

110TH CONGRESS
1ST SESSION

H. R. 2950

To reduce our Nation's dependency on foreign oil by investing in clean, renewable, and alternative energy resources, promoting new emerging energy technologies, developing greater efficiency, and creating a Strategic Energy Efficiency and Renewables Reserve to invest in alternative energy, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JUNE 28, 2007

Mrs. WILSON of New Mexico introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Science and Technology, Education and Labor, Transportation and Infrastructure, Natural Resources, Oversight and Government Reform, Financial Services, Foreign Affairs, Small Business, Judiciary, Armed Services, Select Intelligence (Permanent Select), and Agriculture, 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 reduce our Nation's dependency on foreign oil by investing in clean, renewable, and alternative energy resources, promoting new emerging energy technologies, developing greater efficiency, and creating a Strategic Energy Efficiency and Renewables Reserve to invest in alternative energy, and for other purposes.

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

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

2 (a) **SHORT TITLE.**—This Act may be cited as the
 3 “Renewable Fuels, Consumer Protection, and Energy Ef-
 4 ficiency Act of 2007”.

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

- Sec. 1. Short title; table of contents.
- Sec. 2. Relationship to other law.

TITLE I—BIOFUELS FOR ENERGY SECURITY AND
TRANSPORTATION

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

Subtitle A—Renewable Fuel Standard

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

Subtitle B—Renewable Fuels Infrastructure

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

Subtitle C—Studies

- Sec. 141. Study of advanced biofuels technologies.
- Sec. 142. Study of increased consumption of ethanol-blended gasoline with higher levels of ethanol.
- Sec. 143. Pipeline feasibility study.
- Sec. 144. Study of optimization of flexible fueled vehicles to use E-85 fuel.
- Sec. 145. Study of credits for use of renewable electricity in electric vehicles.
- Sec. 146. Study of engine durability associated with the use of biodiesel.
- Sec. 147. Study of incentives for renewable fuels.

- Sec. 148. Study of streamlined lifecycle analysis tools for the evaluation of renewable carbon content of biofuels.
- Sec. 149. Study of effects of ethanol-blended gasoline on off-road vehicles.
- Sec. 150. Study of offshore wind resources.

Subtitle D—Environmental Safeguards

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

TITLE II—ENERGY EFFICIENCY PROMOTION

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

Subtitle A—Promoting Advanced Lighting Technologies

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

Subtitle B—Expediting New Energy Efficiency Standards

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

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

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

Subtitle D—Setting Energy Efficiency Goals

- Sec. 251. Oil savings plan and requirements.

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

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

- Sec. 261. Federal fleet conservation requirements.
- Sec. 262. Federal requirement to purchase electricity generated by renewable energy.
- Sec. 263. Energy savings performance contracts.
- Sec. 264. Energy management requirements for Federal buildings.
- Sec. 265. Combined heat and power and district energy installations at Federal sites.
- Sec. 266. Federal building energy efficiency performance standards.
- Sec. 267. Application of International Energy Conservation Code to public and assisted housing.
- Sec. 268. Energy efficient commercial buildings initiative.
- Sec. 269. Clean energy corridors.
- Sec. 270. Federal standby power standard.
- Sec. 270A. Standard relating to solar hot water heaters.
- Sec. 270B. Renewable energy innovation manufacturing partnership.
- Sec. 270C. Express loans for renewable energy and energy efficiency.
- Sec. 270D. Small business energy efficiency.

Subtitle F—Assisting State and Local Governments in Energy Efficiency

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

Subtitle G—Marine and Hydrokinetic Renewable Energy Promotion

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

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

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

TITLE IV—COST-EFFECTIVE AND ENVIRONMENTALLY SUSTAINABLE PUBLIC BUILDINGS

Subtitle A—Public Buildings Cost Reduction

- Sec. 401. Short title.
- Sec. 402. Cost-effective and geothermal heat pump technology acceleration program.
- Sec. 403. Environmental Protection Agency demonstration grant program for local governments.
- Sec. 404. Definitions.

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

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

Subtitle C—High-Performance Green Buildings

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

PART I—OFFICE OF HIGH-PERFORMANCE GREEN BUILDINGS

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

PART II—HEALTHY HIGH-PERFORMANCE SCHOOLS

- Sec. 441. Definition of high-performance school.
- Sec. 442. Grants for healthy school environments.
- Sec. 443. Model guidelines for siting of school facilities.
- Sec. 444. Public outreach.
- Sec. 445. Environmental health program.
- Sec. 446. Authorization of appropriations.

PART III—STRENGTHENING FEDERAL LEADERSHIP

- Sec. 451. Incentives.
- Sec. 452. Federal procurement.
- Sec. 453. Federal green building performance.

Sec. 454. Storm water runoff requirements for Federal development projects.

PART IV—DEMONSTRATION PROJECT

Sec. 461. Coordination of goals.

Sec. 462. Authorization of appropriations.

TITLE V—CORPORATE AVERAGE FUEL ECONOMY STANDARDS

Sec. 501. Short title.

Sec. 502. Average fuel economy standards for automobiles and certain other vehicles.

Sec. 503. Amending Fuel Economy Standards.

Sec. 504. Definitions.

Sec. 505. Ensuring safety of automobiles.

Sec. 506. Credit Trading Program.

Sec. 507. Labels for fuel economy and greenhouse gas emissions.

Sec. 508. Continued applicability of existing standards.

Sec. 509. National Academy of Sciences Studies.

Sec. 510. Standards for Executive agency automobiles.

Sec. 511. Increasing Consumer Awareness of Flexible Fuel Automobiles.

Sec. 512. Periodic review of accuracy of fuel economy labeling procedures.

Sec. 513. Tire fuel efficiency consumer information.

Sec. 514. Advanced Battery Initiative.

Sec. 515. Biodiesel standards.

Sec. 516. Use of Civil Penalties for research and development.

Sec. 517. Energy Security Fund and Alternative Fuel Grant Program.

Sec. 518. Authorization of appropriations.

Sec. 519. Application with Clean Air Act.

Sec. 520. Alternative fuel vehicle action plan.

Sec. 521. Study of the adequacy of transportation of domestically-produced renewable fuel by railroads and other modes of transportation.

TITLE VI—PRICE GOUGING

Sec. 601. Short title.

Sec. 602. Definitions.

Sec. 603. Prohibition on price gouging during energy emergencies.

Sec. 604. Prohibition on market manipulation.

Sec. 605. Prohibition on false information.

Sec. 606. Presidential declaration of energy emergency.

Sec. 607. Enforcement by the Federal Trade Commission.

Sec. 608. Enforcement by State Attorneys General.

Sec. 609. Penalties.

Sec. 610. Effect on other laws.

TITLE VII—ENERGY DIPLOMACY AND SECURITY

Sec. 701. Short title.

Sec. 702. Definitions.

Sec. 703. Sense of Congress on energy diplomacy and security.

Sec. 704. Strategic energy partnerships.

Sec. 705. International energy crisis response mechanisms.

Sec. 706. Hemisphere energy cooperation forum.

Sec. 707. National Security Council reorganization.

Sec. 708. Annual national energy security strategy report.

Sec. 709. Appropriate congressional committees defined.

Sec. 710. No Oil Producing and Exporting Cartels Act of 2007.

Sec. 711. Convention on Supplementary Compensation for Nuclear Damage
contingent cost allocation.

TITLE VIII—MISCELLANEOUS

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

TITLE IX—RENEWABLE PORTFOLIO STANDARD

Sec. 801. Renewable portfolio standard.

