wholesale to large end-use customers
8 shall be included but natural gas sold to wholesale
9 electric generators to generate electric power for re-
10 sale shall not be not included.

11 “(b) PERFORMANCE STANDARD.—

12 “(1) IN GENERAL.—Each retail electricity or
13 natural gas distributor shall undertake electricity
14 and natural gas savings measures in each calendar
15 year beginning with 2009 that produce electricity
16 and natural gas savings as a percentage of the dis-
17 tributor’s base quantity at the applicable rate speci-
18 fied in paragraph (5).

19 “(2) SAVINGS.—The savings described in para-
20 graph (1) shall represent savings realized in the
21 specified year from measures implemented in that
22 year and all preceding years beginning with 2007.

23 “(3) LIMITS.—Savings from combined heat and
24 power systems, recycled energy, and electricity or
25 natural gas distribution system measures may be

1 used by a distributor to satisfy no more than 50 per-
2 cent of the applicable savings specified for any year
3 in the table contained in paragraph (5).

4 “(4) COMPLIANCE.—(A) Each retail electricity
5 or natural gas distributor subject to this subsection
6 may use any electricity or natural gas savings meas-
7 ures available to the distributor to achieve compli-
8 ance with the performance standard established
9 under this section, on the condition that the elec-
10 tricity and natural gas savings achieved by such
11 measures are calculated and verified pursuant to the
12 rules issued under subsection (c).

13 “(B) A retail electricity or natural gas dis-
14 tributor may demonstrate compliance with the per-
15 formance standard through the accumulation of __

16 “(i) electricity or natural gas savings cred-
17 its achieved by such electricity or natural gas
18 distributor and certified under clause (i) of sub-
19 section (d)(2)(A);

20 “(ii) electricity or natural gas savings cred-
21 its obtained by purchase under subsection
22 (d)(6);

23 “(iii) electricity or natural gas savings
24 credits borrowed against future years under
25 subsection (d)(7); or

1 “(iv) any combination of credits described
2 in clauses (i), (ii), and (iii).

3 “(5) APPLICABLE RATES.—(A) The applicable
4 rates referred to in paragraph (1) are as follows:

“Year	Electricity Savings (%)	Natural Gas Savings (%)
2009	0.25	0.20
2010	0.75	0.50
2011	1.50	0.80
2012	2.25	1.15
2013	3.00	1.50
2014	4.00	2.00
2015	5.00	2.50
2016	6.00	3.00
2017	7.00	3.50
2018	8.00	4.00
2019	9.00	4.50
2020	10.00	5.00

5 “(B) At least 2 years before the beginning of
6 any year after 2020, the Secretary, after notice and
7 opportunity for comment, shall set the applicable
8 rate, taking into consideration the economic and en-
9 vironmental benefits of the energy savings and the
10 cost of the savings measures.

11 “(c) DETERMINATION OF COMPLIANCE RULES.—Not
12 later than 1 year after the date of enactment of this sec-
13 tion, the Secretary shall issue rules that describe the
14 means to be used to calculate and verify compliance with

1 the performance standard that include each of the fol-
2 lowing:

3 “(1) Procedures and standards for defining and
4 measuring electricity savings and natural gas sav-
5 ings from customer facility end-uses and from utility
6 distribution systems that occur in a calendar year
7 (including measures implemented in previous cal-
8 endar years beginning in 2007). At a minimum,
9 these procedures and standards shall—

10 “(A) specify the types and categories of ef-
11 ficiency measures that will be eligible for certifi-
12 cation under subsection (d)(2);

13 “(B) require that energy consumption esti-
14 mates for customer facilities or portions thereof
15 in the base and current years be adjusted, when
16 appropriate, to account for changes in weather,
17 level of production, and building area;

18 “(C) allow energy consumption estimates
19 from discrete processes and equipment within
20 industrial facilities in the base and current
21 years to be adjusted for factors identified by
22 rule that may be responsible for significant
23 year-to-year changes;

24 “(D) allow energy consumption estimates
25 from discrete processes and equipment within

1 industrial facilities in the base and current
2 years to be adjusted for factors identified by
3 rule that may be responsible for significant
4 year-to-year changes;

5 “(E) account for the useful life of energy
6 saving measures;

7 “(F) include deemed savings values for
8 commonly-used efficiency measures and make
9 provision for such values to be periodically re-
10 viewed and revised;

11 “(G) minimize the chances that more than
12 one entity will claim credit for the same sav-
13 ings; and

14 “(H) exclude savings that—

15 “(i) are attributable to measures or
16 systems installed before January 1, 2007,
17 or to modifications of processes or systems
18 undertaken prior to January 1, 2007;

19 “(ii) are otherwise required by Fed-
20 eral, State, local, or Indian tribal law or
21 regulation;

22 “(iii) are achieved without the inter-
23 vention of the electricity or natural gas dis-
24 tributor or of any other entity seeking

1 credits under paragraph (2)(A)(ii) of , ex-
2 cept as provided under subsection (e);

3 “(iv) are attributable to Federal,
4 State, or local tax incentives, grants, loans,
5 or other public financial support for energy
6 efficiency measures; or

7 “(v) have already been credited under
8 this section to another entity.

9 “(2) Procedures and standards for verification
10 of electricity or natural gas savings reported by re-
11 tail electricity and natural gas distributors. At a
12 minimum, such procedures and standards shall—

13 “(A) provide for periodic spot checks on a
14 sample of sites to verify that measures are in
15 place and functioning;

16 “(B) provide that savings estimates are
17 calibrated with billing analysis or end-use me-
18 tering on a sample of sites where technically
19 feasible and economically justified; and

20 “(C) provide for the protection of cus-
21 tomers’ proprietary information against unwar-
22 ranted disclosure.

23 “(3) Requirements for the content and format
24 of a biennial report from each retail electricity or
25 natural gas distributor demonstrating the compli-

1 ance of the distributor with the performance stand-
2 ard, including a detailed description of the calcula-
3 tion of electricity and natural gas savings to enable
4 the appropriate regulatory authority to verify and
5 enforce compliance with the requirements of this sec-
6 tion (including regulations issued under this sec-
7 tion).

8 “(4) Provision for reviewing and revising the
9 electricity and natural gas consumption of reference
10 facilities and of new equipment of average efficiency
11 at intervals of not greater than 4 years.

12 “(d) CREDIT AND TRADING SYSTEM.—

13 “(1) ESTABLISHMENT.—Not later than one
14 year after the date of enactment of this section, and
15 after consultation with the Administrator of the En-
16 vironmental Protection Agency, the Secretary shall
17 issue rules establishing a nationwide credit and cred-
18 it trading system for electricity and natural gas sav-
19 ings.

20 “(2) CREDITS.—

21 “(A) IN GENERAL.—In accordance with
22 the rules issued under paragraph (1), the Sec-
23 retary

24 “(i) shall certify as credits, electricity
25 and natural gas savings achieved by a re-

1 tail electricity or natural gas distributor in
2 a given calendar year if the savings comply
3 with the rules issued under subsection
4 (c)(1);

5 “(ii) shall certify as credits, customer
6 electricity and natural gas savings under-
7 taken by State agencies and other entities
8 if—

9 “(I) a retail electricity or natural
10 gas distributor did not help finance
11 measures to achieve these savings;
12 and

13 “(II) the savings comply with the
14 rules issued under subsection (c); and

15 “(iii) shall not award credits to any
16 retail electricity or natural gas distributor
17 subject to State administration and en-
18 forcement under subsection (g) unless the
19 Secretary has determined that the adminis-
20 tration and enforcement are at least equiv-
21 alent to administration and enforcement by
22 the Secretary.

23 “(B) AMOUNT OF CREDITS.—A credit cer-
24 tified by the Secretary under this subsection—

1 “(i) shall equal 1,000 kilowatt-hours,
2 in the case of an electricity savings credit;
3 or

4 “(ii) shall equal 10 therms, in the
5 case of a natural gas savings credit.

6 “(3) TREATMENT OF CREDITS.—

7 “(A) USE OF CREDITS.—A credit may be
8 counted toward compliance with the perform-
9 ance standard only once.

10 “(B) PROPERTY RIGHTS.—An electricity or
11 natural gas savings credit certified under this
12 subsection shall not be considered to be a prop-
13 erty right.

14 “(C) REDUCTION AND TERMINATION OF
15 CREDITS.—Nothing in this section or any other
16 provision of the law limits the authority of the
17 United States to reduce or terminate a credit
18 certified under this subsection.

19 “(4) FEE.—

20 “(A) IN GENERAL.—To receive certifi-
21 cation of an electricity or natural gas savings
22 credit under this section, the recipient of the
23 credit shall pay a fee, calculated by the Sec-
24 retary, in an amount that is equal to the lesser
25 of the following:

1 “(i) The administrative costs of
2 issuing, recording, monitoring the sale or
3 exchange, and tracking, of the credit.

4 “(ii) For the years 2009 and 2010, 5
5 percent of the fair market value of the
6 credit, as determined by the Secretary, and
7 for the years 2011 and thereafter, 3 per-
8 cent of the fair market value of the credit,
9 as determined by the Secretary.

10 “(B) USE OF FEES BY SECRETARY.—Sub-
11 ject to annual appropriation, the Secretary shall
12 use amounts equivalent to the fees paid under
13 this paragraph to pay administrative costs de-
14 scribed in subparagraph (A)(i). If receipts ex-
15 ceed the administrative costs incurred by the
16 Secretary in any two consecutive fiscal years,
17 the Secretary shall, not later than January 1 of
18 the first fiscal year thereafter, reduce the fee
19 accordingly.

20 “(5) CREDIT SALE AND USE.—

21 “(A) SALE.—A retail electric or natural
22 gas distributor may sell a credit certified under
23 this subsection to any other entity, and other
24 entities may sell such credit to a retail electric
25 or natural gas distributor or any other entity,

1 in accordance with accounting and verification
2 procedures contained in rules issued by the Sec-
3 retary under paragraph (1).

4 “(B) USE.—A credit certified under this
5 subsection and sold under subparagraph (A)
6 may be used by a purchasing retail electricity
7 or natural gas distributor for purposes of com-
8 plying with the performance standard.

9 “(C) DURATION OF VALIDITY.—A credit
10 certified under this subsection may only be used
11 for compliance with this section for 3 years
12 from the date issued.

13 “(6) CREDIT BORROWING.—(A) During the
14 first year covered by the performance standard, a re-
15 tail electricity or natural gas distributor that has
16 reason to believe that the distributor will not have
17 sufficient electricity or natural gas savings credits to
18 comply with the performance standard may—

19 “(i) submit a plan to the Secretary dem-
20 onstrating that the retail electricity or natural
21 gas distributor will earn or acquire sufficient
22 credits within the subsequent 2 calendar years
23 that would enable the retail electricity or nat-
24 ural gas distributor to meet the performance
25 standard for all three calendar years; and

1 “(ii) upon the approval of the plan by the
2 Secretary, apply credits expected to be earned
3 or acquired within the subsequent 2 calendar
4 years to meet the performance standard for the
5 applicable calendar year.

6 “(B) Any retail electricity or natural gas dis-
7 tributor that has submitted such a plan shall, by
8 March 31 of the fourth calendar year, submit to the
9 Secretary the credits necessary to repay all credits
10 borrowed.

11 “(7) BUYOUT OPTION.—

12 “(A) IN GENERAL.—An electricity or nat-
13 ural gas distributor may elect to comply with
14 this section for any calendar year by paying to
15 the certified Electric and Natural Gas Savings
16 Corporation not later than March 31 of the fol-
17 lowing year, a fee of 5 cents per kilowatt-hour
18 or 50 cents per therm, for any portion of the
19 electricity or natural gas savings credit the dis-
20 tributor would otherwise be obligated to achieve
21 for the year.

22 “(B) USE OF BUYOUT FEES.—The Electric
23 and Natural Gas Savings Corporation shall—

1 “(i) deposit fees received under sub-
2 paragraph (A) in an escrow account estab-
3 lished by the Corporation; and

4 “(ii) periodically distribute amounts in
5 the escrow account to States requesting
6 such funds for use in creating electricity or
7 natural gas savings at customer facilities.

8 States requesting funds from the account estab-
9 lished by the Corporation shall submit specific
10 program proposals, including funds requested,
11 estimated savings and measure lifetime(s), and
12 estimated cost per kWh or therm saved. The
13 Corporation shall develop guidelines for these
14 submissions. The Corporation shall distribute
15 funds based on the following criteria: Estimated
16 savings per dollar of funds provided from the
17 escrow account, maximizing consumer opportu-
18 nities to participate across all States, and, be-
19 ginning in year 3, past history of each State in
20 meeting energy savings and cost-effectiveness
21 targets.

22 “(C) ELECTRIC AND NATURAL GAS SAV-
23 INGS CORPORATION.—

24 “(i) ESTABLISHMENT AND CERTIFI-
25 CATION.—Any person may submit an ap-

1 plication to the Secretary for the establish-
2 ment and certification of a not-for-profit
3 corporation, to be known as the Electric
4 and Natural Gas Savings Corporation, to
5 carry out this paragraph. The Secretary
6 shall certify the corporation if the Sec-
7 retary determines that the corporation has
8 submitted the most qualified application
9 indicating capability to carry out this para-
10 graph. The Secretary may revoke such cer-
11 tification at any time for good cause, and
12 in any such case, the Secretary may accept
13 applications from other persons and certify
14 another person as the Electric and Natural
15 Gas Savings Corporation.

16 “(ii) AUTHORITY OF CORPORATION.—

17 No person may distribute more than
18 800,000 megawatt-hours of electric energy
19 or more than 1 billion cubic feet of natural
20 gas to consumers in the United States for
21 purposes other than resale in any calendar
22 year, including electricity or natural gas
23 supplied by unregulated suppliers, regard-
24 less of whether such suppliers are affiliated
25 or unaffiliated with the distributor unless

1 such person complies with requirements es-
2 tablished by the Corporation for the pay-
3 ment of fees under this paragraph.

4 “(iii) STATUS OF CORPORATION.—The
5 Corporation shall not be treated as a de-
6 partment, agency, or instrumentality of the
7 United States for any purpose.

8 “(iv) BOOKS AND RECORDS.—The
9 books and records of the Corporation shall
10 be available to the public at reasonable
11 hours and under reasonable conditions,
12 without charge.

13 “(v) PENALTY.—Any person who vio-
14 lates clause (ii) of this subparagraph shall
15 be subject to a civil penalty to be assessed
16 and collected by the Secretary in the
17 amount equal to three times the total of
18 the fees which are due and payable to the
19 corporation under this paragraph.

20 “(e) ENFORCEMENT OF COMPLIANCE.—

21 “(1) IN GENERAL.—If a State regulatory au-
22 thority with jurisdiction over a retail electricity or
23 natural gas distributor notifies the Secretary that
24 the State regulatory authority will enforce compli-
25 ance by the distributor with the performance stand-

1 ard under this section, the State regulatory author-
2 ity shall have the authority to administer and en-
3 force the performance standard for the distributor
4 under State law.

5 “(2) AUTHORITY OF SECRETARY.—The Sec-
6 retary shall administer and enforce the performance
7 standard for all electricity and natural gas distribu-
8 tors for which a State regulatory authority described
9 in paragraph (1) has not notified the Secretary as
10 described in that paragraph.

11 “(3) COMPLIANCE REPORT.—Not later than
12 July 1, 2010, and every 2 years thereafter, each re-
13 tail electricity and natural gas distributor shall sub-
14 mit a compliance report conforming to the provisions
15 of the rule described in subsection (c)(3) to either—

16 “(A) the appropriate State regulatory au-
17 thority, if the authority has notified the Sec-
18 retary as described in paragraph (1); or

19 “(B) the Secretary.

20 “(4) FAILURE TO COMPLY.—

21 “(A) IN GENERAL.—In the case of any re-
22 tail electricity or natural gas distributor for
23 which the Secretary is enforcing compliance
24 with the standards under this section, if the
25 distributor fails to comply with the performance

1 standard for more than one calendar year, the
2 Secretary shall__

3 “(i) determine the number of kilowatt-
4 hours of electricity savings, or therms of
5 natural gas savings, by which the dis-
6 tributor has fallen short of meeting the
7 performance standard; and

8 “(ii) by order, require the distributor,
9 after notice and opportunity for hearing, to
10 deposit in the escrow account established
11 under paragraph (8)(B) of subsection (e)
12 an amount equal to 6.0 cents per kilowatt-
13 hour for each such kilowatt hour, and 60
14 cents per therm for each such therm.

15 “(B) JUDICIAL REVIEW OF ORDERS.—

16 “(i) IN GENERAL.—A retail electricity
17 or natural gas distributor ordered to make
18 a payment under subparagraph (A)(ii)
19 may, not later than 60 days after the date
20 of issuance of the order, bring a civil ac-
21 tion in the United States Court of Appeals
22 for the District of Columbia for judicial re-
23 view of the order.

24 “(ii) REMEDIES.—The court specified
25 in clause (i) shall have jurisdiction to enter

1 a judgment affirming, modifying, or set-
2 ting aside an order that is the subject of
3 a civil action brought under that clause, or
4 remanding the order, in whole or in part,
5 to the Secretary.

6 “(f) INFORMATION COLLECTION.—The Secretary
7 may collect any information necessary to verify and audit
8 each of the following:

9 “(1) The annual electric energy sales, natural
10 gas sales, electricity savings, and natural gas savings
11 of any entity applying for electricity or natural gas
12 savings credits under this section.

13 “(2) The validity of electricity or natural gas
14 savings credits submitted by a retail electricity or
15 natural gas distributor to the Secretary.

16 “(3) The quantity of electricity and natural gas
17 sales of all retail electricity and natural gas distribu-
18 tors.

19 “(g) STATE LAW.—

20 “(1) IN GENERAL.—Nothing in this section su-
21 persedes or otherwise affects any State or local law
22 or regulation requiring or otherwise relating to elec-
23 tricity or natural gas savings to the extent that the
24 State or local law or regulation contains more strin-
25 gent savings requirements or has different proce-

1 dures for buyout or penalties than those contained
2 in this section.

3 “(2) SITE-SPECIFIC SAVINGS.—A State may re-
4 quire the performance standard for electricity or
5 natural gas savings of any distributor within its ju-
6 risdiction to be achieved by measures undertaken—

7 “(A) within the State;

8 “(B) within the service territory of any re-
9 gional transmission organization serving the
10 State;

11 “(C) within any group of States partici-
12 pating in a regional program for the control of
13 green house gas emissions; or

14 “(D) within any airshed designated by the
15 State.

16 “(3) TREATMENT UNDER STATE LAW.—A retail
17 electricity or natural gas distributor that achieves
18 electricity or natural gas savings under this section
19 in accordance with any State or local savings re-
20 quirement specifically applicable to such distributor
21 shall be entitled to full credit under this section for
22 the savings to the extent that the savings meet the
23 requirements of this section (including regulations
24 issued under this section), including measurement,
25 verification, and monitoring requirements.

1 “(h) DEVELOPMENT OF MODEL PROVISIONS.—Not
2 later than 18 months after the date of enactment of this
3 section, the Federal Energy Regulatory Commission shall,
4 following public notice and comment, develop and publish
5 model provisions for adoption by State utility regulatory
6 commissions regarding each of the following:

7 “(1) REVENUE STABILITY AND INCENTIVES
8 FOR DISTRIBUTORS.—Policies for rate-setting and
9 return on investment for State-regulated electricity
10 and natural gas distributors that participate in suc-
11 cessful, cost-effective energy efficiency programs.
12 Such model language shall include provisions for de-
13 coupling the earnings of such regulated entities from
14 full dependence on the volume of electricity or nat-
15 ural gas distributed by them to customer facilities.
16 Such model language shall also include provisions
17 for policies for cost recovery and other financial in-
18 centives, such that electric and gas utility investors
19 are rewarded similarly for similar levels of invest-
20 ment in customer energy efficiency and in conven-
21 tional utility assets and that regulated utilities are
22 encouraged to include end-use efficiency measures
23 and utility-owned, customer-owned, or third party-
24 owned CHP systems in electric capacity and trans-
25 mission and distribution plans.

1 “(2) NONDISCRIMINATORY IDENTIFICATION OF
2 COST-EFFECTIVE SAVINGS OPPORTUNITIES.—Estab-
3 lishing a public, nondiscriminatory bidding process
4 open to customers and demand side management
5 service providers to identify cost-effective electricity
6 or natural gas savings opportunities within a retail
7 electricity or natural gas distributor’s service area.
8 The model bidding plan shall provide for a dis-
9 tributor to procure all or a portion of its proposed
10 savings measures, including measures proposed by
11 the distributor or its affiliates, in cost-effective rank
12 order. The model plan shall also address the process
13 that will be used by the distributor to identify and
14 obtain further electricity or natural gas savings in
15 the event that insufficient savings are procured
16 through the bid process.

17 “(3) DEVELOPMENT OF MODEL LANGUAGE ON
18 REVENUE DECOUPLING AND SHAREHOLDER INCEN-
19 TIVES IN RATEMAKING POLICIES.—Rate-setting and
20 earnings for State-regulated electricity and natural
21 gas distributors that participate in successful, cost-
22 effective energy efficiency programs. Such model
23 language shall include, but not be limited to, rec-
24 ommendations for decoupling the earnings of such
25 regulated entities from full dependence on the vol-

1 ume of electricity or natural gas distributed by them
2 to customer facilities. Such model language shall
3 also include recommendations for policies for cost re-
4 covery and shareholder incentives, such that electric
5 and gas utility investors are rewarded similarly for
6 similar levels of investment in customer energy effi-
7 ciency and in conventional utility assets.

8 “(i) STATE ADOPTION OF FERC MODEL PROVI-
9 SIONS.—Each State utility regulatory authority shall
10 adopt the model provisions referred to in subsection (h)
11 in the same manner and subject to the same rules and
12 review as apply in the case of standards referred to in
13 section 113(b) and 303(b). For purposes of any provision
14 of title I or III of this Act, the model provisions referred
15 to in subsection (h) shall be treated as standards under
16 section 113(b) (in the case of State regulated electricity
17 distributors) or 303(b) (in the case of natural gas distribu-
18 tors), except that in the case of such model provisions,
19 any reference contained in this Act to the date of enact-
20 ment of this Act shall be deemed to be a reference to the
21 date of enactment of this section. Each such State utility
22 regulatory authority shall adopt the model provisions not
23 later than 24 months after the date of enactment of this
24 section in the case of paragraphs (1) and (2) of subsection

1 (h) or 42 months after such date of enactment in the case
2 of paragraph (3) of subsection (h)).”.

3 (b) TABLE OF CONTENTS.—The table of contents for
4 title VI of such Act is amended by adding the following
5 new items at the end thereof:

“Sec. 609. Rural and remote communities electrification grants.

“Sec. 610. Efficiency resource standard for retail electricity and natural gas
distributors.”.

6 **Subtitle E—Renewable Portfolio**
7 **Standard**

8 **SEC. 441. RENEWABLE PORTFOLIO STANDARD.**

9 Title VI of the Public Utility Regulatory Policies Act
10 of 1978 (16 U.S.C. 2601 et seq.) is amended by adding
11 at the end the following:

12 **“SEC. 609. FEDERAL RENEWABLE PORTFOLIO STANDARD.**

13 “(a) RENEWABLE ENERGY REQUIREMENT.—

14 “(1) IN GENERAL.—Each electric utility that
15 sells electricity to electric consumers shall obtain a
16 percentage of the base amount of electricity it sells
17 to electric consumers in any calendar year from new
18 renewable energy or existing renewable energy. The
19 percentage obtained in a calendar year shall not be
20 less than the amount specified in the following table:

“Calendar Year	Minimum Annual Percentage
2008 through 2011	5.0
2012 through 2015	10.0
2016 through 2019	15.0
2020 through 2030	20.0.

1 “(2) MEANS OF COMPLIANCE.—An electric util-
2 ity shall meet the requirements of paragraph (1)
3 by—

4 “(A) generating electric energy using new
5 renewable energy or existing renewable energy;

6 “(B) purchasing electric energy generated
7 by new renewable energy or existing renewable
8 energy;

9 “(C) purchasing renewable energy credits
10 issued under subsection (b); or

11 “(D) a combination of the foregoing.

12 “(b) RENEWABLE ENERGY CREDIT TRADING PRO-
13 GRAM.—

14 “(1) Not later than January 1, 2008, the Sec-
15 retary shall establish a renewable energy credit trad-
16 ing program to permit an electric utility that does
17 not generate or purchase enough electric energy
18 from renewable energy to meet its obligations under
19 subsection (a)(1) to satisfy such requirements by
20 purchasing sufficient renewable energy credits.

21 “(2) As part of such program the Secretary
22 shall—

23 “(A) issue renewable energy credits to gen-
24 erators of electric energy from new renewable
25 energy;

1 “(B) sell renewable energy credits to elec-
2 tric utilities at the rate of 1.5 cents per kilo-
3 watt-hour (as adjusted for inflation under sub-
4 section (g));

5 “(C) ensure that a kilowatt hour, including
6 the associated renewable energy credit, shall be
7 used only once for purposes of compliance with
8 this section; and

9 “(D) allow double credits for generation
10 from facilities on Indian Lands, and triple cred-
11 its for generation from small renewable distrib-
12 uted generators (meaning those no larger than
13 1 megawatt).

14 “(3) Credits under paragraph (2)(A) may only
15 be used for compliance with this section for 3 years
16 from the date issued.

17 “(c) ENFORCEMENT.—

18 “(1) CIVIL PENALTIES.—Any electric utility
19 that fails to meet the renewable energy requirements
20 of subsection (a) shall be subject to a civil penalty.

21 “(2) AMOUNT OF PENALTY.—The amount of
22 the civil penalty shall be determined by multiplying
23 the number of kilowatt-hours of electric energy sold
24 to electric consumers in violation of subsection (a)
25 by the greater of 1.5 cents (adjusted for inflation

1 under subsection (g)) or 200 percent of the average
2 market value of renewable energy credits during the
3 year in which the violation occurred.

4 “(3) MITIGATION OR WAIVER.—The Secretary
5 may mitigate or waive a civil penalty under this sub-
6 section if the electric utility was unable to comply
7 with subsection (a) for reasons outside of the rea-
8 sonable control of the utility. The Secretary shall re-
9 duce the amount of any penalty determined under
10 paragraph (2) by an amount paid by the electric
11 utility to a State for failure to comply with the re-
12 quirement of a State renewable energy program if
13 the State requirement is greater than the applicable
14 requirement of subsection (a).

15 “(4) PROCEDURE FOR ASSESSING PENALTY.—
16 The Secretary shall assess a civil penalty under this
17 subsection in accordance with the procedures pre-
18 scribed by section 333(d) of the Energy Policy and
19 Conservation Act of 1954 (42 U.S.C. 6303).

20 “(d) STATE RENEWABLE ENERGY ACCOUNT PRO-
21 GRAM.—

22 “(1) The Secretary shall establish, not later
23 than December 31, 2008, a State renewable energy
24 account program.

1 “(2) All money collected by the Secretary from
2 the sale of renewable energy credits and the assess-
3 ment of civil penalties under this section shall be de-
4 posited into the renewable energy account estab-
5 lished pursuant to this subsection. The State renew-
6 able energy account shall be held by the Secretary
7 and shall not be transferred to the Treasury Depart-
8 ment.

9 “(3) Proceeds deposited in the State renewable
10 energy account shall be used by the Secretary, sub-
11 ject to appropriations, for a program to provide
12 grants to the State agency responsible for developing
13 State energy conservation plans under section 362 of
14 the Energy Policy and Conservation Act (42 U.S.C.
15 6322) for the purposes of promoting renewable en-
16 ergy production, including programs that promote
17 technologies that reduce the use of electricity at cus-
18 tomer sites such as solar water heating.

19 “(4) The Secretary may issue guidelines and
20 criteria for grants awarded under this subsection.
21 State energy offices receiving grants under this sec-
22 tion shall maintain such records and evidence of
23 compliance as the Secretary may require.

24 “(5) In allocating funds under this program,
25 the Secretary shall give preference—

1 “(A) to States in regions which have a dis-
2 proportionately small share of economically sus-
3 tainable renewable energy generation capacity;
4 and (B) to State programs to stimulate or en-
5 hance innovative renewable energy technologies.

6 “(e) RULES.—The Secretary shall issue rules imple-
7 menting this section not later than 1 year after the date
8 of enactment of this section.

9 “(f) EXEMPTIONS.—This section shall not apply in
10 any calendar year to an electric utility—

11 “(1) that sold less than 4,000,000 megawatt-
12 hours of electric energy to electric consumers during
13 the preceding calendar year; or

14 “(2) in Hawaii.

15 “(g) INFLATION ADJUSTMENT.—Not later than De-
16 cember 31 of each year beginning in 2008, the Secretary
17 shall adjust for inflation the price of a renewable energy
18 credit under subsection (b)(2)(B) and the amount of the
19 civil penalty per kilowatt-hour under subsection (c)(2).

20 “(h) STATE PROGRAMS.—Nothing in this section
21 shall diminish any authority of a State or political subdivi-
22 sion thereof to adopt or enforce any law or regulation re-
23 specting renewable energy, but, except as provided in sub-
24 section (c)(3), no such law or regulation shall relieve any
25 person of any requirement otherwise applicable under this

1 section. The Secretary, in consultation with States having
2 such renewable energy programs, shall, to the maximum
3 extent practicable, facilitate coordination between the Fed-
4 eral program and State programs.

5 “(i) DEFINITIONS.—For purposes of this section:

6 “(1) BASE AMOUNT OF ELECTRICITY.—The
7 term ‘base amount of electricity’ means the total
8 amount of electricity sold by an electric utility to
9 electric consumers in a calendar year, excluding—

10 “(A) electricity generated by a hydro-
11 electric facility (including a pumped storage fa-
12 cility but excluding incremental hydropower);
13 and

14 “(B) electricity generated through the in-
15 cineration of municipal solid waste.

16 “(2) DISTRIBUTED GENERATION FACILITY.—
17 The term ‘distributed generation facility’ means a
18 facility at a customer site.

19 “(3) EXISTING RENEWABLE ENERGY.—The
20 term ‘existing renewable energy’ means, except as
21 provided in paragraph (7)(B), electric energy gen-
22 erated at a facility (including a distributed genera-
23 tion facility) placed in service prior to the date of
24 enactment of this section from solar, wind, or geo-
25 thermal energy; ocean energy; biomass (as defined in

1 section 203(a) of the Energy Policy Act of 2005); or
2 landfill gas.

3 “(4) GEOTHERMAL ENERGY.—The term ‘geo-
4 thermal energy’ means energy derived from a geo-
5 thermal deposit (within the meaning of section
6 613(e)(2) of the Internal Revenue Code of 1986).

7 “(5) INCREMENTAL GEOTHERMAL PRODUC-
8 TION.—

9 “(A) IN GENERAL.—The term ‘incremental
10 geothermal production’ means for any year the
11 excess of—

12 “(i) the total kilowatt hours of elec-
13 tricity produced from a facility (including a
14 distributed generation facility) using geo-
15 thermal energy, over

16 “(ii) the average annual kilowatt
17 hours produced at such facility for 5 of the
18 previous 7 calendar years before the date
19 of enactment of this section after elimi-
20 nating the highest and the lowest kilowatt
21 hour production years in such 7-year pe-
22 riod.

23 “(B) SPECIAL RULE.—A facility described
24 in subparagraph (A) which was placed in serv-
25 ice at least 7 years before the date of enactment

1 of this section shall commence with the year
2 in which such date of enactment occurs, reduce
3 the amount calculated under subparagraph
4 (A)(ii) each year, on a cumulative basis, by the
5 average percentage decrease in the annual kilo-
6 watt hour production for the 7-year period de-
7 scribed in subparagraph (A)(ii) with such cu-
8 mulative sum not to exceed 30 percent.

9 “(6) INCREMENTAL HYDROPOWER.—The term
10 ‘incremental hydropower’ means additional energy
11 generated as a result of efficiency improvements or
12 capacity additions made on or after the date of en-
13 actment of this section or the effective date of an ex-
14 isting applicable State renewable portfolio standard
15 program at a hydroelectric facility that was placed
16 in service before that date. The term does not in-
17 clude additional energy generated as a result of
18 operational changes not directly associated with effi-
19 ciency improvements or capacity additions. Effi-
20 ciency improvements and capacity additions shall be
21 measured on the basis of the same water flow infor-
22 mation used to determine a historic average annual
23 generation baseline for the hydroelectric facility and
24 certified by the Secretary or the Federal Energy
25 Regulatory Commission.

1 “(7) NEW RENEWABLE ENERGY.—The term
2 ‘new renewable energy’ means—

3 “(A) electric energy generated at a facility
4 (including a distributed generation facility)
5 placed in service on or after January 1, 2003,
6 from—

7 “(i) solar, wind, or geothermal energy
8 or ocean energy;

9 “(ii) biomass (as defined in section
10 203(a) of the Energy Policy Act of 2005);

11 “(iii) landfill gas; or

12 “(iv) incremental hydropower; and

13 “(B) for electric energy generated at a fa-
14 cility (including a distributed generation facil-
15 ity) placed in service prior to the date of enact-
16 ment of this section—

17 “(i) the additional energy above the
18 average generation in the 3 years pre-
19 ceding the date of enactment of this sec-
20 tion at the facility from—

21 “(I) solar or wind energy or
22 ocean energy;

23 “(II) biomass (as defined in sec-
24 tion 203(a) of the Energy Policy Act
25 of 2005);

1 “(III) landfill gas; or

2 “(IV) incremental hydropower.

3 “(ii) the incremental geothermal pro-
4 duction.

5 “(8) OCEAN ENERGY.—The term ‘ocean energy’
6 includes current, wave, tidal, and thermal energy.

7 “(j) SUNSET.—This section expires on December 31,
8 2030.”.

9 **Subtitle F—Marine and Hydro-**
10 **kinetic Renewable Energy Pro-**
11 **motion**

12 **SEC. 451. SHORT TITLE.**

13 This subtitle may be cited as the “Marine and
14 Hydrokinetic Renewable Energy Promotion Act of 2007”.

15 **SEC. 452. DEFINITION.**

16 For purposes of this subtitle, the term “marine and
17 hydrokinetic renewable energy” means electrical energy
18 from—

19 (1) waves, tides, and currents in oceans, estu-
20 aries, and tidal areas;

21 (2) free flowing water in rivers, lakes, and
22 streams;

23 (3) free flowing water in man-made channels,
24 including projects that utilize nonmechanical struc-

1 tures to accelerate the flow of water for electric
2 power production purposes; and
3 (4) differentials in ocean temperature (ocean
4 thermal energy conversion).

5 The term shall not include energy from any source that
6 utilizes a dam, diversionary structure, or impoundment for
7 electric power production purposes, except as provided in
8 paragraph (3).

9 **SEC. 453. RESEARCH AND DEVELOPMENT.**

10 (a) PROGRAM.—The Secretary of Energy, in con-
11 sultation with the Secretary of Commerce and the Sec-
12 retary of the Interior, shall establish a program of marine
13 and hydrokinetic renewable energy research focused on—

14 (1) developing and demonstrating marine and
15 hydrokinetic renewable energy technologies;

16 (2) reducing the manufacturing and operation
17 costs of marine and hydrokinetic renewable energy
18 technologies;

19 (3) increasing the reliability and survivability of
20 marine and hydrokinetic renewable energy facilities;

21 (4) integrating marine and hydrokinetic renew-
22 able energy into electric grids;

23 (5) identifying opportunities for cross fertiliza-
24 tion and development of economies of scale between

1 offshore wind and marine and hydrokinetic renew-
2 able energy sources;

3 (6) identifying, in consultation with the Sec-
4 retary of Commerce and the Secretary of the Inte-
5 rior, the environmental impacts of marine and
6 hydrokinetic renewable energy technologies and ways
7 to address adverse impacts, and providing public in-
8 formation concerning technologies and other means
9 available for monitoring and determining environ-
10 mental impacts; and

11 (7) standards development, demonstration, and
12 technology transfer for advanced systems engineer-
13 ing and system integration methods to identify crit-
14 ical interfaces.

15 (b) AUTHORIZATION OF APPROPRIATIONS.—There
16 are authorized to be appropriated to the Secretary of En-
17 ergy for carrying out this section \$50,000,000 for each
18 of the fiscal years 2008 through 2017.

19 **SEC. 454. ADAPTIVE MANAGEMENT AND ENVIRONMENTAL**
20 **FUND.**

21 (a) FINDINGS.—The Congress finds that—

22 (1) the use of marine and hydrokinetic renew-
23 able energy technologies can avoid contributions to
24 global warming gases, and such technologies can be
25 produced domestically;

1 (2) marine and hydrokinetic renewable energy
2 is a nascent industry; and

3 (3) the United States must work to promote
4 new renewable energy technologies that reduce con-
5 tributions to global warming gases and improve our
6 country's domestic energy production in a manner
7 that is consistent with environmental protection,
8 recreation, and other public values.

9 (b) ESTABLISHMENT.—The Secretary of Energy
10 shall establish an Adaptive Management and Environ-
11 mental Fund, and shall lend amounts from that fund to
12 entities described in subsection (f) to cover the costs of
13 projects that produce marine and hydrokinetic renewable
14 energy. Such costs include design, fabrication, deploy-
15 ment, operation, monitoring, and decommissioning costs.
16 Loans under this section may be subordinate to project-
17 related loans provided by commercial lending institutions
18 to the extent the Secretary of Energy considers appro-
19 priate.

20 (c) REASONABLE ACCESS.—As a condition of receiv-
21 ing a loan under this section, a recipient shall provide rea-
22 sonable access, to Federal or State agencies and other re-
23 search institutions as the Secretary considers appropriate,
24 to the project area and facilities for the purposes of inde-
25 pendent environmental research.

1 (d) PUBLIC AVAILABILITY.—The results of any as-
2 sessment or demonstration paid for, in whole or in part,
3 with funds provided under this section shall be made avail-
4 able to the public, except to the extent that they contain
5 information that is protected from disclosure under sec-
6 tion 552(b) of title 5, United States Code.

7 (e) REPAYMENT OF LOANS.—

8 (1) IN GENERAL.—The Secretary of Energy
9 shall require a recipient of a loan under this section
10 to repay the loan, plus interest at a rate of 2.1 per-
11 cent per year, over a period not to exceed 20 years,
12 beginning after the commercial generation of electric
13 power from the project commences. Such repayment
14 shall be required at a rate that takes into account
15 the economic viability of the loan recipient and en-
16 sures regular and timely repayment of the loan.

17 (2) BEGINNING OF REPAYMENT REQUIRED.—
18 No repayments shall be required under this sub-
19 section until after the project generates net pro-
20 ceeds. For purposes of this paragraph, the term “net
21 proceeds” means proceeds from the commercial sale
22 of electricity after payment of project-related costs,
23 including taxes and regulatory fees that have not
24 been paid using funds from a loan provided for the
25 project under this section.

1 (3) TERMINATION.—Repayment of a loan made
2 under this section shall terminate as of the date that
3 the project for which the loan was provided ceases
4 commercial generation of electricity if a govern-
5 mental permitting authority has ordered the closure
6 of the facility because of a finding that the project
7 has unacceptable adverse environmental impacts, ex-
8 cept that the Secretary shall require a loan recipient
9 to continue making loan repayments for the cost of
10 equipment, obtained using funds from the loan that
11 have not otherwise been repaid under rules estab-
12 lished by the Secretary, that is utilized in a subse-
13 quent project for the commercial generation of elec-
14 tricity.

15 (f) ADAPTIVE MANAGEMENT PLAN.—In order to re-
16 ceive a loan under this section, an applicant for a Federal
17 license or permit to construct, operate, or maintain a ma-
18 rine or hydrokinetic renewable energy project shall provide
19 to the Federal agency with primary jurisdiction to issue
20 such license or permit an adaptive management plan for
21 the proposed project. Such plan shall—

22 (1) be prepared in consultation with other par-
23 ties to the permitting or licensing proceeding, includ-
24 ing all Federal, State, municipal, and tribal agencies
25 with authority under applicable Federal law to re-

1 quire or recommend design or operating conditions,
2 for protection, mitigation, and enhancement of fish
3 and wildlife resources, water quality, navigation,
4 public safety, land reservations, or recreation, for in-
5 corporation into the permit or license;

6 (2) set forth specific and measurable objectives
7 for the protection, mitigation, and enhancement of
8 fish and wildlife resources, water quality, navigation,
9 public safety, land reservations, or recreation, as re-
10 quired or recommended by governmental agencies
11 described in paragraph (1), and shall require moni-
12 toring to ensure that these objectives are met;

13 (3) provide specifically for the modification or,
14 if necessary, removal of the marine or hydrokinetic
15 renewable energy project based on findings by the li-
16 censing or permitting agency that the marine or
17 hydrokinetic renewable energy project has not at-
18 tained or will not attain the specific and measurable
19 objectives set forth in paragraph (2); and

20 (4) be approved and incorporated in the Fed-
21 eral license or permit.

22 (g) SUNSET.—The Secretary of Energy shall trans-
23 mit a report to the Congress when the Secretary of Energy
24 determines that the technologies supported under this sub-
25 title have achieved a level of maturity sufficient to enable

1 the expiration of the programs under this subtitle. The
2 Secretary of Energy shall not make any new loans under
3 this section after the report is transmitted under this sub-
4 section.

5 **SEC. 455. PROGRAMMATIC ENVIRONMENTAL IMPACT**
6 **STATEMENT.**

7 The Secretary of Commerce and the Secretary of the
8 Interior shall, in cooperation with the Federal Energy
9 Regulatory Commission and the Secretary of Energy, and
10 in consultation with appropriate State agencies, jointly
11 prepare programmatic environmental impact statements
12 which contain all the elements of an environmental impact
13 statement under section 102 of the National Environ-
14 mental Policy Act of 1969 (42 U.S.C. 4332), regarding
15 the impacts of the deployment of marine and hydrokinetic
16 renewable energy technologies in the navigable waters of
17 the United States. One programmatic environmental im-
18 pact statement shall be prepared under this section for
19 each of the Environmental Protection Agency regions of
20 the United States. The agencies shall issue the pro-
21 grammatic environmental impact statements under this
22 section not later than 18 months after the date of enact-
23 ment of this Act. The programmatic environmental impact
24 statements shall evaluate among other things the potential
25 impacts of site selection on fish and wildlife and related

1 habitat. Nothing in this section shall operate to delay con-
2 sideration of any application for a license or permit for
3 a marine and hydrokinetic renewable energy technology
4 project.

5 **Subtitle G—Carbon Capture and** 6 **Sequestration**

7 **SEC. 461. CARBON CAPTURE AND STORAGE RESEARCH, DE-** 8 **VELOPMENT, AND DEMONSTRATION PRO-** 9 **GRAM.**

10 (a) AMENDMENTS.—Section 963 of the Energy Pol-
11 icy Act of 2005 (42 U.S.C. 16293) is amended—

12 (1) in the section heading, by striking “**RE-**
13 **SEARCH AND DEVELOPMENT**” and inserting
14 “**AND STORAGE RESEARCH, DEVELOPMENT,**
15 **AND DEMONSTRATION**”;

16 (2) in subsection (a)—

17 (A) by striking “research and develop-
18 ment” and inserting “and storage research, de-
19 velopment, and demonstration”; and

20 (B) by striking “capture technologies on
21 combustion-based systems” and inserting “cap-
22 ture and storage technologies related to energy
23 systems”;

24 (3) in subsection (b)—

1 (A) in paragraph (3), by striking “and” at
2 the end;

3 (B) in paragraph (4), by striking the pe-
4 riod at the end and inserting “; and”; and

5 (C) by adding at the end the following:

6 “(5) to expedite and carry out large-scale test-
7 ing of carbon sequestration systems in a range of ge-
8 ological formations that will provide information on
9 the cost and feasibility of deployment of sequestra-
10 tion technologies.”; and

11 (4) by striking subsection (e) and inserting the
12 following:

13 “(c) PROGRAMMATIC ACTIVITIES.—

14 “(1) ENERGY RESEARCH AND DEVELOPMENT
15 UNDERLYING CARBON CAPTURE AND STORAGE
16 TECHNOLOGIES.—

17 “(A) IN GENERAL.—The Secretary shall
18 carry out fundamental science and engineering
19 research (including laboratory-scale experi-
20 ments, numeric modeling, and simulations) to
21 develop and document the performance of new
22 approaches to capture and store carbon dioxide.

23 “(B) PROGRAM INTEGRATION.—The Sec-
24 retary shall ensure that fundamental research
25 carried out under this paragraph is appro-

1 priately applied to energy technology develop-
2 ment activities and the field testing of carbon
3 sequestration activities, including—

4 “(i) development of new or improved
5 technologies for the capture of carbon diox-
6 ide;

7 “(ii) modeling and simulation of geo-
8 logical sequestration field demonstrations;
9 and

10 “(iii) quantitative assessment of risks
11 relating to specific field sites for testing of
12 sequestration technologies.

13 “(2) FIELD VALIDATION TESTING ACTIVI-
14 TIES.—

15 “(A) IN GENERAL.—The Secretary shall
16 promote, to the maximum extent practicable,
17 regional carbon sequestration partnerships to
18 conduct geologic sequestration tests involving
19 carbon dioxide injection and monitoring, mitiga-
20 tion, and verification operations in a variety of
21 candidate geological settings, including—

22 “(i) operating oil and gas fields;

23 “(ii) depleted oil and gas fields;

24 “(iii) unmineable coal seams;

25 “(iv) saline formations; and

1 “(v) deep geologic systems that may
2 be used as engineered reservoirs to extract
3 economical quantities of heat from geo-
4 thermal resources of low permeability or
5 porosity.

6 “(B) OBJECTIVES.—The objectives of tests
7 conducted under this paragraph shall be—

8 “(i) to develop and validate geo-
9 physical tools, analysis, and modeling to
10 monitor, predict, and verify carbon dioxide
11 containment;

12 “(ii) to validate modeling of geological
13 formations;

14 “(iii) to refine storage capacity esti-
15 mated for particular geological formations;

16 “(iv) to determine the fate of carbon
17 dioxide concurrent with and following in-
18 jection into geological formations;

19 “(v) to develop and implement best
20 practices for operations relating to, and
21 monitoring of, injection and storage of car-
22 bon dioxide in geologic formations;

23 “(vi) to assess and ensure the safety
24 of operations related to geological storage
25 of carbon dioxide; and

1 “(vii) to allow the Secretary to pro-
2 mulgate policies, procedures, requirements,
3 and guidance to ensure that the objectives
4 of this subparagraph are met in large-scale
5 testing and deployment activities for car-
6 bon capture and storage that are funded
7 by the Department of Energy.

8 “(3) LARGE-SCALE TESTING AND DEPLOY-
9 MENT.—

10 “(A) IN GENERAL.—The Secretary shall
11 conduct not less than 7 initial large-volume se-
12 questration tests for geological containment of
13 carbon dioxide (at least 1 of which shall be
14 international in scope) to validate information
15 on the cost and feasibility of commercial deploy-
16 ment of technologies for geological containment
17 of carbon dioxide.

18 “(B) DIVERSITY OF FORMATIONS TO BE
19 STUDIED.—In selecting formations for study
20 under this paragraph, the Secretary shall con-
21 sider a variety of geological formations across
22 the United States, and require characterization
23 and modeling of candidate formations, as deter-
24 mined by the Secretary.