1 **SEC. 2. RELATIONSHIP TO OTHER LAW.**

2 Except to the extent expressly provided in this Act
3 or an amendment made by this Act, nothing in this Act
4 or an amendment made by this Act supersedes, limits the
5 authority provided or responsibility conferred by, or au-
6 thorizes any violation of any provision of law (including
7 a regulation), including any energy or environmental law
8 or regulation.

9 **TITLE I—BIOFUELS FOR ENERGY** 10 **SECURITY AND TRANSPORTATION** 11 **TATION**

12 **SEC. 101. SHORT TITLE.**

13 This title may be cited as the “Biofuels for Energy
14 Security and Transportation Act of 2007”.

15 **SEC. 102. DEFINITIONS.**

16 In this title:

17 (1) **ADVANCED BIOFUEL.**—

18 (A) **IN GENERAL.**—The term “advanced
19 biofuel” means fuel derived from renewable bio-
20 mass other than corn starch.

1 (B) INCLUSIONS.—The term “advanced
2 biofuel” includes—

3 (i) ethanol derived from cellulose,
4 hemicellulose, or lignin;

5 (ii) ethanol derived from sugar or
6 starch, other than ethanol derived from
7 corn starch;

8 (iii) ethanol derived from waste mate-
9 rial, including crop residue, other vegeta-
10 tive waste material, animal waste, and food
11 waste and yard waste;

12 (iv) diesel-equivalent fuel derived from
13 renewable biomass, including vegetable oil
14 and animal fat;

15 (v) biogas (including landfill gas and
16 sewage waste treatment gas) produced
17 through the conversion of organic matter
18 from renewable biomass;

19 (vi) butanol or other alcohols pro-
20 duced through the conversion of organic
21 matter from renewable biomass; and

22 (vii) other fuel derived from cellulosic
23 biomass.

24 (2) CELLULOSIC BIOMASS ETHANOL.—The
25 term “cellulosic biomass ethanol” means ethanol de-

1 rived from any cellulose, hemicellulose, or lignin that
2 is derived from renewable biomass.

3 (3) CONVENTIONAL BIOFUEL.—The term “con-
4 ventional biofuel” means ethanol derived from corn
5 starch.

6 (4) RENEWABLE BIOMASS.—The term “renew-
7 able biomass” means—

8 (A) nonmerchantable materials or
9 precommercial thinnings that—

10 (i) are byproducts of preventive treat-
11 ments, such as trees, wood, brush,
12 thinnings, chips, and slash, that are re-
13 moved—

14 (I) to reduce hazardous fuels;

15 (II) to reduce or contain disease
16 or insect infestation; or

17 (III) to restore forest health;

18 (ii) would not otherwise be used for
19 higher-value products; and

20 (iii) are harvested from National For-
21 est System land or public land (as defined
22 in section 103 of the Federal Land Policy
23 and Management Act of 1976 (43 U.S.C.
24 1702))—

25 (I) where permitted by law; and

1 (II) in accordance with—

2 (aa) applicable land manage-
3 ment plans; and

4 (bb) the requirements for
5 old-growth maintenance, restora-
6 tion, and management direction
7 of paragraphs (2), (3), and (4) of
8 subsection (e) and the require-
9 ments for large-tree retention of
10 subsection (f) of section 102 of
11 the Healthy Forests Restoration
12 Act of 2003 (16 U.S.C. 6512); or

13 (B) any organic matter that is available on
14 a renewable or recurring basis from non-Fed-
15 eral land or from land belonging to an Indian
16 tribe, or an Indian individual, that is held in
17 trust by the United States or subject to a re-
18 striction against alienation imposed by the
19 United States, including—

20 (i) renewable plant material, includ-
21 ing—

22 (I) feed grains;

23 (II) other agricultural commod-
24 ities;

25 (III) other plants and trees; and

- 1 (IV) algae; and
2 (ii) waste material, including—
3 (I) crop residue;
4 (II) other vegetative waste mate-
5 rial (including wood waste and wood
6 residues);
7 (III) animal waste and byprod-
8 ucts (including fats, oils, greases, and
9 manure); and
10 (IV) food waste and yard waste.

11 (5) RENEWABLE FUEL.—

12 (A) IN GENERAL.—The term “renewable
13 fuel” means motor vehicle fuel or home heating
14 fuel that is—

- 15 (i) produced from renewable biomass;
16 and
17 (ii) used to replace or reduce the
18 quantity of fossil fuel present in a fuel or
19 fuel mixture used to operate a motor vehi-
20 cle or furnace.

21 (B) INCLUSION.—The term “renewable
22 fuel” includes—

- 23 (i) conventional biofuel; and
24 (ii) advanced biofuel.

1 (6) SECRETARY.—The term “Secretary” means
2 the Secretary of Energy.

3 (7) SMALL REFINERY.—The term “small refin-
4 ery” means a refinery for which the average aggre-
5 gate daily crude oil throughput for a calendar year
6 (as determined by dividing the aggregate throughput
7 for the calendar year by the number of days in the
8 calendar year) does not exceed 75,000 barrels.

9 **Subtitle A—Renewable Fuel** 10 **Standard**

11 **SEC. 111. RENEWABLE FUEL STANDARD.**

12 (a) RENEWABLE FUEL PROGRAM.—

13 (1) REGULATIONS.—

14 (A) IN GENERAL.—Not later than 1 year
15 after the date of enactment of this Act, the
16 President shall promulgate regulations to en-
17 sure that motor vehicle fuel and home heating
18 oil sold or introduced into commerce in the
19 United States (except in noncontiguous States
20 or territories), on an annual average basis, con-
21 tains the applicable volume of renewable fuel
22 determined in accordance with paragraph (2).

23 (B) PROVISIONS OF REGULATIONS.—Re-
24 gardless of the date of promulgation, the regu-
25 lations promulgated under subparagraph (A)—

1 (i) shall contain compliance provisions
2 applicable to refineries, blenders, distribu-
3 tors, and importers, as appropriate, to en-
4 sure that—

5 (I) the requirements of this sub-
6 section are met; and

7 (II) renewable fuels produced
8 from facilities that commence oper-
9 ations after the date of enactment of
10 this Act achieve at least a 20 percent
11 reduction in life cycle greenhouse gas
12 emissions compared to gasoline; but

13 (ii) shall not—

14 (I) restrict geographic areas in
15 the contiguous United States in which
16 renewable fuel may be used; or

17 (II) impose any per-gallon obliga-
18 tion for the use of renewable fuel.

19 (C) RELATIONSHIP TO OTHER REGULA-
20 TIONS.—Regulations promulgated under this
21 paragraph shall, to the maximum extent prac-
22 ticable, incorporate the program structure, com-
23 pliance, and reporting requirements established
24 under the final regulations promulgated to im-
25 plement the renewable fuel program established

1 by the amendment made by section 1501(a)(2)
 2 of the Energy Policy Act of 2005 (Public Law
 3 109–58; 119 Stat. 1067).

4 (2) APPLICABLE VOLUME.—

5 (A) CALENDAR YEARS 2008 THROUGH
 6 2022.—

7 (i) RENEWABLE FUEL.—For the pur-
 8 pose of paragraph (1), subject to clause
 9 (ii), the applicable volume for any of cal-
 10 endar years 2008 through 2022 shall be
 11 determined in accordance with the fol-
 12 lowing table:

Calendar year:	Applicable volume of renewable fuel (in billions of gallons):
2008	8.5
2009	10.5
2010	12.0
2011	12.6
2012	13.2
2013	13.8
2014	14.4
2015	15.0
2016	18.0
2017	21.0
2018	24.0
2019	27.0
2020	30.0
2021	33.0
2022	36.0.

13 (ii) ADVANCED BIOFUELS.—For the
 14 purpose of paragraph (1), of the volume of
 15 renewable fuel required under clause (i),
 16 the applicable volume for any of calendar
 17 years 2016 through 2022 for advanced

1 biofuels shall be determined in accordance
 2 with the following table:

Calendar year:	Applicable volume of advanced biofuels (in billions of gallons):
2016	3.0
2017	6.0
2018	9.0
2019	12.0
2020	15.0
2021	18.0
2022	21.0.

3 (B) CALENDAR YEAR 2023 AND THERE-
 4 AFTER.—Subject to subparagraph (C), for the
 5 purposes of paragraph (1), the applicable vol-
 6 ume for calendar year 2023 and each calendar
 7 year thereafter shall be determined by the
 8 President, in coordination with the Secretary of
 9 Energy, the Secretary of Agriculture, and the
 10 Administrator of the Environmental Protection
 11 Agency, based on a review of the implementa-
 12 tion of the program during calendar years 2007
 13 through 2022, including a review of—

14 (i) the impact of renewable fuels on
 15 the energy security of the United States;

16 (ii) the expected annual rate of future
 17 production of renewable fuels, including
 18 advanced biofuels;

19 (iii) the impact of renewable fuels on
 20 the infrastructure of the United States, in-

1 including deliverability of materials, goods,
2 and products other than renewable fuel,
3 and the sufficiency of infrastructure to de-
4 liver renewable fuel; and

5 (iv) the impact of the use of renewable
6 fuels on other factors, including job cre-
7 ation, the price and supply of agricultural
8 commodities, rural economic development,
9 and the environment.

10 (C) MINIMUM APPLICABLE VOLUME.—Sub-
11 ject to subparagraph (D), for the purpose of
12 paragraph (1), the applicable volume for cal-
13 endar year 2023 and each calendar year there-
14 after shall be equal to the product obtained by
15 multiplying—

16 (i) the number of gallons of gasoline
17 that the President estimates will be sold or
18 introduced into commerce in the calendar
19 year; and

20 (ii) the ratio that—

21 (I) 36,000,000,000 gallons of re-
22 newable fuel; bears to

23 (II) the number of gallons of gas-
24 oline sold or introduced into com-
25 merce in calendar year 2022.

1 (D) MINIMUM PERCENTAGE OF ADVANCED
2 BIOFUEL.—For the purpose of paragraph (1)
3 and subparagraph (C), at least 60 percent of
4 the minimum applicable volume for calendar
5 year 2023 and each calendar year thereafter
6 shall be advanced biofuel.

7 (b) APPLICABLE PERCENTAGES.—

8 (1) PROVISION OF ESTIMATE OF VOLUMES OF
9 GASOLINE SALES.—Not later than October 31 of
10 each of calendar years 2008 through 2021, the Ad-
11 ministrator of the Energy Information Administra-
12 tion shall provide to the President an estimate, with
13 respect to the following calendar year, of the vol-
14 umes of gasoline projected to be sold or introduced
15 into commerce in the United States.

16 (2) DETERMINATION OF APPLICABLE PERCENT-
17 AGES.—

18 (A) IN GENERAL.—Not later than Novem-
19 ber 30 of each of calendar years 2008 through
20 2022, based on the estimate provided under
21 paragraph (1), the President shall determine
22 and publish in the Federal Register, with re-
23 spect to the following calendar year, the renew-
24 able fuel obligation that ensures that the re-
25 quirements of subsection (a) are met.

1 (B) REQUIRED ELEMENTS.—The renew-
2 able fuel obligation determined for a calendar
3 year under subparagraph (A) shall—

4 (i) be applicable to refineries, blend-
5 ers, and importers, as appropriate;

6 (ii) be expressed in terms of a volume
7 percentage of gasoline sold or introduced
8 into commerce in the United States; and

9 (iii) subject to paragraph (3)(A), con-
10 sist of a single applicable percentage that
11 applies to all categories of persons speci-
12 fied in clause (i).

13 (3) ADJUSTMENTS.—In determining the appli-
14 cable percentage for a calendar year, the President
15 shall make adjustments—

16 (A) to prevent the imposition of redundant
17 obligations on any person specified in para-
18 graph (2)(B)(i); and

19 (B) to account for the use of renewable
20 fuel during the previous calendar year by small
21 refineries that are exempt under subsection (g).

22 (c) VOLUME CONVERSION FACTORS FOR RENEW-
23 ABLE FUELS BASED ON ENERGY CONTENT OR REQUIRE-
24 MENTS.—

1 (1) IN GENERAL.—For the purpose of sub-
2 section (a), the President shall assign values to spe-
3 cific types of advanced biofuels for the purpose of
4 satisfying the fuel volume requirements of subsection
5 (a)(2) in accordance with this subsection.

6 (2) ENERGY CONTENT RELATIVE TO ETH-
7 ANOL.—For advanced biofuel, 1 gallon of the ad-
8 vanced biofuel shall be considered to be the equiva-
9 lent of 1 gallon of renewable fuel multiplied by the
10 ratio that—

11 (A) the number of British thermal units of
12 energy produced by the combustion of 1 gallon
13 of the advanced biofuel (as measured under
14 conditions determined by the Secretary); bears
15 to

16 (B) the number of British thermal units of
17 energy produced by the combustion of 1 gallon
18 of pure ethanol (as measured under conditions
19 determined by the Secretary to be comparable
20 to conditions described in subparagraph (A)).

21 (3) TRANSITIONAL ENERGY-RELATED CONVER-
22 SION FACTORS FOR CELLULOSIC BIOMASS ETH-
23 ANOL.—For any of calendar years 2008 through
24 2015, 1 gallon of cellulosic biomass ethanol shall be

1 considered to be the equivalent of 2.5 gallons of re-
2 newable fuel.

3 (d) CREDIT PROGRAM.—

4 (1) IN GENERAL.—The President, in consulta-
5 tion with the Secretary and the Administrator of the
6 Environmental Protection Agency, shall implement a
7 credit program to manage the renewable fuel re-
8 quirement of this section in a manner consistent
9 with the credit program established by the amend-
10 ment made by section 1501(a)(2) of the Energy Pol-
11 icy Act of 2005 (Public Law 109–58; 119 Stat.
12 1067).

13 (2) MARKET TRANSPARENCY.—In carrying out
14 the credit program under this subsection, the Presi-
15 dent shall facilitate price transparency in markets
16 for the sale and trade of credits, with due regard for
17 the public interest, the integrity of those markets,
18 fair competition, and the protection of consumers
19 and agricultural producers.

20 (e) SEASONAL VARIATIONS IN RENEWABLE FUEL
21 USE.—

22 (1) STUDY.—For each of calendar years 2008
23 through 2022, the Administrator of the Energy In-
24 formation Administration shall conduct a study of
25 renewable fuel blending to determine whether there

1 are excessive seasonal variations in the use of renew-
2 able fuel.

3 (2) REGULATION OF EXCESSIVE SEASONAL
4 VARIATIONS.—If, for any calendar year, the Admin-
5 istrator of the Energy Information Administration,
6 based on the study under paragraph (1), makes the
7 determinations specified in paragraph (3), the Presi-
8 dent shall promulgate regulations to ensure that 25
9 percent or more of the quantity of renewable fuel
10 necessary to meet the requirements of subsection (a)
11 is used during each of the 2 periods specified in
12 paragraph (4) of each subsequent calendar year.