1 “(4) PREFERENCE IN PROJECT SELECTION
2 FROM MERITORIOUS PROPOSALS.—In making com-
3 petitive awards under this subsection, subject to the
4 requirements of section 989, the Secretary shall give
5 preference to proposals from partnerships among in-
6 dustrial, academic, and government entities.

7 “(5) COST SHARING.—Activities under this sub-
8 section shall be considered research and development
9 activities that are subject to the cost-sharing re-
10 quirements of section 988(b).

11 “(d) AUTHORIZATION OF APPROPRIATIONS.—There
12 are authorized to be appropriated to carry out this sec-
13 tion—

14 “(1) \$90,000,000 for fiscal year 2008;

15 “(2) \$105,000,000 for fiscal year 2009; and

16 “(3) \$120,000,000 for fiscal year 2010.”.

17 (b) TABLE OF CONTENTS AMENDMENT.—The item
18 relating to section 963 in the table of contents for the En-
19 ergy Policy Act of 2005 is amended to read as follows:

“Sec. 963. Carbon capture and storage research, development, and demonstra-
tion program.”.

1 **TITLE V—GREEN WORKFORCE**
2 **Subtitle A—Small Manufacturer**
3 **Assistance**

4 **SEC. 501. SMALL MANUFACTURER ASSISTANCE THROUGH**
5 **HOLLINGS MANUFACTURING EXTENSION**
6 **PARTNERSHIP PROGRAM.**

7 (a) IN GENERAL.—Subsection (b) of section 25 of the
8 National Institute of Standards and Technology Act (15
9 U.S.C. 278k(b)) is amended by striking “and” at the end
10 of paragraph (2), by striking the period at the end of para-
11 graph (3) and inserting “; and”, and by adding at the
12 end the following new paragraph:

13 “(4) information sharing and planning assist-
14 ance for small manufacturing firms in identifying
15 and implementing new green manufacturing tech-
16 nologies.”.

17 (b) AUTHORIZATION OF APPROPRIATIONS.—There
18 are authorized to be appropriated for the assistance de-
19 scribed in paragraph (4) of section 25 of such Act
20 \$50,000,000 for fiscal year 2009 and for each fiscal year
21 thereafter.

1 **Subtitle B—Green Workforce**
2 **Education Incentives**

3 **SEC. 511. NATIONAL GREEN CERTIFICATION STANDARDS.**

4 (a) IN GENERAL.—Not later than 1 year after the
5 date of the enactment of this Act and every 3 years there-
6 after, the Environmental Protection Agency, the Institute
7 of Environmental Health Sciences, National Science
8 Foundation, and National Oceanic and Atmospheric Ad-
9 ministration, in consultation with the Department of
10 Labor and Education, (hereinafter in this subtitle collec-
11 tively referred to as the “Green Certification Standards
12 Board”) shall establish the green workforce standards de-
13 scribed in subsection (b).

14 (b) GREEN WORKFORCE STANDARDS.—The green
15 workforce standards described in this subsection are
16 standards—

17 (1) for successfully training individuals in ad-
18 vanced vehicle manufacturing, alternative fuel vehi-
19 cle repair and maintenance, energy technology prod-
20 uct development and deployment, and green building
21 design and construction, and

22 (2) designed to be applied in determining—

23 (A) eligibility for grants under sections
24 512, 513, 514, and 515, and

1 (B) whether requirements for instruction
2 in green workforce skills are met for purposes
3 of determining eligibility for loan forgiveness
4 under section 428L of the Higher Education
5 Act of 1965.

6 **SEC. 512. ENVIRONMENTALLY LITERATE WORKFORCE**
7 **GRANT PROGRAM.**

8 (a) IN GENERAL.—The Secretary of Education may
9 make grants, in consultation with the Green Certification
10 Standards Board, to institutions of higher education to
11 use for any of the following purposes:

12 (1) Reducing or eliminating dependency on
13 combustion engines in the operation of the institu-
14 tion.

15 (2) Establishing environmental and green en-
16 ergy literacy instruction as a requirement for an un-
17 dergraduate degree.

18 (3) Integrating environmental awareness and
19 sustainability curriculum in programs of instruction,
20 particularly in business, engineering, architecture,
21 technology, manufacturing programs.

22 (4) Conducting professional development pro-
23 grams for faculty in all disciplines to enable faculty
24 to incorporate environmental and sustainability con-
25 tent in their courses.

1 (b) APPLICATION REQUIREMENT.—To be eligible for
2 a grant under this section, an eligible entity shall prepare
3 and submit to the Secretary an application at such time,
4 and in such manner, and containing such information as
5 the Secretary may require.

6 (c) ELIGIBLE ENTITY.—For purposes of this section,
7 the term “eligible entity” means any institution of higher
8 education that has been deemed qualified by the Green
9 Certification Standards Board.

10 (d) AUTHORIZATION OF APPROPRIATIONS.—There
11 are authorized to be appropriated to the Secretary such
12 sums as are necessary to carry out this section.

13 **SEC. 513. CARBON NEUTRALITY GRANTS IN INSTITUTIONS**
14 **OF HIGHER EDUCATIONS.**

15 (a) IN GENERAL.—The Secretary of Education may
16 make grants, in consultation with the Green Certification
17 Standards Board, to institutions of higher education to
18 use for any of the following purposes:

19 (1) Implementing existing plans to achieve full
20 carbon neutrality in the operations of the institution.

21 (2) Disseminating the institution’s best prac-
22 tices to achieving full carbon neutrality.

23 (3) Providing technical assistance and training
24 to the institution’s surrounding community in
25 achieving full carbon neutrality.

1 (b) MATCHING REQUIREMENT.—A grant made under
2 this section may not exceed the amount that the institute
3 of higher education receiving the grant certifies, to the
4 Secretary, will be provided (in cash or in kind) from non-
5 governmental sources to carry out the purposes for which
6 the grant is made.

7 (c) APPLICATION REQUIREMENT.—To be eligible for
8 a grant under this section, an institution of higher edu-
9 cation shall prepare and submit to the Secretary an appli-
10 cation at such time, and in such manner, and containing
11 such information as the Secretary may require.

12 (d) AUTHORIZATION OF APPROPRIATIONS.—There
13 are authorized to be appropriated to the Secretary such
14 sums as are necessary to carry out this section.

15 **SEC. 514. NATIONAL GREEN RANKING SYSTEM GRANT.**

16 (a) IN GENERAL.—

17 (1) GRANT.—The Director of National Institute
18 of Environmental Health Sciences may make grants,
19 in consultation with the Green Certification Stand-
20 ards Board, to a qualified entity to develop and im-
21 plement standards for a national green ranking sys-
22 tem for institutions of higher education based on the
23 following factors:

24 (A) Environmental literacy of an institu-
25 tion's graduates.

1 (B) Availability of programs of instruction
2 in advanced vehicle manufacturing, alternative
3 fuel vehicle repair and maintenance, energy
4 technology product development and deploy-
5 ment, green building design and construction,
6 and other green technology.

7 (C) Extent of the institution's sustainable
8 and low impact facilities and operations.

9 (2) REPORT.—Such ranking system must be re-
10 leased not later than 1 year after the date of the en-
11 actment of this Act, and every 3 years thereafter,
12 and must be made available to the general public
13 and to appropriate publications and student guides.

14 (b) APPLICATION REQUIREMENT.—To be eligible for
15 a grant under this section, an entity shall prepare and
16 submit to the Director an application at such time, and
17 in such manner, and containing such information as the
18 Director may require.

19 (c) AUTHORIZATION OF APPROPRIATIONS.—There
20 are authorized to be appropriated to the Director such
21 sums as are necessary to carry out this section.

22 **SEC. 515. GREEN BUILDING AND ZERO-ENERGY HOME DE-**
23 **SIGN TRAINING GRANTS.**

24 (a) IN GENERAL.—

1 (1) GRANTS.—The Director of National Insti-
2 tute of Environmental Health Sciences may make
3 grants, in consultation with the Green Certification
4 Standards Board, to institutions of higher education
5 to use for programs of instruction which train indi-
6 viduals in any of the following:

7 (A) Green building design and construc-
8 tion.

9 (B) Zero-energy home design and con-
10 struction.

11 (2) GOAL.—It shall be the goal of the grant
12 program to help fund the training of 10,000 stu-
13 dents in the programs of instruction described in
14 paragraph (1).

15 (b) APPLICATION REQUIREMENT.—To be eligible for
16 a grant under this section, an institution of higher edu-
17 cation shall prepare and submit to the Director an applica-
18 tion at such time, and in such manner, and containing
19 such information as the Director may require.

20 (c) AUTHORIZATION OF APPROPRIATIONS.—There
21 are authorized to be appropriated to the Director such
22 sums as are necessary to carry out this section.

1 **SEC. 516. STUDENT LOAN FORGIVENESS FOR GREEN WORK-**
2 **FORCE MEMBERS.**

3 The Higher Education Act of 1965 is amended by
4 inserting after section 428K (20 U.S.C. 1078–11) the fol-
5 lowing:

6 **“SEC. 428L. LOAN FORGIVENESS FOR GREEN WORKFORCE**
7 **MEMBERS.**

8 “(a) PROGRAM AUTHORIZED.—

9 “(1) IN GENERAL.—For the purpose of encour-
10 aging individuals to enter and continue employment
11 as green workforce members, the Secretary is au-
12 thorized, from the funds appropriated under sub-
13 section (h), to forgive, in accordance with this sec-
14 tion, the student loan debt of any new borrower
15 after the date of enactment of the New Apollo En-
16 ergy Act of 2007, who—

17 “(A) is employed as a green workforce
18 member;

19 “(B) incurred such student loan debt in
20 obtaining instruction in green workforce skills
21 that complies with the green workforce stand-
22 ards established under section 511 of the New
23 Apollo Energy Act of 2007; and

24 “(C) is not in default on a loan for which
25 the borrower seeks forgiveness.

1 “(2) METHOD OF LOAN FORGIVENESS.—To
2 provide the loan forgiveness authorized in paragraph
3 (1), the Secretary is authorized to carry out a pro-
4 gram—

5 “(A) through the holder of the loan, to as-
6 sume the obligation to repay a green loan
7 amount (as determined under subsection (b))
8 for a loan made under this part; and

9 “(B) to cancel a green loan amount (as so
10 determined) for a loan made under part D of
11 this title.

12 “(b) QUALIFIED LOAN AMOUNTS.—The Secretary
13 shall forgive the loan obligation of the borrower, in accord-
14 ance with subsection (a)(2), not to exceed \$17,500 in the
15 aggregate, in the following increments:

16 “(1) For the completion of the first 2 years of
17 employment as a green workforce member for which
18 the borrower seeks forgiveness under this section, 20
19 percent of the borrower’s total loan obligation that
20 was incurred in obtaining instruction in green work-
21 force skills that complies with the green workforce
22 standards established under section 511 of the New
23 Apollo Energy Act of 2007, not to exceed \$3,500.

1 “(2) For the completion of the 3rd year of such
2 employment, 20 percent of such total loan obliga-
3 tion, not to exceed \$4,500.

4 “(3) For the completion of each of the 4th and
5 5th years of such employment, 40 percent of such
6 total loan obligation, not to exceed \$7,000 for each
7 year.

8 “(c) AWARD BASIS; PRIORITY.—

9 “(1) AWARD BASIS.—The Secretary shall pro-
10 vide forgiveness benefits under this section on a
11 first-come, first-served basis (subject to paragraph
12 (2)) and subject to the availability of appropriations.

13 “(2) PRIORITY.—The Secretary, in consultation
14 with Green Certification Standards Board estab-
15 lished under section 511 of the New Apollo Energy
16 Act of 2007, shall establish priorities in providing
17 forgiveness benefits under this section for a fiscal
18 year by designating a percentage of loans for green
19 workforce members employed in advanced vehicle
20 manufacturing, alternative fuel vehicle repair and
21 maintenance, clean energy technology product devel-
22 opment and deployment, or green building construc-
23 tion based on the national need in each of those
24 areas.

1 “(d) QUALIFIED INSTRUCTION EXPENSES.—To be
2 eligible for forgiveness under this section, a student loan
3 obligation shall have been incurred to cover all or a portion
4 the cost of attendance at an eligible institution for one
5 or more periods of enrollment in a program of instruction
6 that—

7 “(1) is in a skill required for employment in ad-
8 vanced vehicle manufacturing, alternative fuel vehi-
9 cle repair or maintenance, clean energy technology
10 product development and deployment, or green
11 building construction, as determined in accordance
12 with regulations prescribed by the Secretary; and

13 “(2) complies with the green workforce stand-
14 ards established under section 511 of the New Apol-
15 lo Energy Act of 2007.

16 “(e) CONSTRUCTION.—Nothing in this section shall
17 be construed to authorize the refunding of any repayment
18 of a loan.

19 “(f) REGULATIONS.—The Secretary is authorized to
20 issue such regulations as may be necessary to carry out
21 the provisions of this section.

22 “(g) DEFINITIONS.—In this section:

23 “(1) GREEN WORKFORCE MEMBER.—The term
24 ‘green workforce member’ means an individual who
25 is qualified to be and is employed in advanced vehi-

1 cle manufacturing, alternative fuel vehicle repair and
2 maintenance, clean energy technology product devel-
3 opment and deployment, or green building construc-
4 tion.

5 “(2) ADVANCED VEHICLE MANUFACTURING.—

6 The term ‘advanced vehicle manufacturing’ means
7 the manufacturing of —

8 “(A) any new advanced lean burn tech-
9 nology motor vehicle (as defined in section
10 30B(c)(3) of the Internal Revenue Code of
11 1986):

12 “(B) any new qualified hybrid motor vehi-
13 cle (as defined in section 30B(d)(3)(A) of such
14 Code and determined without regard to any
15 gross vehicle weight rating); or

16 “(C) any new vehicle that is a light-duty,
17 medium-duty, or heavy-duty on-road or nonroad
18 vehicle that is propelled by an internal combus-
19 tion engine, heat engine, or an electric motor
20 (or any combination thereof) and an energy
21 storage system using (or capable of using)—

22 “(i) any combustible fuel;

23 “(ii) an on-board, rechargeable stor-
24 age device: and

1 “(iii) a means of using an off-board
2 source of electricity to operate the vehicle
3 in intermittent or continuous all-electric
4 mode.

5 “(3) ALTERNATIVE FUEL VEHICLE REPAIR AND
6 MAINTENANCE.—The term ‘alternative fuel vehicle
7 repair and maintenance’ means vehicle repair and
8 maintenance for advanced green technologies —

9 “(A) to re-equip, expand, or establish any
10 manufacturing facility of the eligible taxpayer
11 to produce advanced technology motor vehicles
12 or to produce components used in such vehicles;

13 “(B) for engineering integration of such
14 vehicles;

15 “(C) for research and development related
16 to advanced technology motor vehicles; and

17 “(D) to repair vehicles that utilize an en-
18 ergy supply or end-use technology, including a
19 technology using renewable energy sources, that
20 over its lifecycle and compared to similar tech-
21 nologies in commercial use—

22 “(i) emits substantially lower levels of
23 pollutants or greenhouse gases, or both;
24 and

1 “(ii) may generate substantially small-
2 er or less toxic (or both) volumes of solid
3 or liquid waste.

4 “(4) CLEAN ENERGY TECHNOLOGY PRODUCT
5 DEVELOPMENT AND DEPLOYMENT.—The term ‘clean
6 energy technology product development and deploy-
7 ment’ means the development and deployment of an
8 energy supply or end-use technology, including a
9 technology using renewable energy sources, that,
10 over its lifecycle and compared to similar tech-
11 nologies in commercial use—

12 “(A) emits substantially lower levels of pol-
13 lutants or greenhouse gases, or both; and

14 “(B) may generate substantially smaller or
15 less toxic (or both) volumes of solid or liquid
16 waste.

17 “(5) GREEN BUILDING CONSTRUCTION.—The
18 term ‘green building design and construction’ means
19 building design and construction that uses sustain-
20 able design principles to reduce the use of nonrenew-
21 able resources, minimize environmental impact, and
22 relate people with the natural environment.

23 “(h) AUTHORIZATION OF APPROPRIATIONS.—There
24 are authorized to be appropriated to carry out this section

1 such sums as may be necessary for fiscal year 2008 and
2 each of the 5 succeeding fiscal years.”.

3 **SEC. 517. DEFINITIONS.**

4 In this subtitle:

5 (1) The terms “advanced vehicle manufac-
6 turing”, “alternative fuel vehicle repair and mainte-
7 nance”, “energy technology product development
8 and deployment”, “green building design and con-
9 struction” have the meaning given such terms, re-
10 spectively, in section 428L of the Higher Education
11 Act of 1965,

12 (2) The term “institution of higher education”
13 has the meaning given such term in section 101(a)
14 of the Higher Education Act of 1965 (20 U.S.C.
15 1001(a)).

16 **TITLE VI—FEDERAL GOVERN-**
17 **MENT LEVERAGE TO MOVE**
18 **NEW TECHNOLOGIES TO MAR-**
19 **KET**

20 **Subtitle A—Incentives for Clean**
21 **Energy Technology**

22 **SEC. 601. NEW ENERGY TECHNOLOGIES COMMISSION.**

23 (a) ESTABLISHMENT.—There is established a com-
24 mission to be known as the “New Energy Technologies

1 Commission” (hereafter in this section referred to as the
2 “Commission”).

3 (b) DUTIES.—

4 (1) IDENTIFY NEW ENERGY TECHNOLOGIES EL-
5 IGIBLE FOR INCENTIVES.—

6 (A) IN GENERAL.—The Commission shall
7 oversee—

8 (i) the identification of—

9 (I) Apollo Approved energy effi-
10 ciency technologies; and

11 (II) Apollo Approved domestic
12 clean energy production technologies;
13 that the Commission finds substan-
14 tially contributes to the goals of this
15 Act and merits consideration for fa-
16 vorable incentives by Congress; and

17 (ii) the identification of criteria and
18 standards for determining technologies eli-
19 gible under clause (i) as qualifying energy
20 efficiency standards used to determine eli-
21 gibility for the loan guarantees and grants
22 outlined in this title.

23 (B) MATTERS TO BE CONSIDERED BY THE
24 COMMISSION.—In developing energy efficiency
25 standards, the Commission shall—

1 (i) consult with the Environmental
2 Protection Agency program known as “En-
3 ergy Star”; and

4 (ii) focus on technologies manufac-
5 tured domestically.

6 (2) REPORT.—Not later than one year after the
7 date of enactment of this Act, and every six months
8 thereafter the Commission shall submit to Congress
9 a report that contains—

10 (A) a detailed statement of any technology
11 that qualifies for or merits the incentives in this
12 title;

13 (B) recommendations for incentives specifi-
14 cally tailored to be beneficial to such tech-
15 nologies and any standards that should be de-
16 fined in statute to determine eligibility for such
17 benefits; and

18 (C) recommendations for other legislation,
19 administrative actions, and voluntary actions
20 necessary to implement such incentives.

21 (3) APOLLO APPROVED ENERGY TECH-
22 NOLOGIES.—For purposes of this section, the term
23 “Apollo Approved energy technologies” means any
24 final unit product that the Commission finds sub-
25 stantially contributes to the goals of this Act and

1 merits consideration for favorable incentives by Con-
2 gress not already included in this Act.

3 (4) APOLLO APPROVED DOMESTIC CLEAN EN-
4 ERGY PRODUCTION TECHNOLOGIES.—For purposes
5 of this section, the term “Apollo Approved domestic
6 clean energy production technologies” means any do-
7 mestic energy production technology that the Com-
8 mission finds substantially contributes to the goals
9 of this Act and merits consideration for favorable in-
10 centives by Congress not already included in this
11 Act.

12 (c) MEMBERSHIP.—

13 (1) IN GENERAL.—The Commission shall be
14 comprised of 11 members.

15 (2) APPOINTMENTS BY THIS ACT.—The fol-
16 lowing are hereby designated as members of the
17 Commission:

18 (A) The Secretary of the Department of
19 Energy, the Director of the Office of Energy
20 Efficiency and Renewable Energy of the De-
21 partment of Energy, or the Administrator of
22 the Energy Information Administration of the
23 Department of Energy.

24 (B) The Secretary of the Department of
25 Commerce or designee.

1 (C) The Secretary of the Department of
2 Treasury or designee.

3 (D) The Director of the Environmental
4 Protection Agency or designee.

5 (3) APPOINTMENTS BY THE SENATE AND
6 HOUSE OF REPRESENTATIVES.—Seven members ap-
7 pointed jointly by the majority leader and minority
8 leader of the Senate and the Speaker and minority
9 leader of the House of Representatives, of whom—

10 (A) 1 shall represent consumer advocacy
11 organizations focusing on energy issues;

12 (B) 1 shall represent auto manufacturers;

13 (C) 1 shall represent the lending commu-
14 nity;

15 (D) 1 shall represent environmental advo-
16 cacy organizations focusing on energy issues;

17 (E) 1 shall represent organized labor;

18 (F) 1 shall represent small business manu-
19 facturers; and

20 (G) 1 shall represent the energy industry.

21 (4) DATE OF APPOINTMENTS.—The appoint-
22 ment of a member of the Commission shall be made
23 not later than 30 days after the date of enactment
24 of this Act.

1 (5) TERM.—A member shall be appointed for 5
2 year terms.

3 (d) POWERS OF COMMISSION.—

4 (1) HEARINGS AND SESSIONS.—The Commis-
5 sion may, for the purpose of carrying out this sec-
6 tion, hold hearings, sit and act at times and places,
7 take testimony, and receive evidence to carry out its
8 duties under subsection (b). The Commission may
9 administer oaths or affirmations to witnesses ap-
10 pearing before it.

11 (2) POWERS OF MEMBERS AND AGENTS.—Any
12 member or agent of the Commission may, if author-
13 ized by the Commission, take any action which the
14 Commission is authorized to take by this section.

15 (3) OBTAINING OFFICIAL INFORMATION.—

16 (A) REQUIREMENT TO FURNISH.—Except
17 as provided in subparagraph (B), if the Com-
18 mission submits a request to a Federal depart-
19 ment or agency for information necessary to en-
20 able the Commission to carry out this section,
21 the head of that department or agency shall
22 furnish that information to the Commission.

23 (B) EXCEPTION FOR NATIONAL SECUR-
24 ITY.—If the head of a Federal department or
25 agency determines that it is necessary to with-

1 hold requested information from disclosure to
2 protect the national security interests of the
3 United States, the department or agency head
4 shall not furnish that information to the Com-
5 mission.

6 (4) **MAILS.**—The Commission may use the
7 United States mails in the same manner and under
8 the same conditions as other departments and agen-
9 cies of the United States.

10 (5) **ADMINISTRATIVE SUPPORT SERVICES.**—
11 Upon the request of the Director, the Administrator
12 of General Services shall provide to the Commission,
13 on a reimbursable basis, the administrative support
14 services necessary for the Commission to carry out
15 this section.

16 (6) **GIFTS AND DONATIONS.**—The Commission
17 may accept, use, and dispose of gifts or donations of
18 services or property to carry out this Act, but only
19 to the extent or in the amounts provided in advance
20 in appropriation Acts.

21 (7) **CONTRACTS.**—The Commission may con-
22 tract with and compensate persons and government
23 agencies for supplies and services, without regard to
24 section 3709 of the Revised Statutes (41 U.S.C. 5).

1 (e) INITIAL MEETING.—The Commission shall hold
2 the initial meeting of the Commission not later than the
3 earlier of—

4 (1) the date that is 30 days after the date on
5 which all members of the Commission have been ap-
6 pointed; or

7 (2) the date that is 90 days after the date of
8 enactment of this Act, regardless of whether all
9 members have been appointed.

10 (f) CHAIRPERSON AND VICE CHAIRPERSON.—The
11 Commission shall select a Chairperson and Vice Chair-
12 person from among the members of the Commission deter-
13 mined under subsection (c)(2).

14 (g) EXECUTIVE COMMITTEE.—The Commission shall
15 have an executive committee comprised of any five mem-
16 bers of the Commission.