13 (3) DETERMINATIONS.—The determinations re-
14 ferred to in paragraph (2) are that—

15 (A) less than 25 percent of the quantity of
16 renewable fuel necessary to meet the require-
17 ments of subsection (a) has been used during 1
18 of the 2 periods specified in paragraph (4) of
19 the calendar year;

20 (B) a pattern of excessive seasonal vari-
21 ation described in subparagraph (A) will con-
22 tinue in subsequent calendar years; and

23 (C) promulgating regulations or other re-
24 quirements to impose a 25 percent or more sea-

1 sonal use of renewable fuels will not signifi-
2 cantly—

3 (i) increase the price of motor fuels to
4 the consumer; or

5 (ii) prevent or interfere with the at-
6 tainment of national ambient air quality
7 standards.

8 (4) PERIODS.—The 2 periods referred to in this
9 subsection are—

10 (A) April through September; and

11 (B) January through March and October
12 through December.

13 (f) WAIVERS.—

14 (1) IN GENERAL.—The President, in consulta-
15 tion with the Secretary of Energy, the Secretary of
16 Agriculture, and the Administrator of the Environ-
17 mental Protection Agency, may waive the require-
18 ments of subsection (a) in whole or in part on peti-
19 tion by one or more States by reducing the national
20 quantity of renewable fuel required under subsection
21 (a), based on a determination by the President
22 (after public notice and opportunity for comment),
23 that—

24 (A) implementation of the requirement
25 would severely harm the economy or environ-

1 ment of a State, a region, or the United States;
2 or

3 (B) extreme and unusual circumstances
4 exist that prevent distribution of an adequate
5 supply of domestically-produced renewable fuel
6 to consumers in the United States.

7 (2) PETITIONS FOR WAIVERS.—The President,
8 in consultation with the Secretary of Energy, the
9 Secretary of Agriculture, and the Administrator of
10 the Environmental Protection Agency, shall approve
11 or disapprove a State petition for a waiver of the re-
12 quirements of subsection (a) within 30 days after
13 the date on which the petition is received by the
14 President.

15 (3) TERMINATION OF WAIVERS.—A waiver
16 granted under paragraph (1) shall terminate after 1
17 year, but may be renewed by the President after
18 consultation with the Secretary of Energy, the Sec-
19 retary of Agriculture, and the Administrator of the
20 Environmental Protection Agency.

21 (g) SMALL REFINERIES.—

22 (1) TEMPORARY EXEMPTION.—

23 (A) IN GENERAL.—The requirements of
24 subsection (a) shall not apply to—

1 (i) small refineries (other than a small
2 refinery described in clause (ii)) until cal-
3 endar year 2013; and

4 (ii) small refineries owned by a small
5 business refiner (as defined in section
6 45H(c) of the Internal Revenue Code of
7 1986) until calendar year 2015.

8 (B) EXTENSION OF EXEMPTION.—

9 (i) STUDY BY SECRETARY.—Not later
10 than December 31, 2008, the Secretary
11 shall submit to the President and Congress
12 a report describing the results of a study
13 to determine whether compliance with the
14 requirements of subsection (a) would im-
15 pose a disproportionate economic hardship
16 on small refineries.

17 (ii) EXTENSION OF EXEMPTION.—In
18 the case of a small refinery that the Sec-
19 retary determines under clause (i) would
20 be subject to a disproportionate economic
21 hardship if required to comply with sub-
22 section (a), the President shall extend the
23 exemption under subparagraph (A) for the
24 small refinery for a period of not less than
25 2 additional years.

1 (2) PETITIONS BASED ON DISPROPORTIONATE
2 ECONOMIC HARDSHIP.—

3 (A) EXTENSION OF EXEMPTION.—A small
4 refinery may at any time petition the President
5 for an extension of the exemption under para-
6 graph (1) for the reason of disproportionate
7 economic hardship.

8 (B) EVALUATION OF PETITIONS.—In eval-
9 uating a petition under subparagraph (A), the
10 President, in consultation with the Secretary,
11 shall consider the findings of the study under
12 paragraph (1)(B) and other economic factors.

13 (C) DEADLINE FOR ACTION ON PETI-
14 TIONS.—The President shall act on any petition
15 submitted by a small refinery for a hardship ex-
16 emption not later than 90 days after the date
17 of receipt of the petition.

18 (3) OPT-IN FOR SMALL REFINERIES.—A small
19 refinery shall be subject to the requirements of sub-
20 section (a) if the small refinery notifies the Presi-
21 dent that the small refinery waives the exemption
22 under paragraph (1).

23 (h) PENALTIES AND ENFORCEMENT.—

24 (1) CIVIL PENALTIES.—

1 (A) IN GENERAL.—Any person that vio-
2 lates a regulation promulgated under subsection
3 (a), or that fails to furnish any information re-
4 quired under such a regulation, shall be liable
5 to the United States for a civil penalty of not
6 more than the total of—

7 (i) \$25,000 for each day of the viola-
8 tion; and

9 (ii) the amount of economic benefit or
10 savings received by the person resulting
11 from the violation, as determined by the
12 President.

13 (B) COLLECTION.—Civil penalties under
14 subparagraph (A) shall be assessed by, and col-
15 lected in a civil action brought by, the Secretary
16 or such other officer of the United States as is
17 designated by the President.

18 (2) INJUNCTIVE AUTHORITY.—

19 (A) IN GENERAL.—The district courts of
20 the United States shall have jurisdiction to—

21 (i) restrain a violation of a regulation
22 promulgated under subsection (a);

23 (ii) award other appropriate relief;
24 and

1 (iii) compel the furnishing of informa-
2 tion required under the regulation.

3 (B) ACTIONS.—An action to restrain such
4 violations and compel such actions shall be
5 brought by and in the name of the United
6 States.

7 (C) SUBPOENAS.—In the action, a sub-
8 poena for a witness who is required to attend
9 a district court in any district may apply in any
10 other district.

11 (i) VOLUNTARY LABELING PROGRAM.—

12 (1) IN GENERAL.—The President shall establish
13 criteria for a system of voluntary labeling of renew-
14 able fuels based on life cycle greenhouse gas emis-
15 sions.

16 (2) CONSUMER EDUCATION.—The President
17 shall ensure that the labeling system under this sub-
18 section provides useful information to consumers
19 making fuel purchases.

20 (3) FLEXIBILITY.—In carrying out this sub-
21 section, the President may establish more than 1
22 label, as appropriate.

23 (j) STUDY OF IMPACT OF RENEWABLE FUEL STAND-
24 ARD.—

1 (1) IN GENERAL.—The Secretary shall enter
2 into an arrangement with the National Academy of
3 Sciences under which the Academy shall conduct a
4 study to assess the impact of the requirements de-
5 scribed in subsection (a)(2) on each industry relat-
6 ing to the production of feed grains, livestock, food,
7 and energy.

8 (2) PARTICIPATION.—In conducting the study
9 under paragraph (1), the National Academy of
10 Sciences shall seek the participation, and consider
11 the input, of—

12 (A) producers of feed grains;

13 (B) producers of livestock, poultry, and
14 pork products;

15 (C) producers of food and food products;

16 (D) producers of energy;

17 (E) individuals and entities interested in
18 issues relating to conservation, the environment,
19 and nutrition; and

20 (F) users of renewable fuels.

21 (3) CONSIDERATIONS.—In conducting the
22 study, the National Academy of Sciences shall con-
23 sider—

1 (A) the likely impact on domestic animal
2 agriculture feedstocks that, in any crop year,
3 are significantly below current projections; and

4 (B) policy options to alleviate the impact
5 on domestic animal agriculture feedstocks that
6 are significantly below current projections.

7 (4) COMPONENTS.—The study shall include—

8 (A) a description of the conditions under
9 which the requirements described in subsection
10 (a)(2) should be suspended or reduced to pre-
11 vent adverse impacts to domestic animal agri-
12 culture feedstocks described in paragraph
13 (3)(B); and

14 (B) recommendations for the means by
15 which the Federal Government could prevent or
16 minimize adverse economic hardships and im-
17 pacts.

18 (5) DEADLINE FOR COMPLETION OF STUDY.—

19 Not later than 270 days after the date of enactment
20 of this Act, the Secretary shall submit to Congress
21 a report that describes the results of the study.

22 (6) PERIODIC REVIEWS.—

23 (A) IN GENERAL.—To allow for the appro-
24 priate adjustment of the requirements described

1 in subsection (a)(2), the Secretary shall conduct
2 periodic reviews of—

3 (i) existing technologies;

4 (ii) the feasibility of achieving compli-
5 ance with the requirements; and

6 (iii) the impacts of the requirements
7 described in subsection (a)(2) on each indi-
8 vidual and entity described in paragraph
9 (2).

10 (k) EFFECTIVE DATE.—Except as otherwise specifi-
11 cally provided in this section, this section takes effect on
12 the date on which the National Academies of Science com-
13 pletes the study under subsection (j).

14 **SEC. 112. PRODUCTION OF RENEWABLE FUEL USING RE-**
15 **NEWABLE ENERGY.**

16 (a) DEFINITIONS.—In this section:

17 (1) FACILITY.—The term “facility” means a fa-
18 cility used for the production of renewable fuel.

19 (2) RENEWABLE ENERGY.—

20 (A) IN GENERAL.—The term “renewable
21 energy” has the meaning given the term in sec-
22 tion 203(b) of the Energy Policy Act of 2005
23 (42 U.S.C. 15852(b)).

24 (B) INCLUSION.—The term “renewable en-
25 ergy” includes biogas produced through the

1 conversion of organic matter from renewable
2 biomass.

3 (b) ADDITIONAL CREDIT.—

4 (1) IN GENERAL.—The President shall provide
5 a credit under the program established under section
6 111(d) to the owner of a facility that uses renewable
7 energy to displace more than 90 percent of the fossil
8 fuel normally used in the production of renewable
9 fuel.

10 (2) CREDIT AMOUNT.—The President may pro-
11 vide the credit in a quantity that is not more than
12 the equivalent of 1.5 gallons of renewable fuel for
13 each gallon of renewable fuel produced in a facility
14 described in paragraph (1).

15 **SEC. 113. SENSE OF CONGRESS RELATING TO THE USE OF**
16 **RENEWABLE RESOURCES TO GENERATE EN-**
17 **ERGY.**

18 (a) FINDINGS.—Congress finds that—

19 (1) the United States has a quantity of renew-
20 able energy resources that is sufficient to supply a
21 significant portion of the energy needs of the United
22 States;

23 (2) the agricultural, forestry, and working land
24 of the United States can help ensure a sustainable
25 domestic energy system;

1 (3) accelerated development and use of renew-
2 able energy technologies provide numerous benefits
3 to the United States, including improved national se-
4 curity, improved balance of payments, healthier
5 rural economies, improved environmental quality,
6 and abundant, reliable, and affordable energy for all
7 citizens of the United States;

8 (4) the production of transportation fuels from
9 renewable energy would help the United States meet
10 rapidly growing domestic and global energy de-
11 mands, reduce the dependence of the United States
12 on energy imported from volatile regions of the
13 world that are politically unstable, stabilize the cost
14 and availability of energy, and safeguard the econ-
15 omy and security of the United States;

16 (5) increased energy production from domestic
17 renewable resources would attract substantial new
18 investments in energy infrastructure, create eco-
19 nomic growth, develop new jobs for the citizens of
20 the United States, and increase the income for farm,
21 ranch, and forestry jobs in the rural regions of the
22 United States;

23 (6) increased use of renewable energy is prac-
24 tical and can be cost effective with the implementa-

1 tion of supportive policies and proper incentives to
2 stimulate markets and infrastructure; and

3 (7) public policies aimed at enhancing renew-
4 able energy production and accelerating techno-
5 logical improvements will further reduce energy costs
6 over time and increase market demand.

7 (b) SENSE OF CONGRESS.—It is the sense of Con-
8 gress that it is the goal of the United States that, not
9 later than January 1, 2025, the agricultural, forestry, and
10 working land of the United States should—

11 (1) provide from renewable resources not less
12 than 25 percent of the total energy consumed in the
13 United States; and

14 (2) continue to produce safe, abundant, and af-
15 fordable food, feed, and fiber.

16 **Subtitle B—Renewable Fuels**
17 **Infrastructure**

18 **SEC. 121. INFRASTRUCTURE PILOT PROGRAM FOR RENEW-**
19 **ABLE FUELS.**

20 (a) IN GENERAL.—The Secretary, in consultation
21 with the Secretary of Transportation and the Adminis-
22 trator of the Environmental Protection Agency, shall es-
23 tablish a competitive grant pilot program (referred to in
24 this section as the “pilot program”), to be administered
25 through the Vehicle Technology Deployment Program of

1 the Department of Energy, to provide not more than 10
2 geographically-dispersed project grants to State govern-
3 ments, Indian tribal governments, local governments, met-
4 ropolitan transportation authorities, or partnerships of
5 those entities to carry out 1 or more projects for the pur-
6 poses described in subsection (b).

7 (b) GRANT PURPOSES.—A grant under this section
8 shall be used for the establishment of refueling infrastruc-
9 ture corridors, as designated by the Secretary, for gasoline
10 blends that contain not less than 11 percent, and not more
11 than 85 percent, renewable fuel or diesel fuel that contains
12 at least 10 percent renewable fuel, including—

13 (1) installation of infrastructure and equipment
14 necessary to ensure adequate distribution of renew-
15 able fuels within the corridor;

16 (2) installation of infrastructure and equipment
17 necessary to directly support vehicles powered by re-
18 newable fuels; and

19 (3) operation and maintenance of infrastructure
20 and equipment installed as part of a project funded
21 by the grant.

22 (c) APPLICATIONS.—

23 (1) REQUIREMENTS.—

24 (A) IN GENERAL.—Subject to subpara-
25 graph (B), not later than 90 days after the date

1 of enactment of this Act, the Secretary shall
2 issue requirements for use in applying for
3 grants under the pilot program.

4 (B) MINIMUM REQUIREMENTS.—At a min-
5 imum, the Secretary shall require that an appli-
6 cation for a grant under this section—

7 (i) be submitted by—

8 (I) the head of a State, tribal, or
9 local government or a metropolitan
10 transportation authority, or any com-
11 bination of those entities; and

12 (II) a registered participant in
13 the Vehicle Technology Deployment
14 Program of the Department of En-
15 ergy; and

16 (ii) include—

17 (I) a description of the project
18 proposed in the application, including
19 the ways in which the project meets
20 the requirements of this section;

21 (II) an estimate of the degree of
22 use of the project, including the esti-
23 mated size of fleet of vehicles operated
24 with renewable fuel available within
25 the geographic region of the corridor,

1 measured as a total quantity and a
2 percentage;

3 (III) an estimate of the potential
4 petroleum displaced as a result of the
5 project (measured as a total quantity
6 and a percentage), and a plan to col-
7 lect and disseminate petroleum dis-
8 placement and other relevant data re-
9 lating to the project to be funded
10 under the grant, over the expected life
11 of the project;

12 (IV) a description of the means
13 by which the project will be sustain-
14 able without Federal assistance after
15 the completion of the term of the
16 grant;

17 (V) a complete description of the
18 costs of the project, including acquisi-
19 tion, construction, operation, and
20 maintenance costs over the expected
21 life of the project; and

22 (VI) a description of which costs
23 of the project will be supported by
24 Federal assistance under this sub-
25 section.