17 (h) CONFLICTS OF INTEREST.—Each member ap-
18 pointed to the Commission shall submit a financial dislo-
19 sure report pursuant to the Ethics in Government Act of
20 1978, notwithstanding the minimum required rate of com-
21 pensation or time period employed.

22 (i) STAFF APPOINTMENT AND COMPENSATION.—The
23 Chairperson, in consultation with the Vice Chairperson, in
24 accordance with rules agreed upon by the Commission,
25 may appoint and fix the compensation of a staff director

1 and such other personnel as may be necessary to enable
2 the Commission to carry out its functions, without regard
3 to the provisions of title 5, United States Code, governing
4 appointments in the competitive service, and without re-
5 gard to the provisions of chapter 51 and subchapter III
6 of chapter 53 of such title relating to classification and
7 General Schedule pay rates; except that no rate of pay
8 fixed under this subsection may exceed the equivalent of
9 that payable for a position at level V of the Executive
10 Schedule under section 5316 of title 5, United States
11 Code.

12 (j) PERSONNEL AS FEDERAL EMPLOYEES.—

13 (1) IN GENERAL.—The staff director and any
14 personnel of the Commission who are employees
15 shall be employees under section 2105 of title 5,
16 United States Code, for purposes of chapters 63, 81,
17 83, 84, 85, 87, 89, and 90 of that title.

18 (2) MEMBERS OF COMMISSION.—Subparagraph
19 (A) shall not be construed to apply to members of
20 the Commission.

21 (k) DETAILEES.—Any Federal Government employee
22 may be detailed to the Commission without reimbursement
23 from the Commission, and such detailee shall retain the
24 rights, status, and privileges of his or her regular employ-
25 ment without interruption.

1 (l) CONSULTANT SERVICES.—The Commission is au-
2 thORIZED to procure the services of experts and consultants
3 in accordance with section 3109 of title 5, United States
4 Code, but at rates not to exceed the daily rate paid a per-
5 son occupying a position at level IV of the Executive
6 Schedule under section 5315 of title 5, United States
7 Code.

8 (m) MEMBER COMPENSATION.—Each member of the
9 Commission specified in subsection (c)(3) may be com-
10 pensated at a rate not to exceed the daily equivalent of
11 the annual rate of basic pay in effect for a position at
12 level IV of the Executive Schedule under section 5315 of
13 title 5, United States Code, for each day during which that
14 member is engaged in the actual performance of the duties
15 of the Commission.

16 (n) INFORMATION AND ADMINISTRATIVE EX-
17 PENSES.—The Federal agencies and members specified in
18 subsection (c)(3) shall provide the Commission such infor-
19 mation and pay such administrative and members ex-
20 penses as the Commission requires to carry out this sec-
21 tion, consistent with the requirements and guidelines of
22 the Federal Advisory Commission Act (5 U.S.C. App.).

23 (o) TRAVEL EXPENSES.—While away from their
24 homes or regular places of business in the performance
25 of services for the Commission, members of the Commis-

1 sion shall be allowed travel expenses, including per diem
2 in lieu of subsistence, in the same manner as persons em-
3 ployed intermittently in the Government service are al-
4 lowed expenses under section 5703 of title 5, United
5 States Code.

6 (p) AUTHORIZATION OF APPROPRIATIONS.—

7 (1) IN GENERAL.—There is authorized to be
8 appropriated to the Commission such sums as may
9 be necessary to carry out this section.

10 (2) AVAILABILITY.—Amounts appropriated
11 under paragraph (1) are authorized to remain avail-
12 able until expended.

13 **SEC. 602. LOAN GUARANTEES PROGRAM.**

14 (a) IN GENERAL.—The New Energy Technologies
15 Commission shall establish and carry out loan guarantee
16 and grant programs for investments made in structures
17 and equipment necessary to produce innovative energy
18 technologies in the United States, including advanced
19 wind turbines, advanced solar power, advanced marine,
20 high conductivity transmission lines, advanced geothermal,
21 energy efficient appliances, fuel efficient cars, and high
22 capacity efficient airplanes.

23 (1) APPLICANT ASSURANCES.—An applicant for
24 a loan guarantee under this section shall provide as-
25 surances, satisfactory to the Commission, that—

1 (A) the project has been subject to a full
2 technical review;

3 (B) the project is covered by adequate
4 project performance guarantees;

5 (C) the project, with the loan guarantee, is
6 economically viable; and

7 (D) there is a reasonable assurance of re-
8 payment of the guaranteed loan.

9 (2) LIMITATIONS.—

10 (A) MAXIMUM GUARANTEE.—Except as
11 provided in subparagraph (B), a loan guarantee
12 under this section may be issued for up to 70
13 percent of the estimated cost of a project, but
14 may not exceed \$500,000,000 for a project.

15 (B) ADDITIONAL GUARANTEES.—

16 (i) IN GENERAL.—The Commission
17 may issue additional loan guarantees for a
18 project to cover up to 80 percent of the ex-
19 cess of actual project cost over estimated
20 project cost but not to exceed 15 percent
21 of the amount of the original guarantee.

22 (ii) PRINCIPAL AND INTEREST.—Sub-
23 ject to subparagraph (A), the Commission
24 shall guarantee 100 percent of the prin-

1 cipal and interest of a loan made under
2 subparagraph (A).

3 (3) EQUITY CONTRIBUTIONS.—To be eligible
4 for a loan guarantee under this section, an applicant
5 for the loan guarantee shall have binding commit-
6 ments from equity investors to provide an initial eq-
7 uity contribution of at least 30 percent of the total
8 project cost.

9 (4) APPROVAL.—An application for a loan
10 guarantee under this section shall be approved or
11 disapproved by the Commission not later than 90
12 days after the application is received by the Commis-
13 sion.

14 (b) GUARANTEE FEE.—The recipient of a loan guar-
15 antee under subsection (a) shall pay the Commission an
16 amount determined by the Commission to be sufficient to
17 cover the administrative costs of the Commission relating
18 to the loan guarantee.

19 (c) PAYMENT OF PRINCIPAL AND INTEREST; DE-
20 FAULT; RECOVERY OF LOSSES.—(1) With respect to any
21 loan guaranteed pursuant to this section, the commission
22 is authorized to enter into a contract to pay the lender
23 for and on behalf of the borrower the principal and inter-
24 est charges which become due and payable on the unpaid
25 balance of such loan if the commission finds—

1 (A) that the borrower is unable to meet prin-
2 cipal and interest charges, that it is in the public in-
3 terest to permit the borrower to continue to pursue
4 the purposes of the project, and that the probable
5 net cost to the Federal Government in paying such
6 principal will be less than that which would result in
7 the event of a default; and

8 (B) that the amount of such principal and in-
9 terest charges which the Commission is authorized
10 to pay shall be no greater than the amount of prin-
11 cipal and interest which the borrower is obligated to
12 pay under the loan agreement shall take such action
13 as may be appropriate to recover the amounts of
14 such payments (including any payment of principal
15 and interest under subsection (a)(2)(ii)) from such
16 assets of the defaulting borrower as are associated
17 with the activity with respect to which the loan was
18 made or from any other surety included in the terms
19 of the guarantee.

20 (2) In the event of any default by a qualified borrower
21 on a guaranteed loan, the Commission is authorized to
22 make payment in accordance with the guarantee, and the
23 Attorney General.

24 (d) FULL FAITH AND CREDIT.—The full faith and
25 credit of the United States is pledged to the payment of

1 all guarantees made under this section. Any such guar-
2 antee made by the Commission shall be conclusive evi-
3 dence of the eligibility of the loan for the guarantee with
4 respect to principal and interest. The validity of the guar-
5 antee shall be incontestable in the hands of a holder of
6 the guaranteed loan.

7 (e) AUTHORIZATION OF APPROPRIATIONS.—The ag-
8 gregate amount of guarantees under this section for fiscal
9 years 2008 through 2017 shall not exceed
10 \$200,000,000,000.

11 **SEC. 603. GRANT PROGRAM TO CREATE CLEAN ENERGY**
12 **BUSINESS DISTRICTS.**

13 (a) IN GENERAL.—The Secretary of Energy is au-
14 thorized to make grants to units of State government,
15 local government, private, non-profit community develop-
16 ment organizations, and Indian tribe economic develop-
17 ment entities for the purpose of building infrastructure,
18 promoting and marketing centralized business district de-
19 velopments with a focus on the innovative clean energy
20 technologies.

21 (1) CONDITIONS.—The Secretary shall issue
22 grants on a competitive basis for projects that will—

23 (A) promote job growth and economic de-
24 velopment in—

25 (i) rural communities; or

1 (ii) economically depressed areas, in-
2 cluding inner-city urban areas;

3 (B) promote the deployment of innovative
4 clean energy technologies with broad applica-
5 tions and the potential for export to developing
6 countries;

7 (C) create partnerships between private in-
8 dustry and public institutions;

9 (D) provide opportunities for the develop-
10 ment, demonstration, and deployment of feder-
11 ally-funded research technologies;

12 (E) promote smart growth by assuring
13 that projects are located near—

14 (i) residential neighborhoods; or

15 (ii) affordable public transportation.

16 (b) AUTHORIZATION OF APPROPRIATIONS.—For the
17 purposes of this section there are authorized to be appro-
18 priated to the Secretary \$250,000,000 for the fiscal years
19 2008 through 2012.

20 **Subtitle B—Clean Energy Exports**
21 **and International Investment**

22 **SEC. 611. CLEAN ENERGY TECHNOLOGY EXPORTS PRO-**
23 **GRAM.**

24 (a) DEFINITIONS.—In this section:

1 (1) INTERAGENCY WORKING GROUP.—The term
2 “interagency working group” means the Interagency
3 Working Group on Clean Energy Technology Ex-
4 ports established under subsection (b).

5 (2) UNITED STATES CLEAN ENERGY TECH-
6 NOLOGY.—The term “United States clean energy
7 technology” means an energy supply or end-use
8 technology, including a technology using renewable
9 energy sources, that—

10 (A) over its lifecycle and compared to a
11 similar technology already in commercial use in
12 developing countries, countries in transition,
13 and other partner countries—

14 (i) emits substantially lower levels of
15 pollutants and/or greenhouse gases; and

16 (ii) may generate substantially smaller
17 and/or less toxic volumes of solid or liquid
18 waste; and

19 (B) consists of manufactured articles, ma-
20 terials, and supplies produced in the United
21 States substantially all from articles, materials,
22 or supplies mined, produced, or manufactured
23 in the United States, within the meaning of the
24 Buy American Act (41 U.S.C. 10a).

25 (b) INTERAGENCY WORKING GROUP.—

1 (1) ESTABLISHMENT.—Not later than 90 days
2 after the date of enactment of this section, the
3 Chairman of the White House Council on Environ-
4 mental Quality, the Secretary of Energy, the Sec-
5 retary of Commerce, and the Administrator of the
6 United States Agency for International Development
7 shall jointly establish a Interagency Working Group
8 on Clean Energy Technology Exports. The inter-
9 agency working group will, in partnership with in-
10 dustry, focus on opening and expanding energy mar-
11 kets and transferring clean energy technology gen-
12 erated in the United States to developing countries,
13 countries in transition, and other partner countries
14 that are expected to experience, over the next 20
15 years, the most significant growth in energy produc-
16 tion and associated greenhouse gas emissions, in-
17 cluding through technology transfer programs under
18 the Framework Convention on Climate Change,
19 other international agreements, and relevant Federal
20 efforts.

21 (2) MEMBERSHIP.—The interagency working
22 group shall be chaired by the Chairman of the White
23 House Council on Environmental Quality and shall
24 also include representatives from—

25 (A) the Department of Commerce;

- 1 (B) the Department of the Treasury;
2 (C) the Department of Energy;
3 (D) the Environmental Protection Agency;
4 (E) the United States Agency for Inter-
5 national Development;
6 (F) the Export-Import Bank;
7 (G) the Overseas Private Investment Cor-
8 poration;
9 (H) the Trade and Development Agency;
10 (I) the Small Business Administration;
11 (J) the Office of United States Trade Rep-
12 resentative; and
13 (K) other Federal agencies, as determined
14 by the President.

15 (3) DUTIES.—The interagency working group
16 shall—

17 (A) analyze technology, policy, and market
18 opportunities for international development,
19 demonstration, and deployment of clean energy
20 technology developed in the United States;

21 (B) investigate issues associated with
22 building capacity to deploy clean energy tech-
23 nology generated in the United States in devel-
24 oping countries, countries in transition, and
25 other partner countries, including—

- 1 (i) energy-sector reform;
- 2 (ii) creation of open, transparent, and
3 competitive markets for clean energy tech-
4 nologies;
- 5 (iii) availability of trained personnel
6 to deploy and maintain the technology;
- 7 (iv) demonstration and cost-buydown
8 mechanisms to promote first adoption of
9 the technology; and
- 10 (v) to promote sustainable economic
11 development, increase access to modern en-
12 ergy services, reduce greenhouse gas emis-
13 sions, and strengthen energy security and
14 independence in developing countries in
15 partnership with industry through the de-
16 ployment of clean energy technologies;
- 17 (C) examine relevant trade, tax, inter-
18 national, and other policy issues to assess what
19 policies would help open markets and improve
20 United States clean energy technology exports
21 in support of the following areas—
- 22 (i) enhancing energy innovation and
23 cooperation, including energy sector and
24 market reform, capacity building, and fi-
25 nancing measures;

1 (ii) improving energy end-use effi-
2 ciency technologies, including buildings and
3 facilities, vehicle, industrial, and co-genera-
4 tion technology initiatives;

5 (iii) promoting energy supply tech-
6 nologies, including fossil, nuclear, and re-
7 newable technology initiatives;

8 (iv) reducing the trade deficit of the
9 United States through the export of
10 United States energy technologies and
11 technological, project deployment, and de-
12 velopment expertise; and

13 (v) retaining and creating manufac-
14 turing and related service jobs in the
15 United States;

16 (D) establish an advisory committee involv-
17 ing the private sector and other interested
18 groups on the export and deployment of United
19 States clean energy technology;

20 (E) monitor each agency's progress to-
21 wards meeting goals in the 5-year strategic plan
22 submitted to Congress pursuant to the Energy
23 and Water Development Appropriations Act,
24 2001, and the Energy and Water Development
25 Appropriations Act, 2002;

1 (F) make recommendations to heads of ap-
2 propriate Federal agencies on ways to stream-
3 line Federal programs and policies to improve
4 each agency's role in the international develop-
5 ment, demonstration, and deployment of United
6 States clean energy technology;

7 (G) make assessments and recommenda-
8 tions regarding the distinct technological, mar-
9 ket, regional, and stakeholder challenges nec-
10 essary to carry out the program;

11 (H) recommend conditions and criteria
12 that will help ensure that United States funds
13 promote sound energy policies in participating
14 countries while simultaneously opening their
15 markets and exporting United States energy
16 technology;

17 (I) establish methodologies for the meas-
18 urement, monitoring, verification, and reporting
19 under subsection (d) of the greenhouse gas
20 emission impacts of clean energy projects and
21 policies in developing countries; and

22 (J) establish a registry that is accessible to
23 the public through electronic means (including
24 through the Internet) in which information re-
25 ported under subsection (d) shall be collected.

1 (c) FEDERAL SUPPORT FOR CLEAN ENERGY TECH-
2 NOLOGY TRANSFER.—Notwithstanding any other provi-
3 sion of law, each Federal agency or Government corpora-
4 tion carrying out an assistance program in support of the
5 activities of United States persons and industry partner-
6 ships in the environment or energy sector of a developing
7 country, country in transition, or other partner country
8 shall support, to the maximum extent practicable, the
9 transfer of United States clean energy technology as part
10 of that program. Such assistance programs shall support
11 activities including, but not limited to, financial, environ-
12 mental and safety consulting, manufacturing, design and
13 engineering, financing, and other services rendered by
14 United States persons and industry partnerships.

15 (d) ANNUAL REPORT.—Not later than 90 days after
16 the date of the enactment of this Act, and on March 31
17 of each year thereafter, the Interagency Working Group
18 shall submit a report to Congress on its activities during
19 the preceding calendar year. The report shall include a
20 description of the technology, policy, and market opportu-
21 nities for international development, demonstration, and
22 deployment of United States clean energy technology in-
23 vestigated by the Interagency Working Group in that year,
24 as well as any policy recommendations to improve the ex-

1 pansion of clean energy markets and United States clean
2 energy technology exports.

3 (e) AUTHORIZATION OF APPROPRIATIONS.—There
4 are authorized to be appropriated to the appropriate de-
5 partments, agencies, and entities of the United States
6 such sums as may be necessary for each of the fiscal years
7 2008 through 2018 to support the transfer of United
8 States clean energy technology, consistent with the sub-
9 sidy codes of the World Trade Organization, as part of
10 assistance programs carried out by those departments,
11 agencies, and entities in support of activities of United
12 States persons in the energy sector of a developing coun-
13 try, country in transition, or other partner country.

14 **SEC. 612. INTERNATIONAL ENERGY TECHNOLOGY DEPLOY-**
15 **MENT PROGRAM.**

16 Section 1608 of the Energy Policy Act of 1992 (42
17 U.S.C. 13387) is amended by striking subsection (l) and
18 inserting the following:

19 “(l) INTERNATIONAL ENERGY TECHNOLOGY DE-
20 PLOYMENT PROGRAM.—

21 “(1) DEFINITIONS.—In this subsection:

22 “(A) INTERNATIONAL ENERGY DEPLOY-
23 MENT PROJECT.—The term ‘international en-
24 ergy deployment project’ means a project to

1 construct an energy production facility outside
2 the United States—

3 “(i) the output of which will be con-
4 sumed outside the United States; and

5 “(ii) the deployment of which will re-
6 sult in a greenhouse gas reduction per unit
7 of energy produced when compared to the
8 technology that would otherwise be imple-
9 mented—

10 “(I) 20 percentage points or
11 more, in the case of a unit placed in
12 service before January 1, 2010;

13 “(II) 40 percentage points or
14 more, in the case of a unit placed in
15 service after December 31, 2009, and
16 before January 1, 2020; or

17 “(III) 60 percentage points or
18 more, in the case of a unit placed in
19 service after December 31, 2019, and
20 before January 1, 2030.

21 “(B) QUALIFYING INTERNATIONAL EN-
22 ERGY DEPLOYMENT PROJECT.—The term
23 ‘qualifying international energy deployment
24 project’ means an international energy deploy-
25 ment project that—

1 “(i) is submitted by a United States
2 firm to the Secretary and establishes in-
3 dustry partnerships in accordance with
4 procedures established by the Secretary by
5 regulation;

6 “(ii) uses technology or services that
7 have been successfully developed or de-
8 ployed in the United States;

9 “(iii) uses technology or services that
10 consists of manufactured articles, mate-
11 rials, and supplies produced in the United
12 States substantially from articles, mate-
13 rials, or supplies mined, produced, or man-
14 ufactured in the United States, within the
15 meaning of the Buy American Act (41
16 U.S.C. 10a);

17 “(iv) meets the criteria of subsection
18 (k);

19 “(v) is approved by the Secretary,
20 with notice of the approval being published
21 in the Federal Register; and

22 “(vi) complies with such terms and
23 conditions as the Secretary establishes by
24 regulation.

1 “(C) UNITED STATES.—For purposes of
2 this paragraph, the term ‘United States’, when
3 used in a geographical sense, means the 50
4 States, the District of Columbia, Puerto Rico,
5 Guam, the Virgin Islands, American Samoa,
6 and the Commonwealth of the Northern Mar-
7 iana Islands.

8 “(2) PILOT PROGRAM FOR FINANCIAL ASSIST-
9 ANCE.—

10 “(A) IN GENERAL.—Not later than 180
11 days after the date of enactment of this sub-
12 section, the Secretary shall, by regulation, pro-
13 vide for a pilot program for financial assistance
14 for qualifying international energy deployment
15 projects.

16 “(B) SELECTION CRITERIA.—After con-
17 sultation with the Secretary of State, the Sec-
18 retary of Commerce, and the United States
19 Trade Representative, the Secretary shall select
20 projects for participation in the program based
21 solely on the criteria under this title and with-
22 out regard to the country in which the project
23 is located.

24 “(C) FINANCIAL ASSISTANCE.—

1 “(i) IN GENERAL.—A United States
2 firm that undertakes a qualifying inter-
3 national energy deployment project that is
4 selected to participate in the pilot program
5 shall be eligible to receive funding support,
6 a loan, or a loan guarantee from the Sec-
7 retary.

8 “(ii) RATE OF INTEREST.—The rate
9 of interest of any loan made under clause
10 (i) shall be equal to the rate for Treasury
11 obligations then issued for periods of com-
12 parable maturities.

13 “(iii) AMOUNT.—The amount of a
14 loan or loan guarantee under clause (i)
15 shall not exceed 50 percent of the total
16 cost of the qualified international energy
17 deployment project.

18 “(iv) DEVELOPED COUNTRIES.—
19 Loans or loan guarantees made for
20 projects to be located in a developed coun-
21 try, as listed in Annex I of the United Na-
22 tions Framework Convention on Climate
23 Change, shall require at least a 50 percent
24 contribution towards the total cost of the
25 loan or loan guarantee by the host country.

1 “(v) DEVELOPING COUNTRIES.—
2 Loans or loan guarantees made for
3 projects to be located in a developing coun-
4 try (those countries not listed in Annex I
5 of the United Nations Framework Conven-
6 tion on Climate Change) shall require at
7 least a 10 percent contribution towards the
8 total cost of the loan or loan guarantee by
9 the host country.

10 “(vi) CAPACITY BUILDING RE-
11 SEARCH.—Proposals made for projects to
12 be located in a developing country may in-
13 clude a research component intended to
14 build technological capacity within the host
15 country. Such research must be related to
16 the technologies being deployed and must
17 involve both an institution in the host
18 country and an industry, university or na-
19 tional laboratory participant from the
20 United States. The host institution shall
21 contribute at least 50 percent of funds pro-
22 vided for the capacity building research.

23 “(vii) GRANTS.—

24 “(I) IN GENERAL.—The Sec-
25 retary, in consultation with the Sec-

1 retary of Energy and the Adminis-
2 trator of the United States Agency for
3 International Development, may, at
4 the request of the United States am-
5 bassador to a host country, make
6 grants to help address and overcome
7 specific, urgent, and unforeseen obsta-
8 cles in the implementation of a quali-
9 fying project.

10 “(II) MAXIMUM AMOUNT.—The
11 total amount of a grant made for a
12 qualifying project under this para-
13 graph may not exceed \$1,000,000.

14 “(D) COORDINATION WITH OTHER PRO-
15 GRAMS.—A qualifying international energy de-
16 ployment project funded under this section shall
17 not be eligible as a qualifying clean coal tech-
18 nology under section 415 of the Clean Air Act
19 (42 U.S.C. 7651n).

20 “(E) REPORT.—Not later than 5 years
21 after the date of enactment of this subsection,
22 the Secretary shall submit to the President a
23 report on the results of the pilot projects.

24 “(F) RECOMMENDATION.—Not later than
25 60 days after receiving the report under sub-

1 paragraph (E), the President shall submit to
2 Congress a recommendation, based on the re-
3 sults of the pilot projects as reported by the
4 Secretary of Energy, concerning whether the fi-
5 nancial assistance program under this section
6 should be continued, expanded, reduced, or
7 eliminated.

8 “(3) PERFORMANCE CRITERIA FOR MAJOR EN-
9 ERGY CONSUMERS.—

10 “(A) IDENTIFICATION OF MAJOR ENERGY
11 CONSUMERS.—Not later than 1 year after the
12 date of enactment of this subsection, the Task
13 Force shall identify those developing countries
14 that, by virtue of present and projected energy
15 consumption, represent the predominant share
16 of energy use among developing countries.