1 (2) PARTNERS.—An applicant under paragraph
2 (1) may carry out a project under the pilot program
3 in partnership with public and private entities.

4 (d) SELECTION CRITERIA.—In evaluating applica-
5 tions under the pilot program, the Secretary shall—

6 (1) consider the experience of each applicant
7 with previous, similar projects; and

8 (2) give priority consideration to applications
9 that—

10 (A) are most likely to maximize displace-
11 ment of petroleum consumption, measured as a
12 total quantity and a percentage;

13 (B) are best able to incorporate existing
14 infrastructure while maximizing, to the extent
15 practicable, the use of advanced biofuels;

16 (C) demonstrate the greatest commitment
17 on the part of the applicant to ensure funding
18 for the proposed project and the greatest likeli-
19 hood that the project will be maintained or ex-
20 panded after Federal assistance under this sub-
21 section is completed;

22 (D) represent a partnership of public and
23 private entities; and

24 (E) exceed the minimum requirements of
25 subsection (c)(1)(B).

1 (e) PILOT PROJECT REQUIREMENTS.—

2 (1) MAXIMUM AMOUNT.—The Secretary shall
3 provide not more than \$20,000,000 in Federal as-
4 sistance under the pilot program to any applicant.

5 (2) COST SHARING.—The non-Federal share of
6 the cost of any activity relating to renewable fuel in-
7 frastructure development carried out using funds
8 from a grant under this section shall be not less
9 than 20 percent.

10 (3) MAXIMUM PERIOD OF GRANTS.—The Sec-
11 retary shall not provide funds to any applicant under
12 the pilot program for more than 2 years.

13 (4) DEPLOYMENT AND DISTRIBUTION.—The
14 Secretary shall seek, to the maximum extent prac-
15 ticable, to ensure a broad geographic distribution of
16 project sites funded by grants under this section.

17 (5) TRANSFER OF INFORMATION AND KNOWL-
18 EDGE.—The Secretary shall establish mechanisms to
19 ensure that the information and knowledge gained
20 by participants in the pilot program are transferred
21 among the pilot program participants and to other
22 interested parties, including other applicants that
23 submitted applications.

24 (f) SCHEDULE.—

25 (1) INITIAL GRANTS.—

1 (A) IN GENERAL.—Not later than 90 days
2 after the date of enactment of this Act, the Sec-
3 retary shall publish in the Federal Register,
4 Commerce Business Daily, and such other pub-
5 lications as the Secretary considers to be appro-
6 priate, a notice and request for applications to
7 carry out projects under the pilot program.

8 (B) DEADLINE.—An application described
9 in subparagraph (A) shall be submitted to the
10 Secretary by not later than 180 days after the
11 date of publication of the notice under that sub-
12 paragraph.

13 (C) INITIAL SELECTION.—Not later than
14 90 days after the date by which applications for
15 grants are due under subparagraph (B), the
16 Secretary shall select by competitive, peer-re-
17 viewed proposal up to 5 applications for
18 projects to be awarded a grant under the pilot
19 program.

20 (2) ADDITIONAL GRANTS.—

21 (A) IN GENERAL.—Not later than 2 years
22 after the date of enactment of this Act, the Sec-
23 retary shall publish in the Federal Register,
24 Commerce Business Daily, and such other pub-
25 lications as the Secretary considers to be appro-

1 appropriate, a notice and request for additional appli-
2 cations to carry out projects under the pilot
3 program that incorporate the information and
4 knowledge obtained through the implementation
5 of the first round of projects authorized under
6 the pilot program.

7 (B) DEADLINE.—An application described
8 in subparagraph (A) shall be submitted to the
9 Secretary by not later than 180 days after the
10 date of publication of the notice under that sub-
11 paragraph.

12 (C) INITIAL SELECTION.—Not later than
13 90 days after the date by which applications for
14 grants are due under subparagraph (B), the
15 Secretary shall select by competitive, peer-re-
16 viewed proposal such additional applications for
17 projects to be awarded a grant under the pilot
18 program as the Secretary determines to be ap-
19 propriate.

20 (g) REPORTS TO CONGRESS.—

21 (1) INITIAL REPORT.—Not later than 60 days
22 after the date on which grants are awarded under
23 this section, the Secretary shall submit to Congress
24 a report containing—

1 (A) an identification of the grant recipients
2 and a description of the projects to be funded
3 under the pilot program;

4 (B) an identification of other applicants
5 that submitted applications for the pilot pro-
6 gram but to which funding was not provided;
7 and

8 (C) a description of the mechanisms used
9 by the Secretary to ensure that the information
10 and knowledge gained by participants in the
11 pilot program are transferred among the pilot
12 program participants and to other interested
13 parties, including other applicants that sub-
14 mitted applications.

15 (2) EVALUATION.—Not later than 2 years after
16 the date of enactment of this Act, and annually
17 thereafter until the termination of the pilot program,
18 the Secretary shall submit to Congress a report con-
19 taining an evaluation of the effectiveness of the pilot
20 program, including an assessment of the petroleum
21 displacement and benefits to the environment de-
22 rived from the projects included in the pilot pro-
23 gram.

24 (h) AUTHORIZATION OF APPROPRIATIONS.—There is
25 authorized to be appropriated to the Secretary to carry

1 out this section \$200,000,000, to remain available until
2 expended.

3 **SEC. 122. BIOENERGY RESEARCH AND DEVELOPMENT.**

4 Section 931(c) of the Energy Policy Act of 2005 (42
5 U.S.C. 16231(c)) is amended—

6 (1) in paragraph (2), by striking
7 “\$251,000,000” and inserting “\$377,000,000”; and

8 (2) in paragraph (3), by striking
9 “\$274,000,000” and inserting “\$398,000,000”.

10 **SEC. 123. BIORESEARCH CENTERS FOR SYSTEMS BIOLOGY**
11 **PROGRAM.**

12 Section 977(a)(1) of the Energy Policy Act of 2005
13 (42 U.S.C. 16317(a)(1)) is amended by inserting before
14 the period at the end the following: “, including the estab-
15 lishment of at least 11 bioresearch centers of varying
16 sizes, as appropriate, that focus on biofuels, of which at
17 least 2 centers shall be located in each of the 4 Petroleum
18 Administration for Defense Districts with no subdistricts
19 and 1 center shall be located in each of the subdistricts
20 of the Petroleum Administration for Defense District with
21 subdistricts”.

1 **SEC. 124. LOAN GUARANTEES FOR RENEWABLE FUEL FA-**
2 **CILITIES.**

3 (a) IN GENERAL.—Section 1703 of the Energy Policy
4 Act of 2005 (42 U.S.C. 16513) is amended by adding at
5 the end the following:

6 “(f) RENEWABLE FUEL FACILITIES.—

7 “(1) IN GENERAL.—The Secretary may make
8 guarantees under this title for projects that produce
9 advanced biofuel (as defined in section 102 of the
10 Biofuels for Energy Security and Transportation
11 Act of 2007).

12 “(2) REQUIREMENTS.—A project under this
13 subsection shall employ new or significantly im-
14 proved technologies for the production of renewable
15 fuels as compared to commercial technologies in
16 service in the United States at the time that the
17 guarantee is issued.

18 “(3) ISSUANCE OF FIRST LOAN GUARANTEES.—
19 The requirement of section 20320(b) of division B
20 of the Continuing Appropriations Resolution, 2007
21 (Public Law 109–289, Public Law 110–5), relating
22 to the issuance of final regulations, shall not apply
23 to the first 6 guarantees issued under this sub-
24 section.

25 “(4) PROJECT DESIGN.—A project for which a
26 guarantee is made under this subsection shall have

1 a project design that has been validated through the
2 operation of a continuous process pilot facility with
3 an annual output of at least 50,000 gallons of eth-
4 anol or the energy equivalent volume of other ad-
5 vanced biofuels.

6 “(5) MAXIMUM GUARANTEED PRINCIPAL.—The
7 total principal amount of a loan guaranteed under
8 this subsection may not exceed \$250,000,000 for a
9 single facility.

10 “(6) AMOUNT OF GUARANTEE.—The Secretary
11 shall guarantee 100 percent of the principal and in-
12 terest due on 1 or more loans made for a facility
13 that is the subject of the guarantee under paragraph
14 (3).

15 “(7) DEADLINE.—The Secretary shall approve
16 or disapprove an application for a guarantee under
17 this subsection not later than 90 days after the date
18 of receipt of the application.

19 “(8) REPORT.—Not later than 30 days after
20 approving or disapproving an application under
21 paragraph (7), the Secretary shall submit to Con-
22 gress a report on the approval or disapproval (in-
23 cluding the reasons for the action).”.

24 (b) IMPROVEMENTS TO UNDERLYING LOAN GUAR-
25 ANTEE AUTHORITY.—

1 (1) DEFINITION OF COMMERCIAL TECH-
2 NOLOGY.—Section 1701(1) of the Energy Policy Act
3 of 2005 (42 U.S.C. 16511(1)) is amended by strik-
4 ing subparagraph (B) and inserting the following:

5 “(B) EXCLUSION.—The term ‘commercial
6 technology’ does not include a technology if the
7 sole use of the technology is in connection
8 with—

9 “(i) a demonstration plant; or

10 “(ii) a project for which the Secretary
11 approved a loan guarantee.”.

12 (2) SPECIFIC APPROPRIATION OR CONTRIBU-
13 TION.—Section 1702 of the Energy Policy Act of
14 2005 (42 U.S.C. 16512) is amended by striking sub-
15 section (b) and inserting the following:

16 “(b) SPECIFIC APPROPRIATION OR CONTRIBU-
17 TION.—

18 “(1) IN GENERAL.—No guarantee shall be
19 made unless—

20 “(A) an appropriation for the cost has
21 been made; or

22 “(B) the Secretary has received from the
23 borrower a payment in full for the cost of the
24 obligation and deposited the payment into the
25 Treasury.

1 “(2) LIMITATION.—The source of payments re-
2 ceived from a borrower under paragraph (1)(B) shall
3 not be a loan or other debt obligation that is made
4 or guaranteed by the Federal Government.

5 “(3) RELATION TO OTHER LAWS.—Section
6 504(b) of the Federal Credit Reform Act of 1990 (2
7 U.S.C. 661c(b)) shall not apply to a loan or loan
8 guarantee made in accordance with paragraph
9 (1)(B).”.

10 (3) AMOUNT.—Section 1702 of the Energy Pol-
11 icy Act of 2005 (42 U.S.C. 16512) is amended by
12 striking subsection (c) and inserting the following:

13 “(c) AMOUNT.—

14 “(1) IN GENERAL.—Subject to paragraph (2),
15 the Secretary shall guarantee up to 100 percent of
16 the principal and interest due on 1 or more loans for
17 a facility that are the subject of the guarantee.

18 “(2) LIMITATION.—The total amount of loans
19 guaranteed for a facility by the Secretary shall not
20 exceed 80 percent of the total cost of the facility, as
21 estimated at the time at which the guarantee is
22 issued.”.

23 (4) SUBROGATION.—Section 1702(g)(2) of the
24 Energy Policy Act of 2005 (42 U.S.C. 16512(g)(2))
25 is amended—

1 (A) by striking subparagraph (B); and
2 (B) by redesignating subparagraph (C) as
3 subparagraph (B).

4 (5) FEES.—Section 1702(h) of the Energy Pol-
5 icy Act of 2005 (42 U.S.C. 16512(h)) is amended by
6 striking paragraph (2) and inserting the following:

7 “(2) AVAILABILITY.—Fees collected under this
8 subsection shall—

9 “(A) be deposited by the Secretary into a
10 special fund in the Treasury to be known as the
11 ‘Incentives For Innovative Technologies Fund’;
12 and

13 “(B) remain available to the Secretary for
14 expenditure, without further appropriation or
15 fiscal year limitation, for administrative ex-
16 penses incurred in carrying out this title.”.

17 **SEC. 125. GRANTS FOR RENEWABLE FUEL PRODUCTION RE-**
18 **SEARCH AND DEVELOPMENT IN CERTAIN**
19 **STATES.**

20 (a) IN GENERAL.—The Secretary shall provide
21 grants to eligible entities to conduct research into, and de-
22 velop and implement, renewable fuel production tech-
23 nologies in States with low rates of ethanol production,
24 including low rates of production of cellulosic biomass eth-
25 anol, as determined by the Secretary.

1 (b) ELIGIBILITY.—To be eligible to receive a grant
2 under the section, an entity shall—

3 (1)(A) be an institution of higher education (as
4 defined in section 2 of the Energy Policy Act of
5 2005 (42 U.S.C. 15801)) located in a State de-
6 scribed in subsection (a);

7 (B) be an institution—

8 (i) referred to in section 532 of the Equity
9 in Educational Land-Grant Status Act of 1994
10 (Public Law 103–382; 7 U.S.C. 301 note);

11 (ii) that is eligible for a grant under the
12 Tribally Controlled College or University Assist-
13 ance Act of 1978 (25 U.S.C. 1801 et seq.), in-
14 cluding Diné College; or

15 (iii) that is eligible for a grant under the
16 Navajo Community College Act (25 U.S.C.
17 640a et seq.); or

18 (C) be a consortium of such institutions of
19 higher education, industry, State agencies, Indian
20 tribal agencies, or local government agencies located
21 in the State; and

22 (2) have proven experience and capabilities with
23 relevant technologies.

1 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
2 authorized to be appropriated to carry out this section
3 \$25,000,000 for each of fiscal years 2008 through 2010.

4 **SEC. 126. GRANTS FOR INFRASTRUCTURE FOR TRANSPOR-**
5 **TATION OF BIOMASS TO LOCAL BIOREFIN-**
6 **ERIES.**

7 (a) IN GENERAL.—The Secretary shall conduct a
8 program under which the Secretary shall provide grants
9 to Indian tribal and local governments and other eligible
10 entities (as determined by the Secretary) (referred to in
11 this section as “eligible entities”) to promote the develop-
12 ment of infrastructure to support the separation, produc-
13 tion, processing, and transportation of biomass to local
14 biorefineries, including by portable processing equipment.

15 (b) PHASES.—The Secretary shall conduct the pro-
16 gram in the following phases:

17 (1) DEVELOPMENT.—In the first phase of the
18 program, the Secretary shall make grants to eligible
19 entities to assist the eligible entities in the develop-
20 ment of local projects to promote the development of
21 infrastructure to support the separation, production,
22 processing, and transportation of biomass to local
23 biorefineries, including by portable processing equip-
24 ment.

1 (2) IMPLEMENTATION.—In the second phase of
2 the program, the Secretary shall make competitive
3 grants to eligible entities to implement projects de-
4 veloped under paragraph (1).

5 (c) AUTHORIZATION OF APPROPRIATIONS.—There
6 are authorized to be appropriated such sums as are nec-
7 essary to carry out this section.