17 “(B) PERFORMANCE CRITERIA.—As a con-
18 dition of accepting assistance provided under
19 this section, any developing country identified
20 under subparagraph (A) shall—

21 “(i) meet the eligibility criteria estab-
22 lished under section 607 of the Millennium
23 Challenge Act of 2003 (22 U.S.C. 7706),
24 notwithstanding the eligibility of the devel-
25 oping country as a candidate country

1 under section 606 of that Act (22 U.S.C.
2 7705); and

3 “(ii) agree to establish and report on
4 progress in meeting specific goals for re-
5 duced energy-related greenhouse gas emis-
6 sions and specific goals for—

7 “(I) increased access to clean en-
8 ergy services among unserved and un-
9 derserved populations;

10 “(II) increased use of renewable
11 energy resources;

12 “(III) increased use of lower
13 greenhouse gas-emitting fossil fuel-
14 burning technologies;

15 “(IV) greater reliance on ad-
16 vanced energy technologies;

17 “(V) the sustainable use of tradi-
18 tional energy resources; or

19 “(VI) other goals for improving
20 energy-related environmental perform-
21 ance, including the reduction or avoid-
22 ance of local air and water quality
23 and solid waste contaminants.

24 “(4) AUTHORIZATION OF APPROPRIATIONS.—

25 There are authorized to be appropriated to the Sec-

1 retary to carry out this section \$500,000,000 for
2 each of fiscal years 2008 through 2018, to remain
3 available until expended.”.

4 **Subtitle C—Export-Import Bank**

5 **SEC. 621. REQUIRE THE EXPORT-IMPORT BANK OF THE** 6 **UNITED STATES TO MEET RENEWABLE EN-** 7 **ERGY TARGETS IN ITS LENDING PRACTICES.**

8 (a) ALLOCATION OF ASSISTANCE AMONG ENERGY
9 PROJECTS.—Of the total amount available to the Export-
10 Import Bank of the United States for the extension of
11 credit for transactions related to energy projects, the
12 Bank shall, not later than the beginning of fiscal year
13 2008, use—

14 (1) not more than 85 percent for transactions
15 related to fossil fuel projects; and

16 (2) not less than 15 percent for transactions re-
17 lated to renewable energy and energy efficiency
18 projects.

19 (b) RENEWABLE ENERGY AND TECHNOLOGY COM-
20 MISSION.—

21 (1) ESTABLISHMENT.—Within 1 year after the
22 date of the enactment of this Act, the Export-Import
23 Bank of the United States (in this subsection re-
24 ferred to as the “Bank”) shall establish a commis-
25 sion which shall be known as the “Renewable En-

1 ergy and Technology Commission” (in this sub-
2 section referred to as the “Commission”).

3 (2) FUNCTION.—The Commission shall help the
4 Bank achieve the percentage goal set forth in sub-
5 section (a)(2) by the beginning of fiscal year 2008,
6 by proactively assisting the Bank in identifying new
7 opportunities for renewable energy and energy effi-
8 ciency financing.

9 (3) COMPOSITION.—The Commission shall be
10 composed of—

11 (A) 6 representatives selected by compa-
12 nies involved in renewable energy and energy ef-
13 ficiency technology;

14 (B) 2 representatives selected by environ-
15 mental organizations;

16 (C) 2 members of the academic community
17 who are knowledgeable about renewable energy;
18 and

19 (D) representatives of the Bank.

20 (4) REPORTS.—The Commission shall submit
21 annually to the Committee on Natural Resources
22 and the Committee on Financial Services of the
23 House of Representatives and the Committee on
24 Banking, Housing, and Urban Affairs of the Senate

1 a report that contains the following information for
2 the fiscal year covered by the report:

3 (A) A detailed description of the activities
4 of the Commission.

5 (B) Any recommendations made by the
6 Commission that were adopted by the Bank.

7 (C) An analysis comparing the level of
8 credit extended by the Bank for renewable en-
9 ergy and energy efficiency projects with the
10 level of credit so extended for the preceding fis-
11 cal year.

12 (c) DEFINITION OF RENEWABLE ENERGY AND EN-
13 ERGY EFFICIENCY PROJECTS.—In this section, the term
14 “renewable energy and energy efficiency projects” means
15 projects related to solar, wind, biomass, or geothermal en-
16 ergy sources.

17 **SEC. 622. INCREASE IN THE AMOUNT OF FINANCING MADE**
18 **AVAILABLE BY THE EXPORT-IMPORT BANK**
19 **FOR TRANSACTIONS INVOLVING RENEWABLE**
20 **ENERGY AND ENERGY EFFICIENCY.**

21 Section 2(b)(1) of the Export-Import Bank Act of
22 1945 (12 U.S.C. 635(b)(1)) is amended by adding at the
23 end the following:

24 “(M)(i) For each fiscal year that begins after the 1-
25 year period that begins with the date of the enactment

1 of this subparagraph, the Bank shall make available, from
2 the aggregate loan authority available to the Bank, an
3 amount to finance transactions directly related to the pro-
4 duction of renewable energy or to energy efficiency, which
5 shall be not less than—

6 “(I) in the case of the 1st such fiscal year,
7 \$200,000,000;

8 “(II) in the case of each of the 2nd through 6th
9 such fiscal years, 120 percent of the amount made
10 available in accordance with this clause to finance
11 the transactions for the then preceding fiscal year;
12 and

13 “(III) in the case of each fiscal year after the
14 6th such fiscal year, the amount made available in
15 accordance with this clause to finance the trans-
16 actions for such 6th fiscal year.

17 “(ii) In this Act, the term ‘renewable energy’ means
18 solar energy, wind energy, energy generated by the use
19 of a fuel cell, geothermal energy, and less than 10
20 megawatts of energy generated by hydropower.”.

21 **SEC. 623. OFFICE OF RENEWABLE ENERGY PROMOTION.**

22 Section 3 of the Export-Import Bank Act of 1945
23 (12 U.S.C. 635a) is amended by adding at the end the
24 following:

1 “(j) OFFICE OF RENEWABLE ENERGY PRO-
2 MOTION.—

3 “(1) ESTABLISHMENT.—Within 1 year after
4 the date of the enactment of this subsection, the
5 Bank shall establish an Office of Renewable Energy
6 Promotion (in this subsection referred to as the “Of-
7 fice”) staffed by individuals with expertise in financ-
8 ing renewable energy technologies.

9 “(2) FUNCTIONS.—The Office shall assist the
10 Bank in complying with section 2(b)(1)(M) by iden-
11 tifying opportunities to provide financing for trans-
12 actions directly related to the production of renew-
13 able energy or to energy efficiency.”.

14 **SEC. 624. REPORT ON EXPORT-IMPORT BANK FINANCING**
15 **FOR TRANSACTIONS INVOLVING RENEWABLE**
16 **ENERGY OR ENERGY EFFICIENCY.**

17 Section 8 of the Export-Import Bank Act of 1945
18 (12 U.S.C. 635g) is amended by adding at the end the
19 following:

20 “(g) FINANCING FOR TRANSACTIONS INVOLVING RE-
21 NEWABLE ENERGY OR ENERGY EFFICIENCY.—The Bank
22 shall include in its annual report under subsection (a) of
23 this section—

24 “(1) a description of the activities of the Office;

1 “(2) a description of the number of trans-
2 actions and the amount of credit extended by the
3 Bank for renewable energy and energy efficiency
4 technologies, disaggregated by the types of renew-
5 able energy specified in section 2(b)(1)(M)(ii); and

6 “(3) a comparison between the number and
7 amount referred to in paragraph (2) for the period
8 covered by the report, and the numbers and amounts
9 reported for all preceding periods pursuant to this
10 subsection.”.

11 **SEC. 625. REPORT ON EFFECT OF EXPORT-IMPORT BANK**
12 **FINANCING ON GREENHOUSE GAS EMIS-**
13 **SIONS.**

14 (a) IN GENERAL.—Within 5 years after the date of
15 the enactment of this Act, the Export-Import Bank of the
16 United States shall prepare and submit to the Committee
17 on Financial Services of the House of Representatives and
18 the Committee on Finance of the Senate a report that—

19 (1) estimates the amount of greenhouse gases
20 emitted annually as a result of the activities fi-
21 nanced by the Bank; and

22 (2) identifies opportunities to reduce the
23 amount of greenhouse gases emitted as a result of
24 the activities.

1 (b) GREENHOUSE GAS DEFINED.—In subsection (a),
2 the term “greenhouse gas” means carbon dioxide,
3 hydrofluorocarbons, methane, nitrous oxide,
4 perfluorocarbons, sulfur hexafluoride, or any other
5 anthropogenically-emitted gas that is determined by the
6 Administrator of the Environmental Protection Agency,
7 after notice and comment, to contribute to global warming
8 to a non-negligible degree.

9 **Subtitle D—Emerging Clean En-**
10 **ergy Technology Venture Cap-**
11 **ital Fund**

12 **SEC. 631. FINDINGS.**

13 Congress finds the following:

14 (1) It is in the interests of the United States
15 to promote technologies that reduce our dependence
16 on fossil fuels.

17 (2) New and emerging clean energy tech-
18 nologies often fail to achieve commercial success due
19 to funding shortfalls, often termed “the Valley of
20 Death”, before the technologies attract the necessary
21 private venture capital funding required for further
22 development.

23 **SEC. 632. ESTABLISHMENT OF FUND.**

24 The Secretary of Energy, using authorities granted
25 to the Secretary of Defense under section 2371 of title

1 10, United States Code, shall provide for the establish-
 2 ment of a nonprofit venture capital investment corpora-
 3 tion, to be known as the Emerging Clean Energy Tech-
 4 nology Venture Capital Fund, for the purpose of making
 5 funding available to United States companies for the de-
 6 velopment of technologies used—

- 7 (1) for the production of renewable energy; or
 8 (2) to improve energy efficiency.

9 **SEC. 633. AUTHORIZATION OF APPROPRIATIONS.**

10 There are authorized to be appropriated to the Sec-
 11 retary of Energy \$100,000,000 for each of the fiscal years
 12 2008 through 2012 for carrying out this subtitle.

13 **TITLE VII—GREENHOUSE GAS**
 14 **REDUCTIONS**
 15 **Subtitle A—Global Climate Change**

16 **SEC. 701. GLOBAL CLIMATE CHANGE.**

17 (a) IN GENERAL.—The Clean Air Act (42 U.S.C.
 18 7401 et seq.) is amended by adding at the end the fol-
 19 lowing new title:

20 **“TITLE VIII—GLOBAL CLIMATE**
 21 **CHANGE**

“TITLE VIII—GLOBAL CLIMATE CHANGE

“Sec. 801. Definitions.

“Subtitle A—Stopping and Reversing Greenhouse Gas Emissions

“Sec. 811. Regulations; greenhouse gas emissions limitations.

“Sec. 812. Scientific review of the safe climate level.

“Sec. 813. Required review of emission reductions needed to maintain the safe
 climate level.

“Sec. 814. Distribution of allowances between auctions and allocations; nature of allowances.

“Sec. 815. Auction of allowances.

“Sec. 816. Allocation of allowances.

“Sec. 817. Adaptation assistance.

“Sec. 818. Early reduction credits.

“Sec. 819. Avoiding significant economic harm.

“Sec. 820. Use and transfer of credits.

“Sec. 821. Compliance and enforcement.

“Sec. 822. Equalizing the treatment of domestic and imported industrial products sold in the United States.

“Subtitle B—Offset Credits

“Sec. 831. Outreach initiative on revenue enhancement for agricultural producers.

“Sec. 832. Offset measurement for agricultural, forestry, wetlands, and other land use-related sequestration projects.

“Sec. 833. Offset credits from greenhouse gas emissions reduction projects.

“Sec. 834. Borrowing at program start-up based on contracts to purchase offset credits.

“Sec. 835. Review and correction of accounting for offset credits.

“Subtitle C—National Registry for Credits

“Sec. 841. Establishment and operation of national registry.

“Sec. 842. Monitoring and reporting.

1 **“SEC. 801. DEFINITIONS.**

2 “In this title:

3 “(1) **ALLOCATION.**—The term ‘allocation’, with
4 respect to an allowance, means the issuance of an al-
5 lowance directly to covered entities, at no cost, under
6 this title.

7 “(2) **ALLOWANCE.**—The term ‘allowance’
8 means an authorization under this title to emit 1
9 metric ton of carbon dioxide (or a carbon dioxide
10 equivalent), as allocated to a covered entity pursuant
11 to section 816.

12 “(3) **CARBON DIOXIDE EQUIVALENT.**—The
13 term ‘carbon dioxide equivalent’ means, with respect

1 to a greenhouse gas, the quantity of the greenhouse
2 gas that makes the same contribution to global
3 warming as 1 metric ton of carbon dioxide, as deter-
4 mined by the Administrator.

5 “(4) COVERED ENTITY.—The term ‘covered en-
6 tity’ means an entity (including a branch, depart-
7 ment, agency, or instrumentality of Federal, State,
8 or local government) that—

9 “(A) owns or controls a source of green-
10 house gas emissions in the electric power, in-
11 dustrial, or commercial sector of the United
12 States economy (as defined in the Inventory),
13 refines or imports products for use in transpor-
14 tation, or produces or imports
15 hydrofluorocarbons, perfluorocarbons, or sulfur
16 hexafluoride; and

17 “(B) emits, from any single facility owned
18 by the entity, over 10,000 metric tons of green-
19 house gas per year, measured in units of carbon
20 dioxide equivalents, or—

21 “(i) refines or imports products that,
22 when combusted, will emit;

23 “(ii) produces or imports
24 hydrofluorocarbons, perfluorocarbons, or

1 sulfur hexafluoride that, when used, will
2 emit; or

3 “(iii) produces or imports other green-
4 house gases that, when used, will emit,
5 over 10,000 metric tons of greenhouse gas
6 per year, measured in units of carbon diox-
7 ide equivalents.

8 “(5) CREDIT.—

9 “(A) IN GENERAL.—The term ‘credit’
10 means an authorization under this title to emit
11 greenhouse gases equivalent to 1 metric ton of
12 carbon dioxide.

13 “(B) INCLUSIONS.—The term ‘credit’ in-
14 cludes—

15 “(i) an allowance;

16 “(ii) an offset credit;

17 “(iii) an early reduction credit; or

18 “(iv) an international credit.

19 “(6) EARLY REDUCTION CREDIT.—The term
20 ‘early reduction credit’ means a credit issued under
21 section 818 for a reduction in the quantity of emis-
22 sions or an increase in sequestration equivalent to 1
23 metric ton of carbon dioxide.

24 “(7) ELIGIBLE ENTITY.—The term ‘eligible en-
25 tity’ include any entity determined by the Adminis-

1 trator to be eligible to receive emissions allowance
2 allocations or the value of such allowances.

3 “(8) GREENHOUSE GAS AUTHORIZED ACCOUNT
4 REPRESENTATIVE.—The term ‘greenhouse gas au-
5 thorized account representative’ means, for a covered
6 entity, an individual who is authorized by the owner
7 and operator of the covered entity to represent and
8 legally bind the owner and operator in matters per-
9 taining to this title.

10 “(9) INDUSTRY SECTOR.—The term ‘industry
11 sector’ means any sector of the economy of a coun-
12 try (including, where applicable, the forestry sector)
13 that is responsible for significant quantities of
14 greenhouse gas emissions.

15 “(10) INVASIVE SPECIES.—The term ‘invasive
16 species’ means a species (including pathogens, seeds,
17 spores, or any other biological material relating to a
18 species) the introduction of which causes or is likely
19 to cause economic or environmental harm or harm
20 to human health.

21 “(11) INVENTORY.—The term ‘Inventory’
22 means the Inventory of U.S. Greenhouse Gas Emis-
23 sions and Sinks, prepared in compliance with the
24 United Nations Framework Convention on Climate
25 Change Decision 3/CP.5.

1 “(12) LAND-GRANT COLLEGES AND UNIVER-
2 SITIES.—The term ‘land-grant colleges and univer-
3 sities’ has the meaning given the term in section
4 1404 of the National Agricultural Research, Exten-
5 sion, and Teaching Policy Act of 1977 (7 U.S.C.
6 3103).

7 “(13) LEAKAGE.—The term ‘leakage’ means an
8 increase in greenhouse gas emissions or a decrease
9 in sequestration of greenhouse gases that is—

10 “(A) outside the area of a project; and

11 “(B) attributable to the project.

12 “(14) NATIVE PLANT.—The term ‘native plant’
13 means an indigenous, terrestrial, or aquatic plant
14 species that evolved naturally in an ecosystem.

15 “(15) NEW COVERED ENTITY.—The term ‘new
16 covered entity’ means a covered entity that has oper-
17 ated for not more than 3 years.

18 “(16) OFFSET CREDIT.—The term ‘offset cred-
19 it’ means a credit issued for an offset project pursu-
20 ant to subtitle B certifying a reduction in the quan-
21 tity of emissions or an increase in sequestration
22 equivalent to 1 metric ton of carbon dioxide.

23 “(17) OFFSET PRACTICE.—The term ‘offset
24 practice’ means a practice that—

1 “(A) reduces greenhouse gas emissions or
2 increases sequestration; and

3 “(B) may be eligible to create an offset
4 credit under this title.

5 “(18) OFFSET PROJECT.—The term ‘offset
6 project’ means a project that reduces greenhouse gas
7 emissions or increases sequestration of carbon diox-
8 ide or a carbon dioxide equivalent by a method other
9 than reduction of greenhouse gas emissions at a cov-
10 ered entity.

11 “(19) PANEL.—The term ‘Panel’ means the
12 Climate Science Advisory Panel established by this
13 title.

14 “(20) PLANT MATERIAL.—The term ‘plant ma-
15 terial’ means—

16 “(A) a seed;

17 “(B) a part of a plant; or

18 “(C) a whole plant.

19 “(21) RENEWABLE ENERGY.—The term ‘renew-
20 able energy’ means electricity generated from—

21 “(A) wind;

22 “(B) organic waste (excluding incinerated
23 municipal solid waste);

1 “(C) biomass (including anaerobic diges-
2 tion from farm systems and landfill gas recov-
3 ery); or

4 “(D) a hydroelectric, geothermal, solar
5 thermal, photovoltaic, tidal, wave, or other non-
6 fossil fuel, nonnuclear source.

7 “(22) RENEWABLE ENERGY ENTITY.—The
8 term ‘renewable energy entity’ means an electric
9 generating entity that exclusively uses renewable en-
10 ergy to generate electricity for sale.

11 “(23) RESTORATION.—

12 “(A) IN GENERAL.—The term ‘restoration’
13 means assisting the recovery of an ecosystem
14 that has been degraded, damaged, or destroyed.

15 “(B) INCLUSION.—The term ‘restoration’
16 includes the reestablishment in an ecosystem of
17 preexisting biotic integrity with respect to spe-
18 cies composition and community structure.

19 “(24) SEQUESTRATION.—The term ‘sequestra-
20 tion’ means the separation, isolation, or removal of
21 greenhouse gases from the atmosphere.

22 “(25) SEQUESTRATION FLOW.—The term ‘se-
23 questration flow’ means the uptake of greenhouse
24 gases each year from sequestration practices, as cal-
25 culated under section 832.

1 “(26) UNFCCC.—The term ‘UNFCCC’ means
2 the United Nations Framework Convention on Cli-
3 mate Change, done at New York on May 9, 1992.

4 **“Subtitle A—Stopping and Revers-**
5 **ing Greenhouse Gas Emissions**

6 **“SEC. 811. REGULATIONS; GREENHOUSE GAS EMISSIONS**
7 **LIMITATIONS.**

8 “(a) REGULATIONS.—Not later than 18 months after
9 the date of enactment of this title, the Administrator shall
10 promulgate regulations to establish an allowance trading
11 program to address emissions of greenhouse gases from
12 covered entities in the United States.

13 “(b) GREENHOUSE GAS EMISSIONS LIMITATIONS.—
14 Not later than 2 years after the date of enactment of this
15 section, the Administrator shall promulgate annual emis-
16 sion reduction targets for each calendar year beginning
17 in 2010 and ending in 2050, as follows:

18 “(1) In 2010, the quantity of United States
19 greenhouse gas emissions shall not exceed the quan-
20 tity of United States greenhouse gases projected to
21 be emitted in 2009.

22 “(2) Beginning in 2011, the quantity of United
23 States greenhouse gas emissions shall be reduced by
24 approximately 2 percent each year, such that the
25 quantity of such emissions in 2020 does not exceed

1 the quantity of United States greenhouse gases
2 emitted in 1990.

3 “(3) Beginning in 2021, the quantity of United
4 States greenhouse gas emissions shall be reduced by
5 approximately 5 percent each year, such that the
6 quantity of such emissions in 2050 does not exceed
7 20 percent of the quantity of United States green-
8 house gases emitted in 1990.

9 **“SEC. 812. SCIENTIFIC REVIEW OF THE SAFE CLIMATE**
10 **LEVEL.**

11 “(a) DEFINITION AND OBJECTIVE OF MAINTAINING
12 THE SAFE CLIMATE LEVEL.—

13 “(1) FINDING.—Congress finds that ratification
14 by the Senate in 1992 of the UNFCCC, commit-
15 ments which were affirmed by the President in
16 2002, established for the United States an objective
17 of stabilization of greenhouse gas concentrations in
18 the atmosphere at a level that would prevent dan-
19 gerous anthropogenic interference with the climate
20 system.

21 “(2) DEFINITION OF SAFE CLIMATE LEVEL.—
22 In this section, the term ‘safe climate level’ means
23 the climate level referred to in paragraph (1).

24 “(b) CLIMATE SCIENCE ADVISORY PANEL.—

1 “(1) ESTABLISHMENT.—Not later than 270
2 days after the date of enactment of this title, the
3 Administrator shall establish an advisory panel, to
4 be known as the ‘Climate Science Advisory Panel’ .

5 “(2) DUTIES.—The Panel shall—

6 “(A) inform Congress and the Adminis-
7 trator of the state of climate science;

8 “(B) not later than December 31, 2010,
9 and not less frequently than every 4 years
10 thereafter, issue a report that is endorsed by at
11 least 7 members of the Panel that describes
12 recommendations for the Administrator, based
13 on the best available information in the fields of
14 climate science, including reports from the
15 Intergovernmental Panel on Climate Change,
16 relating to—

17 “(i) the specific concentration, in
18 parts per million, of all greenhouse gases
19 in carbon dioxide equivalents at or below
20 which constitutes the safe climate level;
21 and

22 “(ii) the projected timeframe for
23 achieving the safe climate level.

24 “(3) COMPOSITION.—

1 “(A) IN GENERAL.—The Panel shall be
2 composed of 8 climate scientists and 3 former
3 Federal officials, as described in subparagraphs
4 (B) through (D).

5 “(B) CLIMATE SCIENTISTS.—Not later
6 than 270 days after the date of enactment of
7 this title, the President of the National Acad-
8 emy of Sciences shall appoint to serve on the
9 Panel 8 climate scientists from among individ-
10 uals who—

11 “(i) have earned doctorate degrees;

12 “(ii) have performed research in phys-
13 ical, biological, or social sciences, mathe-
14 matics, economics, or related fields, with a
15 particular focus on or link to 1 or more as-
16 pects of climate science;

17 “(iii) have records of peer-reviewed
18 publications that include—

19 “(I) publications in main-stream,
20 high-quality scientific journals (such
21 as journals associated with respected
22 scientific societies or those with a high
23 impact factor, as determined by the
24 Institute for Scientific Information);

1 “(II) recent publications relating
2 to earth systems, and particularly re-
3 lating to the climate system; and

4 “(III) a high publication rate,
5 typically at least 2 or 3 papers per
6 year; and

7 “(iv) have participated in high-level
8 committees, such as those formed by the
9 National Academy of Sciences or by lead-
10 ing scientific societies.

11 “(C) RESTRICTION.—A majority of climate
12 scientists appointed to the Panel under sub-
13 paragraph (B) shall be participating, as of the
14 date of appointment to the Panel, in active re-
15 search in the physical or biological sciences,
16 with a particular focus on or link to 1 or more
17 aspects of climate science.

18 “(D) FEDERAL OFFICIALS.—

19 “(i) IN GENERAL.—Subject to clause
20 (ii), the Administrator shall appoint as
21 members of the Panel, the longest-serving
22 former Administrators of the Environ-
23 mental Protection Agency for each of the
24 3 most recent former Presidents.

1 “(ii) TIMING.—The 3 most recent
2 former Presidents described in clause (i)
3 shall be identified as of the deadline for
4 appointments to the Panel under subpara-
5 graph (B) or (E)(ii), whichever is applica-
6 ble.

7 “(iii) SUBSTITUTES.—If a former Ad-
8 ministrator described in clause (i) declines
9 appointment, or is unable to serve, as a
10 member of the Panel, the Administrator
11 shall appoint in place of the former Admin-
12 istrator—

13 “(I) the longest-serving former
14 Administrator for the applicable
15 President who agrees to serve; or

16 “(II) if no individual described in
17 subclause (I) accepts appointment as
18 a member of the Panel, the longest-
19 serving Assistant Administrator for
20 Air and Radiation for the applicable
21 President who agrees to serve.

22 “(E) TERMS OF SERVICE AND VACAN-
23 CIES.—

24 “(i) TERMS.—The initial term of a
25 member of the Panel shall be—

1 “(I) to the maximum extent prac-
2 ticable, the period covered by, and ex-
3 tending through the date of issuance
4 of, each report under paragraph
5 (2)(B); but

6 “(II) not longer than 4 years.

7 “(ii) SUBSEQUENT PANELS AND RE-
8 PORTS.—On the issuance of each report
9 under paragraph (2)(B)—

10 “(I) the Panel that submitted the
11 report shall terminate; and

12 “(II)(aa) pursuant to subpara-
13 graphs (B) and (C), the President of
14 the National Academy of Sciences
15 shall appoint climate scientists (in-
16 cluding at least 3 climate scientists
17 who served as members of the pre-
18 ceding Panel) to serve as members of
19 a new Panel by not later than 15
20 months after the deadline for issuance
21 of the report under paragraph (2)(B);
22 and

23 “(bb) pursuant to subparagraph
24 (D), the Administrator shall appoint 3
25 Federal officials as members of the

1 new Panel by the deadline described
2 in item (aa).

3 “(iii) VACANCIES.—Vacancies in the
4 membership of the Panel—

5 “(I) shall not affect the power of
6 the remaining members to execute the
7 functions of the Panel; and

8 “(II) shall be filled in the same
9 manner in which the original appoint-
10 ment was made.

11 “(F) CHAIRPERSON AND VICE CHAIR-
12 PERSON.—The Panel shall elect a Chairperson
13 and Vice Chairperson as soon as practicable.

14 “(G) COMPENSATION OF MEMBERS.—A
15 member of the Panel shall be compensated at a
16 rate equal to the daily equivalent of the annual
17 rate of basic pay prescribed for level IV of the
18 Executive Schedule under section 5315 of title
19 5, United States Code, for each day (including
20 travel time) during which the member is en-
21 gaged in the performance of the duties of the
22 Panel.

23 “(H) TRAVEL EXPENSES.—A member of
24 the Panel shall be allowed travel expenses, in-
25 cluding per diem in lieu of subsistence, at rates

1 authorized for an employee of an agency under
2 subchapter I of chapter 57 of title 5, United
3 States Code, while away from the home or reg-
4 ular place of business of the member in the per-
5 formance of the duties of the Panel.

6 “(4) STAFF.—

7 “(A) IN GENERAL.—The Chairperson of
8 the Panel may, without regard to the civil serv-
9 ice laws (including regulations), appoint and
10 terminate an executive director and such other
11 additional personnel as are necessary to enable
12 the Panel to perform the duties of the Panel.

13 “(B) CONFIRMATION OF EXECUTIVE DI-
14 RECTOR.—The employment of an executive di-
15 rector shall be subject to confirmation by the
16 Panel.

17 “(C) COMPENSATION.—

18 “(i) IN GENERAL.—Except as pro-
19 vided in clause (ii), the Chairperson of the
20 Panel may fix the compensation of the ex-
21 ecutive director and other personnel with-
22 out regard to the provisions of chapter 51
23 and subchapter III of chapter 53 of title 5,
24 United States Code, relating to classifica-

1 tion of positions and General Schedule pay
2 rates.

3 “(ii) EXCEPTION.—The rate of pay
4 for the executive director and other per-
5 sonnel shall not exceed the rate payable for
6 level V of the Executive Schedule under
7 section 5316 of title 5, United States
8 Code.

9 “(D) DETAIL OF FEDERAL GOVERNMENT
10 EMPLOYEES.—

11 “(i) IN GENERAL.—An employee of
12 the Federal Government may be detailed to
13 the staff of the Panel without reimburse-
14 ment.

15 “(ii) TREATMENT OF DETAILEES.—
16 The detail of the employee shall be without
17 interruption or loss of civil service status
18 or privilege.

19 “(E) PROCUREMENT OF TEMPORARY AND
20 INTERMITTENT SERVICES.—The Chairperson or
21 executive director of the Panel may procure
22 temporary and intermittent services in accord-
23 ance with section 3109(b) of title 5, United
24 States Code, at rates for individuals that do not
25 exceed the daily equivalent of the annual rate of

1 basic pay prescribed for level V of the Executive
2 Schedule under section 5316 of that title.

3 “(5) HEARINGS.—The Panel may hold such
4 hearings, meet and act at such times and places,
5 take such testimony, and receive such evidence as
6 the Panel considers advisable to carry out this sec-
7 tion.

8 “(6) INFORMATION FROM FEDERAL AGEN-
9 CIES.—

10 “(A) IN GENERAL.—The Panel may secure
11 directly from a Federal agency such informa-
12 tion as the Panel considers necessary to carry
13 out this section.

14 “(B) PROVISION OF INFORMATION.—On
15 request of the Chairperson of the Panel, the
16 head of the agency shall provide the informa-
17 tion to the Panel.

18 “(7) POSTAL SERVICES.—The Panel may use
19 the United States mail in the same manner and
20 under the same conditions as other agencies of the
21 Federal Government.

1 **“SEC. 813. REQUIRED REVIEW OF EMISSION REDUCTIONS**
2 **NEEDED TO MAINTAIN THE SAFE CLIMATE**
3 **LEVEL.**

4 “(a) REVIEW AND DETERMINATION REGARDING RE-
5 DUCTION RATE.—Not later than December 31, 2015, the
6 Administrator, after providing public notice and oppor-
7 tunity to comment, shall promulgate a final rule pursuant
8 to which the Administrator shall review the reduction rate
9 for greenhouse gas emissions required under section 811
10 and determine—

11 “(1) whether to—

12 “(A) accept the recommendations of the
13 Panel under section 812(b)(2) regarding the
14 safe climate level and the timeframe for achiev-
15 ing the safe climate level;

16 “(B) establish a more stringent safe cli-
17 mate level or timeframe, together with a de-
18 tailed explanation of the justification of the Ad-
19 ministrator for rejection of the recommenda-
20 tions of the Panel.

21 “(b) MODIFICATION OF REDUCTION RATE.—

22 “(1) IN GENERAL.—If the Administrator makes
23 a determination described in subparagraph (A) or
24 (B) of subsection (a)(1), the final rule promulgated
25 pursuant to subsection (a) shall establish a required
26 level of emissions reductions for each calendar year,

1 beginning with calendar year 2020, based on the
2 considerations described in paragraph (2).

3 “(2) CONSIDERATIONS.—

4 “(A) PRIMARY CONSIDERATION.—In estab-
5 lishing the required level of emission reductions
6 pursuant to paragraph (1), the Administrator
7 shall take into consideration primarily the emis-
8 sion reductions necessary to stabilize atmos-
9 pheric greenhouse gas concentrations at the
10 safe climate level within the timeframe specified
11 under section 812(b)(2)(B).

12 “(B) SECONDARY CONSIDERATIONS.—In
13 establishing the required level of emission re-
14 ductions pursuant to paragraph (1), in addition
15 to the primary consideration described in para-
16 graph (2), the Administrator shall take into
17 consideration—

18 “(i) technological capability to reduce
19 greenhouse gas emissions;

20 “(ii) the progress that foreign coun-
21 tries have made toward reducing their
22 greenhouse gas emissions;

23 “(iii) the economic impacts within the
24 United States of implementing this sub-

1 title, including impacts on the major emit-
2 ting sectors; and

3 “(iv) the economic impacts within the
4 United States of inadequate action.

5 “(c) ENFORCEMENT PROVISION.—

6 “(1) IN GENERAL.—If the Administrator fails
7 to meet a deadline for promulgation of any regula-
8 tion under subsection (a), the Administrator shall
9 withhold from allocation to covered entities that
10 would otherwise be entitled to an allocation of allow-
11 ances under this subtitle a total of 10 percent of the
12 allowances for each covered entity for each year
13 after the deadline until the Administrator promul-
14 gates the applicable regulation.

15 “(2) RETURN OF ALLOWANCES.—On promulga-
16 tion of a delayed regulation described in paragraph
17 (1), the Administrator shall distribute any allow-
18 ances withheld under that paragraph—

19 “(A) among the covered entities from
20 which the allowances were withheld; and

21 “(B) in accordance with section 816.

22 “(d) SUBSEQUENT RULEMAKINGS.—

23 “(1) IN GENERAL.—Not later than December
24 31, 2019, and every 4 years thereafter, the Adminis-

1 trator shall promulgate a new final rule described in
2 subsection (a) in accordance with this section.

3 “(2) EFFECTIVE DATE.—If a new final rule
4 promulgated pursuant to paragraph (1) changes a
5 level of emission reductions required under the pre-
6 ceding final rule, the effective date of the new final
7 rule shall be January 1 of the calendar year that is
8 5 years after the deadline for promulgation of the
9 new final rule under paragraph (1).

10 **“SEC. 814. DISTRIBUTION OF ALLOWANCES BETWEEN AUC-**
11 **TIONS AND ALLOCATIONS; NATURE OF AL-**
12 **LOWANCES.**

13 “(a) DISTRIBUTION OF ALLOWANCES BETWEEN
14 AUCTIONS AND ALLOCATIONS.—

15 “(1) IN GENERAL.—For each calendar year, the
16 total quantity of allowances to be auctioned and allo-
17 cated under this subtitle shall be equal to the annual
18 tonnage limitation for emissions of greenhouse gases
19 from covered entities specified in section 811 for the
20 calendar year.

21 “(2) DISTRIBUTION.—The proportion of allow-
22 ances to be auctioned pursuant to section 815 and
23 allocated pursuant to section 816 for each calendar
24 year beginning in calendar year 2010 shall be as fol-
25 lows:

“Percentages of Allowances to Be Auctioned and Allocated

Calendar year	Percentage to be auctioned	Percentage to be allocated
2010	50	50
2011	53	47
2012	56	44
2013	59	41
2014	62	38
2015	65	35
2016	68	32
2017	71	29
2018	74	26
2019	77	23
2020	80	20
2021	83	17
2022	86	14
2023	89	11
2024	92	8
2025	96	4
2026	100	0

1 “(b) NATURE OF ALLOWANCES.—An allowance—
2 “(1) shall not be considered to be a property
3 right; and
4 “(2) may be terminated or limited by the Ad-
5 ministrator.
6 “(c) NO JUDICIAL REVIEW.—An auction or alloca-
7 tion of an allowance by the Administrator shall not be sub-
8 ject to judicial review.
9 **“SEC. 815. AUCTION OF ALLOWANCES.**
10 “(a) IN GENERAL.—Not later than 2 years after the
11 date of enactment of this title, the Administrator shall
12 promulgate regulations establishing a procedure for the
13 auction of the quantity of allowances specified in section
14 814(a) for each calendar year.

1 “(b) DEPOSIT OF PROCEEDS.—The Administrator
2 shall deposit all proceeds from auctions conducted under
3 this section in the General Fund of the United States
4 Treasury.

5 **“SEC. 816. ALLOCATION OF ALLOWANCES.**

6 “(a) ALLOCATIONS TO COVERED ENTITIES AND
7 OTHER ELIGIBLE ENTITIES.—Beginning with calendar
8 year 2010, the Administrator shall, by regulation, estab-
9 lish a process for the allocation of free tradeable allow-
10 ances under this section that will—

11 “(1) provide equitable compensation for covered
12 entities subject to unrecoverable costs resulting from
13 the regulations promulgated under this title;

14 “(2) avoid overcompensating covered entities;

15 “(3) minimize the costs to the government of
16 allocating tradeable allowances;

17 “(4) provide incentives for the deployment of
18 new low and zero carbon energy technologies and en-
19 ergy efficiency upgrades at covered entities;

20 “(5) give credit to covered entities for emissions
21 reductions made before 2010 and registered with the
22 National Registry established in subtitle C;

23 “(6) recognize the investments that covered en-
24 tities and their customers have made to reduce their

1 energy use and greenhouse gas emissions prior to
2 enactment of this title; and

3 “(7) maintain the international competitiveness
4 of United States manufacturing and avoid the addi-
5 tional loss of United States manufacturing jobs.

6 “(b) ALLOCATIONS TO NEW COVERED ENTITIES AND
7 NEW ELIGIBLE ENTITIES.—

8 “(1) ESTABLISHMENT.—For each calendar
9 year, the Administrator, in consultation with the
10 Secretary of Energy the Secretary of Commerce, and
11 with consideration to the allocation factors listed in
12 subsection (a) shall promulgate regulations estab-
13 lishing—

14 “(A) a reserve of allowances to be allocated
15 among new covered entities and new eligible en-
16 tities for the calendar year; and

17 “(B) the methodology for allocating those
18 allowances among new covered entities and new
19 eligible entities.

20 “(2) LIMITATION.—The number of allowances
21 allocated under paragraph (1) during a calendar
22 year shall be not more than 3 percent of the total
23 number of allowances allocated among entities for
24 the calendar year.

1 “(3) UNUSED ALLOWANCES.—For each cal-
2 endar year, the Administrator shall reallocate to
3 each entity any unused allowances from the new en-
4 tity reserve established under paragraph (1) in the
5 proportion that—

6 “(A) the number of allowances allocated to
7 each entity for the calendar year; bears to

8 “(B) the number of allowances allocated to
9 all entities for the calendar year.

10 “(c) TOTAL QUANTITY OF ALLOWANCES TO BE AL-
11 LOCATED.—For each calendar year, the quantity of allow-
12 ances allocated under subsection (a) shall be equal to the
13 difference between subparagraphs (1) and (2)—

14 “(1) the allocation percentage in section 814 of
15 the annual limitation for emissions of greenhouse
16 gases from covered entities specified in section 811
17 for the calendar year, as modified, if applicable,
18 under section 813; and

19 “(2) the quantity of allowances reserved for
20 new covered entities under subsection (b) for the cal-
21 endar year.

22 “(d) COAL-FIRED COVERED ENTITIES.—

23 “(1) IN GENERAL.—Notwithstanding any other
24 provision of this subtitle, no allowance shall be allo-

1 cated under this subtitle to a coal-fired covered enti-
2 ty unless the covered entity—

3 “(A) is powered by qualifying advanced
4 clean coal technology, as defined pursuant to
5 paragraph (2); or

6 “(B) entered operation before January 1,
7 2007.

8 “(2) DEFINITION OF QUALIFYING ADVANCED
9 CLEAN COAL TECHNOLOGY.—

10 “(A) IN GENERAL.—Not later than 18
11 months after the date of enactment of this title,
12 the Administrator, by regulation, shall define
13 the term ‘qualifying advanced clean coal tech-
14 nology’ with respect to electric power genera-
15 tion.

16 “(B) REQUIREMENT.—In promulgating a
17 definition pursuant to subparagraph (A), the
18 Administrator shall ensure that the term ‘quali-
19 fying advanced clean coal technology’ reflects
20 advances in available technology, taking into
21 consideration—

22 “(i) net thermal efficiency;

23 “(ii) measures to capture and seques-
24 ter carbon dioxide; and

1 “(iii) output-based emission rates
2 for—

3 “(I) carbon dioxide;

4 “(II) sulfur dioxide;

5 “(III) oxides of nitrogen;

6 “(IV) filterable and condensable
7 particulate matter; and

8 “(V) mercury.

9 “(C) REVIEW AND REVISION.—

10 “(i) IN GENERAL.—Not later than
11 July 1, 2009, and each July 1 of every sec-
12 ond year thereafter, the Administrator
13 shall review and, if appropriate, revise the
14 definition under subparagraph (A) based
15 on technological advances during the pre-
16 ceding 2 calendar years.

17 “(ii) NOTICE AND COMMENT RE-
18 QUIRED.—Subject to clause (iii), after the
19 initial definition is established under sub-
20 paragraph (A), no subsequent review or re-
21 vision under this subparagraph shall be
22 subject to the notice and comment provi-
23 sions of section 307 of this Act or of sec-
24 tion 553 of title 5, United States Code.

1 “(iii) EFFECT.—Nothing in clause (ii)
2 precludes the application of the notice and
3 comment provisions of section 307 of this
4 Act or of section 553 of title 5, United
5 States Code, as the Administrator deter-
6 mines to be practicable.

7 **“SEC. 817. ADAPTATION ASSISTANCE.**

8 “(a) ADAPTATION ASSISTANCE FOR WORKERS AND
9 COMMUNITIES NEGATIVELY AFFECTED BY CLIMATE
10 CHANGE AND GREENHOUSE GAS REGULATION.—For
11 each calendar year the Administrator shall, in consultation
12 with the Secretary of labor and the Secretary of com-
13 merce, provide adaptation assistance for workers and com-
14 munities—

15 “(1) to address local or regional impacts of cli-
16 mate change and the impacts, if any, from green-
17 house gas regulation, including by providing assist-
18 ance to displaced workers and disproportionately af-
19 fected communities; and

20 “(2) to mitigate impacts of climate change and
21 the impacts, in any, from greenhouse gas regulation
22 on low-income energy consumers.

23 “(b) ADAPTATION ASSISTANCE FOR FISH AND WILD-
24 LIFE HABITAT.—For each calendar year, the Adminis-
25 trator shall, in consultation with the United States Fish

1 and Wildlife Service, the fund efforts to strengthen and
2 restore habitat that improves the ability of fish and wild-
3 life to adapt successfully to climate change. The funding
4 made available for such purposes shall be directed toward
5 the wildlife restoration fund subaccount known as the
6 Wildlife Conservation and Restoration Account established
7 under section 3 of the Pittman-Robertson Wildlife Res-
8 toration Act (16 U.S.C. 669b). Amounts deposited in the
9 subaccount under this paragraph shall be available with-
10 out further appropriation for obligation and expenditure
11 under that Act.

12 “(c) There are authorized to be appropriated such
13 sums as are necessary to carry out this section for each
14 of fiscal years 2010 through 2050.

15 **“SEC. 818. EARLY REDUCTION CREDITS.**

16 “(a) REGULATIONS.—Not later than 2 years after
17 the date of enactment of this title, the Administrator shall
18 promulgate regulations that provide for the issuance on
19 a 1-time basis, certification, and use of early reduction
20 credits for greenhouse gas reduction or sequestration
21 projects carried out during any of calendar years 2000
22 through 2010.

23 “(b) ELIGIBLE PROJECTS.—A greenhouse gas reduc-
24 tion or sequestration project shall be eligible for early re-
25 duction credits if the project—

1 “(1) is carried out in the United States;

2 “(2) meets the standards contained in regula-
3 tions promulgated by the Administrator under sub-
4 section (a) that the Administrator determines to be
5 applicable to the project, including consistency with
6 the requirements of—

7 “(A) paragraphs (2) through (5) of section
8 836(a), with respect to greenhouse gas reduc-
9 tion projects; and

10 “(B) section 832(a), with respect to se-
11 questration projects; and

12 “(3) was reported to a State, regional or Na-
13 tional registry or was otherwise accounted for in a
14 manner that the Administrator determines to be le-
15 gitimate—

16 “(A) under section 1605(b) of the Energy
17 Policy Act of 1992 (42 U.S.C. 13385(b)); or

18 “(B) to a State or regional greenhouse gas
19 registry.

20 “(c) LIMITATION.—

21 “(1) IN GENERAL.—The aggregate quantity of
22 early reduction credits available for greenhouse gas
23 reduction or sequestration projects for the period of
24 calendar years 2000 through 2009 shall not exceed
25 10 percent of the tonnage limitation for calendar

1 year 2010 for emissions of greenhouse gases from
2 covered entities under section 811.

3 “(2) NO OTHER EXCEEDANCE OF TONNAGE
4 LIMITATION.—No provision of this subtitle (other
5 than paragraph (1)) or any regulation promulgated
6 under this subtitle authorizes the issuance or use of
7 a quantity of credits greater than the annual ton-
8 nage limitation for emissions of greenhouse gases
9 from covered entities for a calendar year.

10 **“SEC. 819. AVOIDING SIGNIFICANT ECONOMIC HARM.**

11 “(a) IN GENERAL.—Pursuant to the regulations pro-
12 mulgated under this section, the Administrator may per-
13 mit covered entities to use allowances in a calendar year
14 before the calendar year for which the allowances were al-
15 located.

16 “(b) REGULATIONS.—

17 “(1) IN GENERAL.—Not later than 3 years
18 after the date of enactment of this title, the Admin-
19 istrator, in coordination with the Secretary of the
20 Treasury, shall promulgate regulations requiring the
21 continuous monitoring of the operation of the carbon
22 market and the effect of that market on the econ-
23 omy of the United States.

24 “(2) REQUIREMENTS.—The regulations shall—

1 “(A) establish the criteria for determining
2 whether allowance prices have reached and sus-
3 tained a level that is causing or will cause sig-
4 nificant harm to the economy of the United
5 States; and

6 “(B) take into consideration—

7 “(i) the obligation of the United
8 States under this subtitle to stabilize
9 greenhouse gas concentrations in the at-
10 mosphere at the safe climate level; and

11 “(ii) the costs of the anticipated im-
12 pacts of climate change in the United
13 States.

14 “(3) PREVENTION OF ECONOMIC HARM.—If the
15 Administrator determines that allowance prices have
16 reached and sustained a level that is causing or will
17 cause significant harm to the economy of the United
18 States, the regulations shall establish a program
19 under which a covered entity may use allowances in
20 a calendar year before the calendar year for which
21 the allowances were allocated, including—

22 “(A) a requirement that allowances bor-
23 rowed from the allocation of a future year re-
24 duce the allocation of allowances to the covered
25 entity for the future year on a 1-to-1 basis;

1 “(B) a requirement for payment of interest
2 on borrowed allowances requiring the submis-
3 sion of additional credits upon repayment of the
4 allowances equal to the product obtained by
5 multiplying—

6 “(i) the number of years between the
7 advance use of allowances by a covered en-
8 tity under clause (i) and the submission of
9 additional credits under this clause; and

10 “(ii) the sum obtained by adding—

11 “(I) the Federal short-term rate,
12 as defined pursuant to section
13 1274(d)(1)(C)(i) of the Internal Rev-
14 enue Code of 1986; and

15 “(II) 2 percent; and

16 “(C) a limitation that in no event may a
17 covered entity—

18 “(i) satisfy more than 10 percent of
19 the obligation of the covered entity under
20 section 821(a) to surrender allowances by
21 submitting allowances in a calendar year
22 before the calendar year for which the al-
23 lowances were allocated; and

24 “(ii) use allowances in a calendar year
25 that is more than 3 years before the cal-

1 endar year for which the allowances were
2 allocated; and

3 **“SEC. 820. USE AND TRANSFER OF CREDITS.**

4 “(a) USE IN OTHER GREENHOUSE GAS ALLOWANCE
5 TRADING PROGRAMS.—

6 “(1) IN GENERAL.—A credit obtained under
7 this subtitle may be used in any other greenhouse
8 gas allowance trading program, including a program
9 of 1 or more States or subdivisions of States, that
10 is approved by the Administrator and an authorized
11 official for the other program for use of the allow-
12 ance.

13 “(2) RECIPROCITY.—A credit obtained from an-
14 other greenhouse gas trading program, including a
15 program of 1 or more States or subdivisions of
16 States, that is approved by the Administrator and
17 an authorized official for the other program may be
18 used in the trading program under this title.

19 “(b) ALLOWANCE USE BEFORE APPLICABLE CAL-
20 ENDAR YEAR.—Except as provided in section 819, an al-
21 lowance auctioned or allocated under this subtitle may not
22 be used before the calendar year for which the allowance
23 was auctioned or allocated.

24 “(c) TRANSFER.—

1 “(1) IN GENERAL.—Except as provided in para-
2 graph (2), the transfer of a credit shall not take ef-
3 fect until receipt and recording by the Administrator
4 of a written certification of the transfer that is exe-
5 cuted by an authorized official of the person making
6 the transfer.

7 “(2) SPECIAL RULE FOR ALLOWANCES.—Not-
8 withstanding paragraph (1), the transfer of an al-
9 lowance auctioned or allocated under this subtitle
10 may take effect before the calendar year for which
11 the allowance was auctioned or allocated.

12 “(d) BANKING OF CREDITS.—Any covered entity may
13 use a credit obtained under this subtitle in the calendar
14 year for which the credit was auctioned or allocated, or
15 in a subsequent calendar year, to demonstrate compliance
16 with section 821.

17 “(e) LIMITATIONS ON THE USE OF OFFSET CRED-
18 ITS.—The owner of each covered entity may not satisfy
19 more than 10 percent of the obligation of the covered enti-
20 ty under section 821(a) by submitting offset credits. The
21 Administrator may modify the maximum allowable offset
22 credits that a covered entity may use to demonstrate com-
23 pliance with section 821(a). In evaluating this determina-
24 tion, the Administrator shall take into consideration:

1 “(1) technological capability to reduce green-
2 house gas emissions; and

3 “(2) the economic impacts within the United
4 States of allowing covered entities to submit a fewer
5 or greater number of offset credits, including im-
6 pacts on the major emitting sectors.

7 **“SEC. 821. COMPLIANCE AND ENFORCEMENT.**

8 “(a) IN GENERAL.—For calendar year 2010 and
9 each calendar year thereafter, the owner of each covered
10 entity shall surrender to the Administrator a quantity of
11 credits that is equal to the total tons of carbon dioxide
12 or, with respect to other greenhouse gases, tons in carbon
13 dioxide equivalent, emitted by a covered entity during a
14 calendar year.

15 “(b) REGULATIONS.—Not later than 2 years after
16 the date of enactment of this title, the Administrator shall
17 promulgate regulations establishing the procedures for the
18 surrender of credits.

19 “(c) PENALTY.—The owner of a covered entity that
20 emits greenhouse gases in excess of the number of credits
21 that the owner of the covered entity holds for use of the
22 covered entity for the calendar year shall—

23 “(1) submit to the Administrator 1.3 credits for
24 each metric ton of excess greenhouse gas emissions
25 of the covered entity; and

1 “(2) pay an excess emissions penalty equal to
2 the product obtained by multiplying—

3 “(A) the number of tons of carbon dioxide,
4 or the carbon dioxide equivalent of other green-
5 house gases, emitted in excess of the total
6 quantity of credits held by the covered entity;
7 and

8 “(B)(i) except as provided in clause (ii),
9 \$100, as adjusted for changes beginning on
10 January 1, 2007, in accordance with the Con-
11 sumer Price Index for All-Urban Consumers
12 published by the Department of Labor; or

13 “(ii) if the average market price for a met-
14 ric ton of carbon dioxide equivalent during a
15 calendar year exceeds \$60, \$200, as adjusted
16 for changes beginning on January 1, 2007, in
17 accordance with the Consumer Price Index for
18 All-Urban Consumers published by the Depart-
19 ment of Labor.

20 **“SEC. 822. EQUALIZING THE TREATMENT OF DOMESTIC**
21 **AND IMPORTED INDUSTRIAL PRODUCTS**
22 **SOLD IN THE UNITED STATES.**

23 “(a) FINDINGS.—Congress finds that—

1 “(1) Greenhouse gas emission reductions from
2 industry sectors are necessary to protect from dan-
3 gerous climate change—

4 “(A) human, animal, and plant life and
5 health in the United States; and

6 “(B) the environment in the United States;
7 and

8 “(2) the environmental and natural resource
9 protections described in paragraph (1) would be un-
10 dermined if manufacturing of industry sector prod-
11 ucts shifted to locations outside the United States
12 without comparable limits on greenhouse gas emis-
13 sions.

14 “(b) EQUALIZE TREATMENT FOR ENERGY INTEN-
15 SIVE PRODUCTS.—Not later than December 31, 2008, the
16 Administrator, in consultation with the United States
17 Trade Representative, the Secretary of State, and the Sec-
18 retary of Commerce, shall consider ways to establish equal
19 treatment, with respect to greenhouse gas emissions, of
20 domestic and imported industrial products sold in the
21 United States. Not later than December 31, 2011, the Ad-
22 ministrator shall begin to implement policies and rec-
23 ommend to Congress regulatory mechanisms that would
24 assure that energy intensive materials sold into United
25 States commerce, of domestic and foreign origin, are man-

1 ufactured according to minimum performance standards
2 with respect to the greenhouse gas emissions produced per
3 ton of material produced.

4 “(c) CONSULTATION.—In developing policies and rec-
5 ommendations under this section, the Administrator shall
6 consult with other government entities within and outside
7 the United States having programs for control of green-
8 house gas emissions from the manufacturing sector.

9 “(d) CONSIDERATIONS.—In developing policies and
10 recommendations under this section, the Administrator, in
11 consultation with the United States Trade Representative,
12 the Secretary of State, and the Secretary of Commerce,
13 shall consider—

14 “(1) the principle of equal treatment of domes-
15 tic and imported industrial products sold in the
16 United States;

17 “(2) the need to sustain United States natural
18 resources for use by future generations;

19 “(3) the distinction between foreign manufac-
20 turers from countries with regulation of greenhouse
21 gases comparable to this title, and foreign manufac-
22 turers from countries without such comparable regu-
23 lation;

1 “(4) the obligations of the United States and
2 other countries under applicable treaties and trade
3 agreements; and

4 “(5) such other factors as the Administrator, in
5 consultation with the United States Trade Rep-
6 resentative, the Secretary of State, and the Sec-
7 retary of Commerce, determines to be relevant and
8 appropriate.

9 “(e) INTERNATIONAL TRADE AGREEMENTS.—The
10 United States Trade Representative shall negotiate trade
11 agreements that are consistent with the standards regu-
12 lated under this section.

13 **“Subtitle B—Offset Credits**

14 **“SEC. 831. OUTREACH INITIATIVE ON REVENUE ENHANCE-** 15 **MENT FOR AGRICULTURAL PRODUCERS.**

16 “(a) PURPOSES.—The purposes of this subtitle are
17 to achieve climate benefits, reduce overall costs to the
18 United States economy, and enhance revenue for domestic
19 agricultural producers, foresters, and other landowners
20 by—

21 “(1) establishing procedures by which domestic
22 agricultural producers, foresters, and other land-
23 owners can measure and report reductions in green-
24 house gas emissions and increases in sequestration;
25 and

1 “(2) publishing a handbook of guidance for do-
2 mestic agricultural producers, foresters, and other
3 landowners to market emission reductions to compa-
4 nies.

5 “(b) ESTABLISHMENT.—The Secretary of Agri-
6 culture, acting through the Chief of the Natural Resources
7 Conservation Service, the Chief of the Forest Service, the
8 Administrator of the Cooperative State Research, Edu-
9 cation, and Extension Service, and land-grant colleges and
10 universities, in consultation with the Administrator and
11 the heads of other appropriate departments and agencies,
12 shall establish an outreach initiative to provide informa-
13 tion to agricultural producers, agricultural organizations,
14 foresters, and other landowners about opportunities under
15 this subtitle to earn new revenue.

16 “(c) COMPONENTS.—The initiative under this sec-
17 tion—

18 “(1) shall be designed to ensure that, to the
19 maximum extent practicable, agricultural organiza-
20 tions and individual agricultural producers, for-
21 esters, and other landowners receive detailed prac-
22 tical information about—

23 “(A) opportunities to earn new revenue
24 under this subtitle;

1 “(B) measurement protocols, monitoring,
2 verifying, inventorying, registering, insuring,
3 and marketing offsets under this title;

4 “(C) emerging domestic markets for en-
5 ergy crops, allowances, and offsets; and

6 “(D) local, regional, and national data-
7 bases and aggregation networks to facilitate
8 achievement, measurement, registration, and
9 sales of offsets;

10 “(2) shall provide—

11 “(A) outreach materials, including the
12 handbook published under subsection (d)(1), to
13 interested parties;

14 “(B) workshops; and

15 “(C) technical assistance; and

16 “(3) may include the creation and development
17 of regional marketing centers or coordination with
18 existing centers (including centers within the Nat-
19 ural Resources Conservation Service or the Coopera-
20 tive State Research, Education, and Extension Serv-
21 ice or at land-grant colleges and universities).

22 “(d) HANDBOOK.—

23 “(1) IN GENERAL.—Not later than 2 years
24 after the date of enactment of this title, the Sec-
25 retary of Agriculture, in consultation with the Ad-

1 administrator and after public input, shall publish a
2 handbook for use by agricultural producers, agricul-
3 tural cooperatives, foresters, other landowners, offset
4 buyers, and other stakeholders that provides easy-to-
5 use guidance on achieving, reporting, registering,
6 and marketing offsets.

7 “(2) DISTRIBUTION.—The Secretary of Agri-
8 culture shall ensure, to the maximum extent prac-
9 ticable, that the handbook is distributed widely
10 through land-grant colleges and universities and
11 other appropriate institutions.

12 **“SEC. 832. OFFSET MEASUREMENT FOR AGRICULTURAL,**
13 **FORESTRY, WETLANDS, AND OTHER LAND**
14 **USE-RELATED SEQUESTRATION PROJECTS.**

15 “(a) IN GENERAL.—Not later than 2 years after the
16 date of enactment of this title, the Secretary of Agri-
17 culture, in consultation with the Administrator, shall pro-
18 mulgate regulations establishing the requirements regard-
19 ing the issuance, certification, and use of offset credits for
20 greenhouse gas reductions from agricultural, forestry, wet-
21 lands, and other land use-related sequestration projects,
22 including requirements—

23 “(1) for a region-specific discount factor for
24 business-as-usual practices for specific types of se-

1 sequestration projects, in accordance with subsection
2 (c);

3 “(2) that ensure that the reductions are real,
4 additional, verifiable, and enforceable;

5 “(3) that address leakage;

6 “(4) that the reductions are not otherwise re-
7 quired by any law (including a regulation) or other
8 legally binding requirement;

9 “(5) for the quantification, monitoring, report-
10 ing, and verification of the reductions;

11 “(6) that ensure that offset credits are limited
12 in duration to the period of sequestration of green-
13 house gases, and rectify any loss of sequestration
14 other than a loss caused by an error in calculation
15 identified under this subtitle, by requiring the sub-
16 mission of additional credits of an equivalent quan-
17 tity to the lost sequestration; and

18 “(7) that quantify sequestration flow.

19 “(b) ELIGIBILITY TO CREATE OFFSET CREDITS.—
20 A sequestration project that commences operation on or
21 after January 1, 2010, is eligible to create offset credits
22 under this subtitle if the sequestration project satisfies the
23 other applicable requirements of this subtitle.

24 “(c) DISCOUNTING FOR BUSINESS-AS-USUAL PRAC-
25 TICES.—

1 “(1) IN GENERAL.—In order to streamline the
2 availability of offset credits for agricultural and
3 other land use-related sequestration projects, the
4 regulations promulgated under subsection (a) shall
5 provide for the calculation and reporting of region-
6 specific discount factors by the Secretary of Agri-
7 culture—

8 “(A) to be used by developers of agricul-
9 tural projects and other land use-related se-
10 questration projects; and

11 “(B) to account for business-as-usual prac-
12 tices for specific types of sequestration projects.

13 “(2) CALCULATION.—Unless otherwise provided
14 in this subtitle, the region-specific discount factor
15 for business-as-usual practices for sequestration
16 projects shall be calculated by dividing—

17 “(A) the difference between—

18 “(i) the quantity of greenhouse gases
19 sequestered in the region as a result of the
20 offset practice under this subtitle; and

21 “(ii) the quantity of greenhouse gases
22 sequestered in the region as a result of the
23 projected business-as-usual implementation
24 of the applicable offset practice; by

1 “(B) the quantity of greenhouse gases se-
2 questered in the region as a result of the offset
3 practice under this subtitle.

4 “(3) REQUIREMENTS.—

5 “(A) IN GENERAL.—The regulations pro-
6 mulgated under this section shall, to the max-
7 imum extent practicable—

8 “(i) define geographic regions with
9 reference to land that has similar agricul-
10 tural characteristics; and

11 “(ii) subject to subparagraph (B), de-
12 fine baseline historical reference periods
13 for each category of sequestration practice,
14 using the most recent period of sufficient
15 length for which there are reasonably com-
16 prehensive data available.

17 “(B) EXCEPTION.—If the Secretary of Ag-
18 riculture determines that entities have increased
19 implementation of the relevant offset practice
20 during the most recent period in anticipation of
21 legislation granting credit for the offsets, the
22 regulations described in subparagraph (A)(ii)
23 may define baseline historical reference periods
24 for each category of sequestration practice
25 using an earlier period.

1 “(d) QUANTIFYING SEQUESTRATION FLOW.—The
2 regulations that quantify sequestration flow shall in-
3 clude—

4 “(1) a default rate of sequestration flow, re-
5 gionally specific to the maximum extent practicable,
6 for each offset practice or combination of offset
7 practices, that is estimated conservatively to allow
8 for site-specific variations and data uncertainties;

9 “(2) a downward adjustment factor for any off-
10 set practice or combination of practices for which, in
11 the judgment of the Secretary of Agriculture, there
12 are substantial uncertainties in the sequestration
13 flows estimated in paragraph (1), but still reason-
14 ably sufficient data to calculate a default rate of
15 flow; and

16 “(3) OFFSET PRACTICE.—or project-specific
17 measurement, monitoring, and verification require-
18 ments for—

19 “(A) offset practices or projects for which
20 there are insufficiently reliable data to calculate
21 a default rate of sequestration flow; or

22 “(B) projects for which the project pro-
23 ponent chooses to use project-specific require-
24 ments.

1 “(e) USE OF NATIVE PLANT SPECIES IN OFFSET
2 PROJECTS.—Not later than 18 months after the date of
3 enactment of this title, the Administrator, in consultation
4 with the Secretary of Agriculture, shall promulgate regula-
5 tions for selection, use, and storage of native and non-
6 native plant materials in the offset projects described in
7 paragraph (2)—

8 “(1) to ensure native plant materials are given
9 primary consideration, in accordance with applicable
10 Department of Agriculture guidance for use of na-
11 tive plant materials;

12 “(2) to prohibit the use of Federal or State-des-
13 igned noxious weeds; and

14 “(3) to prohibit the use of a species listed by
15 a regional or State invasive plant council within the
16 applicable region or State.

17 **“SEC. 833. OFFSET CREDITS FROM GREENHOUSE GAS EMIS-**
18 **SIONS REDUCTION PROJECTS.**

19 “(a) IN GENERAL.—Not later than 2 years after the
20 date of enactment of this title, the Administrator shall
21 promulgate regulations establishing the requirements re-
22 garding the issuance, certification, and use of offset cred-
23 its for greenhouse gas emissions reduction offset projects,
24 including requirements—

1 “(1) for performance standards for specific
2 types of offset projects, which represent significant
3 improvements compared to recent practices in the
4 geographic area, to be reviewed, and updated if the
5 Administrator determines updating is appropriate,
6 every 5 years;

7 “(2) that ensure that the reductions are real,
8 additional, verifiable, enforceable, and permanent;

9 “(3) that address leakage;

10 “(4) that the reductions are not otherwise re-
11 quired by any law (including a regulation) or other
12 legally binding requirement;

13 “(5) for the quantification, monitoring, report-
14 ing, and verification of the reductions; and

15 “(6) that specify the duration of offset credits
16 for greenhouse gas emissions reduction projects
17 under this section.

18 “(b) ELIGIBILITY TO CREATE OFFSET CREDITS.—
19 Greenhouse gas emissions reduction offset projects that
20 commence operation on or after January 1, 2007, are eli-
21 gible to create offset credits under this subtitle if the
22 projects satisfy the other applicable requirements of this
23 subtitle.

24 “(c) CREATION OF ADDITIONAL CATEGORIES OF
25 GREENHOUSE GAS EMISSIONS REDUCTION OFFSET

1 PROJECTS.—The Administrator may, by regulation, cre-
2 ate additional categories of greenhouse gas emissions re-
3 duction offset projects for types of projects for which the
4 Administrator determines that compliance with the regula-
5 tions promulgated under subsection (a) is feasible.

6 “(d) PROHIBITION ON USE.—Notwithstanding the
7 eligibility of greenhouse gas emission reduction projects to
8 create offset credits in accordance with subsection (d),
9 greenhouse gas emissions reduction offset projects shall
10 not be eligible to create offset credits for use under this
11 section beginning on the date on which the reductions are
12 required by law (including regulations) or other legally
13 binding requirement.

14 **“SEC. 834. BORROWING AT PROGRAM START-UP BASED ON**
15 **CONTRACTS TO PURCHASE OFFSET CREDITS.**

16 “(a) IN GENERAL.—During calendar years 2011,
17 2012, and 2013, a covered entity may satisfy not more
18 than 5 percent of the allowance submission requirements
19 of section 822 by submitting to the Administrator contrac-
20 tual commitments to purchase offset credits that will im-
21 plement an equivalent quantity of emission reductions or
22 sequestration not later than December 31, 2015.

23 “(b) APPROVAL OF QUALIFYING OFFSET
24 PROJECTS.—Offset projects that may be appropriately

1 carried out under this section shall be approved by the
2 Administrator in accordance with this subtitle.

3 “(c) REPAYMENT BY 2015.—

4 “(1) IN GENERAL.—If a covered entity uses
5 subsection (a) to comply with section 822, not later
6 than the deadline in that section for allowance sub-
7 missions for calendar year 2015, the covered entity
8 shall submit additional credits of a quantity equiva-
9 lent to the sum obtained by adding—

10 “(A) the value of credits submitted to com-
11 ply with credit submission requirements de-
12 scribed in subsection (a); and

13 “(B) interest calculated in accordance with
14 paragraph (2).

15 “(2) INTEREST.—Interest referred to in para-
16 graph (1)(B) shall be equal to the product obtained
17 by multiplying—

18 “(A) the number of years between—

19 “(i) the use by a covered entity of the
20 method of compliance described in sub-
21 section (a); and

22 “(ii) the submission by the covered
23 entity of additional credits under this sub-
24 section; and

25 “(B) the sum obtained by adding—

1 “(i) the Federal short-term rate, as
2 defined pursuant to section
3 1274(d)(1)(C)(i) of the Internal Revenue
4 Code of 1986; and
5 “(ii) 2 percent.

6 **“SEC. 835. REVIEW AND CORRECTION OF ACCOUNTING FOR**
7 **OFFSET CREDITS.**

8 “(a) DUTY TO MONITOR.—The Secretary of Agri-
9 culture and the Administrator shall monitor regularly
10 whether offset credits under the respective jurisdiction of
11 each agency head under this subtitle are being awarded
12 only for real and additional sequestration of greenhouse
13 gases and reductions in greenhouse gas emissions, includ-
14 ing—

15 “(1) the accuracy of default calculations of se-
16 questration flow and greenhouse gas emission reduc-
17 tions achieved by the use of offset practices;

18 “(2) the calculation of region-specific discount
19 factors; and

20 “(3) the accuracy of leakage calculations.

21 “(b) PERIODIC REVIEW.—Not later than December
22 31, 2013, and every 5 years thereafter, the Secretary of
23 Agriculture and the Administrator shall review the
24 issuance of offset credits under the respective jurisdiction
25 of each agency head under this subtitle to determine—

1 “(1) whether offset credits are being awarded
2 only for real and additional sequestration of green-
3 house gases or reductions in greenhouse gas emis-
4 sions, as described in subsection (a);

5 “(2) the amount of excessive award of any off-
6 set credits;

7 “(3) the volume of offset credits that have been
8 or are expected to be approved;

9 “(4) the impact of the offset credits on market
10 prices; and

11 “(5) the impact of the offset credits on the tra-
12 jectory of emissions from covered entities.

13 “(c) DUTY TO CORRECT.—If the Secretary of Agri-
14 culture or the Administrator determines that offset credits
15 under the respective jurisdictions of the agency head have
16 been awarded under this subtitle in excess of real and ad-
17 ditional sequestration of greenhouse gases or reductions
18 in emissions of greenhouse gases, the Secretary of Agri-
19 culture or the Administrator shall—

20 “(1) promptly correct on a prospective basis the
21 sources of the errors, including correcting leakage
22 factors, region-specific discount factors, default rates
23 of sequestration flow, and other relevant information
24 for the offset practices involved; and

1 “(2) quantify and publicly disclose the quantity
2 of offset credits that have been awarded in excess of
3 real and additional sequestration or emissions reduc-
4 tions.

5 **“Subtitle C—National Registry for**
6 **Credits**

7 **“SEC. 841. ESTABLISHMENT AND OPERATION OF NATIONAL**
8 **REGISTRY.**

9 “(a) IN GENERAL.—Except as provided in subsection
10 (b), not later than July 1 of the year immediately prior
11 to the first calendar year in which an annual tonnage limi-
12 tation on the emission of greenhouse gases applies under
13 section 811(b), the Administrator shall promulgate regula-
14 tions to establish, operate, and maintain a national reg-
15 istry through which the Administrator shall—

16 “(1) record allocations of allowances and the
17 issuance of offset credits or early reduction credits;

18 “(2) track transfers of credits;

19 “(3) retire all credits used for compliance;

20 “(4) subject to subsection (b), maintain trans-
21 parent availability of registry information to the
22 public, including the quarterly reports submitted
23 under section 842(a);

1 “(5) prepare an annual assessment of the emis-
2 sion data in the quarterly reports submitted under
3 section 842(a); and

4 “(6) take such action as is necessary to main-
5 tain the integrity of the registry, including adjust-
6 ments to correct for—

7 “(A) errors or omissions in the reporting
8 of data; and

9 “(B) the prevention of counterfeiting, dou-
10 ble-counting, multiple registrations, multiple
11 sales, and multiple retirements of credits.

12 “(b) EXCEPTION TO PUBLIC AVAILABILITY OF
13 DATA.—

14 “(1) IN GENERAL.—Subsection (a)(4) shall not
15 apply in any case in which the Administrator, in
16 consultation with the Secretary of Defense, deter-
17 mines that publishing or otherwise making available
18 information in accordance with that paragraph poses
19 a risk to national security.

20 “(2) STATEMENT OF REASONS.—In a case de-
21 scribed in paragraph (1), the Administrator shall
22 publish a description of the determination and the
23 reasons for the determination.

1 **“SEC. 842. MONITORING AND REPORTING.**

2 “(a) REQUIREMENTS.—Each owner or operator of a
3 covered entity, or to the extent applicable, the greenhouse
4 gas authorized account representative for the covered enti-
5 ty, shall—

6 “(1) comply with the monitoring, record-
7 keeping, and reporting requirements of part 75 of
8 title 40, Code of Federal Regulations (or successor
9 regulations); and

10 “(2) submit to the Administrator electronic
11 quarterly reports that describe the greenhouse gas
12 mass emission data, fuel input data, and electricity
13 output data for the covered entity.

14 “(b) BIOMASS COFIRING.—Not later than 18 months
15 after the date of enactment of this title, the Administrator
16 shall promulgate regulations that provide monitoring, rec-
17 ordkeeping, and reporting requirements for biomass co-
18 firing at covered entities.”.

19 (b) CONFORMING AMENDMENTS.—

20 (1) FEDERAL ENFORCEMENT.—Section 113 of
21 the Clean Air Act (42 U.S.C. 7413) is amended—

22 (A) in subsection (a)(3), by striking or title
23 VI,“ and inserting title VI, or title VII,”;

24 (B) in subsection (b)—

25 (i) by redesignating paragraphs (1)
26 through (3) as subparagraphs (A) through

1 (C), respectively, and indenting the sub-
2 paragraphs appropriately;

3 (ii) by striking “The Administrator
4 shall” and inserting the following:

5 “(1) IN GENERAL.—The Administrator shall”;

6 (iii) in paragraph (1) (as designated
7 by clause (ii)), in the matter preceding
8 subparagraph (A) (as redesignated by
9 clause (i)), by striking “or a major sta-
10 tionary source” and inserting “a major
11 stationary source, or a covered entity
12 under title VII”; and

13 (iv) in subparagraph (B) (as redesign-
14 ated by clause (i)), by striking “or title
15 VI” and inserting “title VI, or title VII”;

16 (v) in the matter following subpara-
17 graph (C) of paragraph (1) (as designated
18 by clauses (i) and (ii))—

19 (I) by striking “Any action” and
20 inserting the following:

21 “(2) JUDICIAL ENFORCEMENT.—

22 “(A) IN GENERAL.—Any action”;

23 (II) by striking “Notice” and in-
24 serting the following:

25 “(B) NOTICE.—Notice”; and

1 (III) by striking “In the case”
2 and inserting the following:

3 “(C) ACTIONS BROUGHT BY ADMINIS-
4 TRATOR.—In the case”;

5 (C) in subsection (c)—

6 (i) in the first sentence of paragraph
7 (1), by striking “or title VI (relating to
8 stratospheric ozone control),” and insert-
9 ing “title VI (relating to stratospheric
10 ozone control), or title VII (relating to
11 global warming pollution emission reduc-
12 tions),”; and

13 (ii) in the first sentence of paragraph
14 (3), by striking “or VI” and inserting “VI,
15 or VII”;

16 (D) in subsection (d)(1)(B), by striking
17 “or VI” and inserting “VI, or VII”; and

18 (E) in subsection (f), in the first sentence,
19 by striking “or VI” and inserting “VI, or VII”.

20 (2) INSPECTIONS, MONITORING, AND ENTRY.—

21 Section 114(a) of the Clean Air Act (42 U.S.C.
22 7414(a)) is amended by striking “section 112,” and
23 all that follows through “(ii)” and inserting the fol-
24 lowing: “section 112, any regulation of solid waste

1 combustion under section 129, or any regulation of
2 greenhouse gas emissions under title VII, (ii)”.

3 (3) ADMINISTRATIVE PROCEEDINGS AND JUDI-
4 CIAL REVIEW.—Section 307 of the Clean Air Act
5 (42 U.S.C. 7607) is amended—

6 (A) in subsection (a), by striking “, or sec-
7 tion 306” and inserting “section 306, or title
8 VII”;

9 (B) in subsection (b)(1)—

10 (i) by striking “section 111,,” and in-
11 serting “section 111,”;

12 (ii) by striking “section 120,” each
13 place it appears and inserting “section
14 120, any action under title VII,”; and

15 (iii) by striking “112,,” and inserting
16 “112,”; and

17 (C) in subsection (d)(1)—

18 (i) by striking subparagraph (S);

19 (ii) by redesignating the second sub-
20 paragraph (N) and subparagraphs (O)
21 through (R) as subparagraphs (O), (P),
22 (Q), (R), and (S), respectively;

23 (iii) by redesignating subparagraphs
24 (T) and (U) as subparagraphs (U) and
25 (V), respectively; and

1 (iv) by inserting after subparagraph
2 (S) (as redesignated by clause (ii)) the fol-
3 lowing:

4 “(T) the promulgation or revision of any
5 regulation under title VII,”.

6 (4) UNAVAILABILITY OF EMISSIONS DATA.—
7 Section 412(d) of the Clean Air Act (42 U.S.C.
8 7651k(d)) is amended in the first sentence—

9 (A) by inserting “or title VII” after
10 “under subsection (a)”; and

11 (B) by inserting “or title VII” after “this
12 title”.

13 **Subtitle B—Climate Change**

14 **Research Initiatives**

15 **SEC. 711. RESEARCH GRANTS THROUGH NATIONAL** 16 **SCIENCE FOUNDATION.**

17 Section 105 of the Global Change Research Act of
18 1990 (15 U.S.C. 2935) is amended—

19 (1) by redesignating subsection (c) as sub-
20 section (d); and

21 (2) by inserting after subsection (b) the fol-
22 lowing:

23 “(c) RESEARCH GRANTS.—

24 “(1) LIST OF PRIORITY RESEARCH AREAS.—

25 The Committee shall develop a list of priority areas

1 for research and development on climate change that
2 are not being adequately addressed by Federal agen-
3 cies.

4 “(2) TRANSMISSION OF LIST.—The Director of
5 the Office of Science and Technology Policy shall
6 submit the list developed under paragraph (1) to the
7 National Science Foundation.

8 “(3) AUTHORIZATION OF APPROPRIATIONS.—
9 There are authorized to be appropriated to the Na-
10 tional Science Foundation such sums as are nec-
11 essary to carry out this subsection, to be made avail-
12 able through the Science and Technology Policy In-
13 stitute, for research in the priority areas.”.

14 **SEC. 712. ABRUPT CLIMATE CHANGE RESEARCH.**

15 (a) IN GENERAL.—The Secretary of Commerce, act-
16 ing through the National Oceanic and Atmospheric Ad-
17 ministration, shall carry out a program of scientific re-
18 search on abrupt climate change designed to provide time-
19 ly warnings of the potential likelihood, magnitude, and
20 consequences of, and measures to avoid, abrupt human-
21 induced climate change.

22 (b) AUTHORIZATION OF APPROPRIATIONS.—There
23 are authorized to be appropriated to the Secretary of Com-
24 merce such sums as are necessary to carry out this sec-
25 tion.

1 **SEC. 713. DEVELOPMENT OF NEW MEASUREMENT TECH-**
2 **NOLOGIES.**

3 (a) IN GENERAL.—The Administrator of the Envi-
4 ronmental Protection Agency shall carry out a program
5 to develop, with technical assistance from appropriate
6 Federal agencies, innovative standards and measurement
7 technologies to calculate greenhouse gas emissions or re-
8 ductions for which no accurate, reliable, low-cost measure-
9 ment technology exists.

10 (b) ADMINISTRATION.—The program shall include
11 technologies (including remote sensing technologies) to
12 measure carbon changes and other greenhouse gas emis-
13 sions and reductions from agriculture, forestry, wetlands,
14 and other land use practices.

15 (c) AUTHORIZATION OF APPROPRIATIONS.—There
16 are authorized to be appropriated to the Administrator
17 such sums as are necessary to carry out this section.

18 **SEC. 714. TECHNOLOGY DEVELOPMENT AND DIFFUSION.**

19 (a) IN GENERAL.—The Director of the National In-
20 stitute of Standards and Technology, acting through the
21 Manufacturing Extension Partnership program, may de-
22 velop a program to promote the use, by small manufactur-
23 ers, of technologies and techniques that result in reduced
24 emissions of greenhouse gases or increased sequestration
25 of greenhouse gases.

1 (b) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated to the Director of the
3 National Institute of Standards and Technology such
4 sums as are necessary to carry out this section.

5 **SEC. 715. PUBLIC LAND.**

6 (a) IN GENERAL.—Not later than 3 years after the
7 date of enactment of this Act, the Secretary of Agriculture
8 and the Secretary of the Interior shall prepare a joint as-
9 sessment or separate assessments setting forth rec-
10 ommendations for increased sequestration of greenhouse
11 gases and reduction of greenhouse gas emissions on public
12 land that is—

13 (1) managed forestland;

14 (2) managed rangeland or grassland; or

15 (3) protected land, including national parks and
16 designated wilderness areas.

17 (b) AUTHORIZATION OF APPROPRIATIONS.—There
18 are authorized to be appropriated to the Secretary of Agri-
19 culture and the Secretary of the Interior such sums as
20 are necessary to carry out this section.

21 **SEC. 716. SEA LEVEL RISE FROM POLAR ICE SHEET MELT-**
22 **ING.**

23 (a) IN GENERAL.—The Secretary of Commerce, act-
24 ing through the National Oceanic and Atmospheric Ad-
25 ministration and in cooperation with the Administrator of

1 the National Aeronautics and Space Administration, shall
2 carry out a program of scientific research to support mod-
3 eling and observations into the potential role of the Green-
4 land, west Antarctic, and east Antarctic ice sheets in any
5 future increase in sea levels.

6 (b) AUTHORIZATION OF APPROPRIATIONS.—There
7 are authorized to be appropriated to the Secretary of Com-
8 merce and the Administrator of the National Aeronautics
9 and Space Administration such sums as are necessary to
10 carry out this section.

11 **TITLE VIII—OFFSETS**
12 **Subtitle A—Denial of Oil and Gas**
13 **Tax Benefits**

14 **SEC. 801. SHORT TITLE.**

15 This subtitle may be cited as the “Ending Subsidies
16 for Big Oil Act of 2007”.

17 **SEC. 802. DENIAL OF DEDUCTION FOR INCOME ATTRIB-**
18 **UTABLE TO DOMESTIC PRODUCTION OF OIL,**
19 **NATURAL GAS, OR PRIMARY PRODUCTS**
20 **THEREOF.**

21 (a) IN GENERAL.—Subparagraph (B) of section
22 199(c)(4) of the Internal Revenue Code of 1986 (relating
23 to exceptions) is amended by striking “or” at the end of
24 clause (ii), by striking the period at the end of clause (iii)

1 and inserting “, or”, and by inserting after clause (iii) the
2 following new clause:

3 “(iv) the sale, exchange, or other dis-
4 position of oil, natural gas, or any primary
5 product thereof.”.

6 (b) PRIMARY PRODUCT.—Section 199(c)(4)(B) of
7 such Code is amended by adding at the end the following
8 flush sentence:

9 “For purposes of clause (iv), the term ‘primary
10 product’ has the same meaning as when used in
11 section 927(a)(2)(C), as in effect before its re-
12 peal.”.

13 (c) CONFORMING AMENDMENTS.—Section 199(c)(4)
14 of such Code is amended—

15 (1) in subparagraph (A)(i)(III) by striking
16 “electricity, natural gas,” and inserting “electricity”,
17 and

18 (2) in subparagraph (B)(ii) by striking “elec-
19 tricity, natural gas,” and inserting “electricity”.

20 (d) EFFECTIVE DATE.—The amendments made by
21 this section shall apply to taxable years beginning after
22 December 31, 2007.

1 **SEC. 803. 7-YEAR AMORTIZATION OF GEOLOGICAL AND**
2 **GEOPHYSICAL EXPENDITURES FOR CERTAIN**
3 **MAJOR INTEGRATED OIL COMPANIES.**

4 (a) IN GENERAL.—Subparagraph (A) of section
5 167(h)(5) of the Internal Revenue Code of 1986 (relating
6 to special rule for major integrated oil companies) is
7 amended by striking “5-year” and inserting “7-year”.

8 (b) EFFECTIVE DATE.—The amendment made by
9 this section shall apply to amounts paid or incurred after
10 the date of the enactment of this Act.

11 **Subtitle B—Royalties Under**
12 **Offshore Oil and Gas Leases**

13 **SEC. 811. SHORT TITLE.**

14 This title may be cited as the “Royalty Relief for
15 American Consumers Act of 2007”.

16 **SEC. 812. PRICE THRESHOLDS FOR ROYALTY SUSPENSION**
17 **PROVISIONS.**

18 The Secretary of the Interior shall agree to a request
19 by any lessee to amend any lease issued for any Central
20 and Western Gulf of Mexico tract during the period of
21 January 1, 1998, through December 31, 1999, to incor-
22 porate price thresholds applicable to royalty suspension
23 provisions, that are equal to or less than the price thresh-
24 olds described in clauses (v) through (vii) of section
25 8(a)(3)(C) of the Outer Continental Shelf Lands Act (43
26 U.S.C. 1337(a)(3)(C)). Any amended lease shall impose

1 the new or revised price thresholds effective October 1,
2 2006. Existing lease provisions shall prevail through Sep-
3 tember 30, 2006.

4 **SEC. 813. CLARIFICATION OF AUTHORITY TO IMPOSE**
5 **PRICE THRESHOLDS FOR CERTAIN LEASE**
6 **SALES.**

7 Congress reaffirms the authority of the Secretary of
8 the Interior under section 8(a)(1)(H) of the Outer Conti-
9 nental Shelf Lands Act (43 U.S.C. 1337(a)(1)(H)) to
10 vary, based on the price of production from a lease, the
11 suspension of royalties under any lease subject to section
12 304 of the Outer Continental Shelf Deep Water Royalty
13 Relief Act (Public Law 104–58; 43 U.S.C. 1337 note).

14 **SEC. 814. ELIGIBILITY FOR NEW LEASES AND THE TRANS-**
15 **FER OF LEASES; CONSERVATION OF RE-**
16 **SOURCES FEES.**

17 (a) ISSUANCE OF NEW LEASES.—

18 (1) IN GENERAL.—The Secretary shall not
19 issue any new lease that authorizes the production
20 of oil or natural gas in the Gulf of Mexico under the
21 Outer Continental Shelf Lands Act (43 U.S.C. 1331
22 et seq.) to a person described in paragraph (2) un-
23 less—

24 (A) the person has renegotiated each cov-
25 ered lease with respect to which the person is

1 a lessee, to modify the payment responsibilities
2 of the person to include price thresholds that
3 are equal to or less than the price thresholds
4 described in clauses (v) through (vii) of section
5 8(a)(3)(C) of the Outer Continental Shelf
6 Lands Act (43 U.S.C. 1337(a)(3)(C)); or

7 (B) the person has—

8 (i) paid all fees established by the
9 Secretary under subsection (b) that are
10 due with respect to each covered lease for
11 which the person is a lessee; or

12 (ii) entered into an agreement with
13 the Secretary under which the person is
14 obligated to pay such fees.

15 (2) PERSONS DESCRIBED.—A person referred
16 to in paragraph (1) is a person that—

17 (A) is a lessee that—

18 (i) holds a covered lease on the date
19 on which the Secretary considers the
20 issuance of the new lease; or

21 (ii) was issued a covered lease before
22 the date of enactment of this Act, but
23 transferred the covered lease to another
24 person or entity (including a subsidiary or

1 affiliate of the lessee) after the date of en-
2 actment of this Act; or

3 (B) any other person or entity who has
4 any direct or indirect interest in, or who derives
5 any benefit from, a covered lease;

6 (3) MULTIPLE LESSEES.—

7 (A) IN GENERAL.—For purposes of para-
8 graph (1), if there are multiple lessees that own
9 a share of a covered lease, the Secretary may
10 implement separate agreements with any lessee
11 with a share of the covered lease that modifies
12 the payment responsibilities with respect to the
13 share of the lessee to include price thresholds
14 that are equal to or less than the price thresh-
15 olds described in clauses (v) through (vii) of
16 section 8(a)(3)(C) of the Outer Continental
17 Shelf Lands Act (43 U.S.C. 1337(a)(3)(C)).

18 (B) TREATMENT OF SHARE AS COVERED
19 LEASE.—Beginning on the effective date of an
20 agreement under subparagraph (A), any share
21 subject to the agreement shall not constitute a
22 covered lease with respect to any lessees that
23 entered into the agreement.

24 (b) CONSERVATION OF RESOURCES FEES.—

1 (1) IN GENERAL.—Not later than 60 days after
2 the date of enactment of this Act, the Secretary of
3 the Interior by regulation shall establish—

4 (A) a conservation of resources fee for pro-
5 ducing Federal oil and gas leases in the Gulf of
6 Mexico; and

7 (B) a conservation of resources fee for
8 nonproducing Federal oil and gas leases in the
9 Gulf of Mexico.

10 (2) PRODUCING LEASE FEE TERMS.—The fee
11 under paragraph (1)(A)—

12 (A) subject to subparagraph (C), shall
13 apply to covered leases that are producing
14 leases;

15 (B) shall be set at \$9 per barrel for oil and
16 \$1.25 per million Btu for gas, respectively, in
17 2005 dollars; and

18 (C) shall apply only to production of oil or
19 gas occurring—

20 (i) in any calendar year in which the
21 arithmetic average of the daily closing
22 prices for light sweet crude oil on the New
23 York Mercantile Exchange (NYMEX) ex-
24 ceeds \$34.73 per barrel for oil and \$4.34

1 per million Btu for gas in 2005 dollars;
2 and
3 (ii) on or after October 1, 2006.

4 (3) NONPRODUCING LEASE FEE TERMS.—The
5 fee under paragraph (1)(B)—

6 (A) subject to subparagraph (C), shall
7 apply to leases that are nonproducing leases;

8 (B) shall be set at \$3.75 per acre per year
9 in 2005 dollars; and

10 (C) shall apply on and after October 1,
11 2006.

12 (4) TREATMENT OF RECEIPTS.—Amounts re-
13 ceived by the United States as fees under this sub-
14 section shall be treated as offsetting receipts.

15 (c) TRANSFERS.—A lessee or any other person who
16 has any direct or indirect interest in, or who derives a
17 benefit from, a lease shall not be eligible to obtain by sale
18 or other transfer (including through a swap, spinoff, serv-
19 icing, or other agreement) any covered lease, the economic
20 benefit of any covered lease, or any other lease for the
21 production of oil or natural gas in the Gulf of Mexico
22 under the Outer Continental Shelf Lands Act (43 U.S.C.
23 1331 et seq.), unless—

24 (1) the lessee or other person has—

1 (A) renegotiated all covered leases of the
2 lessee or other person; and

3 (B) entered into an agreement with the
4 Secretary to modify the terms of all covered
5 leases of the lessee or other person to include
6 limitations on royalty relief based on market
7 prices that are equal to or less than the price
8 thresholds described in clauses (v) through (vii)
9 of section 8(a)(3)(C) of the Outer Continental
10 Shelf Lands Act (43 U.S.C. 1337(a)(3)(C)); or
11 (2) the lessee or other person has—

12 (A) paid all fees established by the Sec-
13 retary under subsection (b) that are due with
14 respect to each covered lease for which the per-
15 son is a lessee; or

16 (B) entered into an agreement with the
17 Secretary under which the person is obligated
18 to pay such fees.

19 (d) DEFINITIONS.—In this section—

20 (1) COVERED LEASE.—The term “covered
21 lease” means a lease for oil or gas production in the
22 Gulf of Mexico that is—

23 (A) in existence on the date of enactment
24 of this Act;

1 (B) issued by the Department of the Inte-
2 rior under section 304 of the Outer Continental
3 Shelf Deep Water Royalty Relief Act (43
4 U.S.C. 1337 note; Public Law 104–58); and

5 (C) not subject to limitations on royalty re-
6 lief based on market price that are equal to or
7 less than the price thresholds described in
8 clauses (v) through (vii) of section 8(a)(3)(C) of
9 the Outer Continental Shelf Lands Act (43
10 U.S.C. 1337(a)(3)(C)).

11 (2) LESSEE.—The term “lessee” includes any
12 person or other entity that controls, is controlled by,
13 or is in or under common control with, a lessee.

14 (3) SECRETARY.—The term “Secretary” means
15 the Secretary of the Interior.

16 **SEC. 815. REPEAL OF CERTAIN TAXPAYER SUBSIDIZED**
17 **ROYALTY RELIEF FOR THE OIL AND GAS IN-**
18 **DUSTRY.**

19 (a) REPEAL OF PROVISIONS OF ENERGY POLICY ACT
20 OF 2005.—The following provisions of the Energy Policy
21 Act of 2005 (Public Law 109–58) are repealed:

22 (1) Section 344 (42 U.S.C. 15904; relating to
23 incentives for natural gas production from deep wells
24 in shallow waters of the Gulf of Mexico).

1 (2) Section 345 (42 U.S.C. 15905; relating to
2 royalty relief for deep water production in the Gulf
3 of Mexico).

4 (3) Subsection (i) of section 365 (42 U.S.C.
5 15924; relating to the prohibition on drilling-related
6 permit application cost recovery fees).

7 (b) PROVISIONS RELATING TO PLANNING AREAS
8 OFFSHORE ALASKA.—Section 8(a)(3)(B) of the Outer
9 Continental Shelf Lands Act (43 U.S.C. 1337(a)(3)(B))
10 is amended by striking “and in the Planning Areas off-
11 shore Alaska” after “West longitude”.

12 (c) PROVISIONS RELATING TO NAVAL PETROLEUM
13 RESERVE IN ALASKA.—Section 107 of the Naval Petro-
14 leum Reserves Production Act of 1976 (as transferred, re-
15 designated, moved, and amended by section 347 of the En-
16 ergy Policy Act of 2005 (119 Stat. 704)) is amended—

17 (1) in subsection (i) by striking paragraphs (2)
18 through (6); and

19 (2) by striking subsection (k).

1 **Subtitle C—Strategic Energy**
2 **Efficiency and Renewable Reserve**

3 **SEC. 821. STRATEGIC ENERGY EFFICIENCY AND RENEW-**
4 **ABLES RESERVE FOR INVESTMENTS IN RE-**
5 **NEWABLE ENERGY AND ENERGY EFFI-**
6 **CIENCY.**

7 (a) IN GENERAL.—For budgetary purposes, the addi-
8 tional Federal receipts by reason of the enactment of this
9 Act shall be held in a separate account to be known as
10 the “Strategic Energy Efficiency and Renewables Re-
11 serve”. The Strategic Energy Efficiency and Renewables
12 Reserve shall be available to offset the cost of subsequent
13 legislation—

14 (1) to accelerate the use of clean domestic re-
15 newable energy resources and alternative fuels;

16 (2) to promote the utilization of energy-efficient
17 products and practices and conservation; and

18 (3) to increase research, development, and de-
19 ployment of clean renewable energy and efficiency
20 technologies.

21 (b) PROCEDURE FOR ADJUSTMENTS.—

22 (1) BUDGET COMMITTEE CHAIRMAN.—After the
23 reporting of a bill or joint resolution, or the offering
24 of an amendment thereto or the submission of a con-
25 ference report thereon, providing funding for the

1 purposes set forth in subsection (a) in excess of the
2 amounts provided for those purposes for fiscal year
3 2007, the chairman of the Committee on the Budget
4 of the applicable House of Congress shall make the
5 adjustments set forth in paragraph (2) for the
6 amount of new budget authority and outlays in that
7 measure and the outlays flowing from that budget
8 authority.

9 (2) MATTERS TO BE ADJUSTED.—The adjust-
10 ments referred to in paragraph (1) are to be made
11 to—

12 (A) the discretionary spending limits, if
13 any, set forth in the appropriate concurrent res-
14 olution on the budget;

15 (B) the allocations made pursuant to the
16 appropriate concurrent resolution on the budget
17 pursuant to section 302(a) of the Congressional
18 Budget Act of 1974; and

19 (C) the budget aggregates contained in the
20 appropriate concurrent resolution on the budget
21 as required by section 301(a) of the Congres-
22 sional Budget Act of 1974.

23 (3) AMOUNTS OF ADJUSTMENTS.—The adjust-
24 ments referred to in paragraphs (1) and (2) shall
25 not exceed the receipts estimated by the Congres-

1 sional Budget Office that are attributable to this Act
2 for the fiscal year in which the adjustments are
3 made.

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