8 **SEC. 127. BIOREFINERY INFORMATION CENTER.**

9 (a) IN GENERAL.—The Secretary, in cooperation
10 with the Secretary of Agriculture, shall establish a bio-
11 refinery information center to make available to interested
12 parties information on—

- 13 (1) renewable fuel resources, including informa-
14 tion on programs and incentives for renewable fuels;
15 (2) renewable fuel producers;
16 (3) renewable fuel users; and
17 (4) potential renewable fuel users.

18 (b) ADMINISTRATION.—In administering the bio-
19 refinery information center, the Secretary shall—

- 20 (1) continually update information provided by
21 the center;
22 (2) make information available to interested
23 parties on the process for establishing a biorefinery;
24 and

1 (3) make information and assistance provided
2 by the center available through a toll-free telephone
3 number and website.

4 (c) AUTHORIZATION OF APPROPRIATIONS.—There
5 are authorized to be appropriated such sums as are nec-
6 essary to carry out this section.

7 **SEC. 128. ALTERNATIVE FUEL DATABASE AND MATERIALS.**

8 The Secretary and the Director of the National Insti-
9 tute of Standards and Technology shall jointly establish
10 and make available to the public—

11 (1) a database that describes the physical prop-
12 erties of different types of alternative fuel; and

13 (2) standard reference materials for different
14 types of alternative fuel.

15 **SEC. 129. FUEL TANK CAP LABELING REQUIREMENT.**

16 Section 406(a) of the Energy Policy Act of 1992 (42
17 U.S.C. 13232(a)) is amended—

18 (1) by striking “The Federal Trade Commis-
19 sion” and inserting the following:

20 “(1) IN GENERAL.—The Federal Trade Com-
21 mission”; and

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

23 “(2) FUEL TANK CAP LABELING REQUIRE-
24 MENT.—Beginning with model year 2010, the fuel
25 tank cap of each alternative fueled vehicle manufac-

1 tured for sale in the United States shall be clearly
2 labeled to inform consumers that such vehicle can
3 operate on alternative fuel.”.

4 **SEC. 130. BIODIESEL.**

5 (a) IN GENERAL.—Not later than 180 days after the
6 date of enactment of this Act, the Secretary shall submit
7 to Congress a report on any research and development
8 challenges inherent in increasing to 5 percent the propor-
9 tion of diesel fuel sold in the United States that is bio-
10 diesel (as defined in section 757 of the Energy Policy Act
11 of 2005 (42 U.S.C. 16105)).

12 (b) REGULATIONS.—The President shall promulgate
13 regulations providing for the uniform labeling of biodiesel
14 blends that are certified to meet applicable standards pub-
15 lished by the American Society for Testing and Materials.

16 (c) NATIONAL BIODIESEL FUEL QUALITY STAND-
17 ARD.—

18 (1) QUALITY REGULATIONS.—Not later than
19 180 days after the date of enactment of this Act, the
20 President shall promulgate regulations to ensure
21 that each diesel-equivalent fuel derived from renew-
22 able biomass and introduced into interstate com-
23 merce is tested and certified to comply with applica-
24 ble standards of the American Society for Testing
25 and Materials.

1 (2) ENFORCEMENT.—The President shall en-
2 sure that all biodiesel entering interstate commerce
3 meets the requirements of paragraph (1).

4 (3) FUNDING.—There are authorized to be ap-
5 propriated to the President to carry out this section:

6 (A) \$3,000,000 for fiscal year 2008.

7 (B) \$3,000,000 for fiscal year 2009.

8 (C) \$3,000,000 for fiscal year 2010.

9 **SEC. 131. TRANSITIONAL ASSISTANCE FOR FARMERS WHO**
10 **PLANT DEDICATED ENERGY CROPS FOR A**
11 **LOCAL CELLULOSIC REFINERY.**

12 (a) DEFINITIONS.—In this section:

13 (1) CELLULOSIC CROP.—The term “cellulosic
14 crop” means a tree or grass that is grown specifi-
15 cally—

16 (A) to provide raw materials (including
17 feedstocks) for conversion to liquid transpor-
18 tation fuels or chemicals through biochemical or
19 thermochemical processes; or

20 (B) for energy generation through combus-
21 tion, pyrolysis, or cofiring.

22 (2) CELLULOSIC REFINER.—The term “cel-
23 lulosic refiner” means the owner or operator of a
24 cellulosic refinery.

1 (3) CELLULOSIC REFINERY.—The term “cel-
2 lulosic refinery” means a refinery that processes a
3 cellulosic crop.

4 (4) QUALIFIED CELLULOSIC CROP.—The term
5 “qualified cellulosic crop” means, with respect to an
6 agricultural producer, a cellulosic crop that is—

7 (A) the subject of a contract or memo-
8 randum of understanding between the producer
9 and a cellulosic refiner, under which the pro-
10 ducer is obligated to sell the crop to the cel-
11 lulosic refiner by a certain date; and

12 (B) produced not more than 70 miles from
13 a cellulosic refinery owned or operated by the
14 cellulosic refiner.

15 (5) SECRETARY.—The term “Secretary” means
16 the Secretary of Agriculture.

17 (b) TRANSITIONAL ASSISTANCE PAYMENTS.—The
18 Secretary shall make transitional assistance payments to
19 an agricultural producer during the first year in which the
20 producer devotes land to the production of a qualified cel-
21 lulosic crop.

22 (c) AMOUNT OF PAYMENT.—

23 (1) DETERMINED BY FORMULA.—Subject to
24 paragraph (2), the Secretary shall devise a formula
25 to be used to calculate the amount of a payment to

1 be made to an agricultural producer under this sec-
2 tion, based on the opportunity cost (as determined
3 in accordance with such standard as the Secretary
4 may establish, taking into consideration land rental
5 rates and other applicable costs) incurred by the
6 producer during the first year in which the producer
7 devotes land to the production of the qualified cel-
8 lulosic crop.

9 (2) LIMITATION.—The total of the amount paid
10 to a producer under this section shall not exceed an
11 amount equal to 25 percent of the amounts made
12 available under subsection (e) for the applicable fis-
13 cal year.

14 (d) REGULATIONS.—The Secretary shall promulgate
15 such regulations as the Secretary determines to be nec-
16 essary to carry out this section.

17 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
18 authorized to be appropriated to carry out this section
19 \$4,088,000 for each of fiscal years 2008 through 2012,
20 to remain available until expended.

21 **SEC. 132. RESEARCH AND DEVELOPMENT IN SUPPORT OF**
22 **LOW-CARBON FUELS.**

23 (a) DECLARATION OF POLICY.—Congress declares
24 that, in order to achieve maximum reductions in green-
25 house gas emissions, enhance national security, and en-

1 sure the protection of wildlife habitat, biodiversity, water
2 quality, air quality, and rural and regional economies
3 throughout the lifecycle of each low-carbon fuel, it is nec-
4 essary and desirable to undertake a combination of basic
5 and applied research, as well as technology development
6 and demonstration, involving the colleges and universities
7 of the United States, in partnership with the Federal Gov-
8 ernment, State governments, and the private sector.

9 (b) PURPOSE.—The purpose of this section is to pro-
10 vide for research support to facilitate the development of
11 sustainable markets and technologies to produce and use
12 woody biomass and other low-carbon fuels for the produc-
13 tion of thermal and electric energy, biofuels, and bioproducts.
14

15 (c) DEFINITION OF FUEL EMISSION BASELINE.—In
16 this section, the term “fuel emission baseline” means the
17 average lifecycle greenhouse gas emissions per unit of en-
18 ergy of the fossil fuel component of conventional transpor-
19 tation fuels in commerce in the United States in calendar
20 year 2008, as determined by the President.

21 (d) GRANT PROGRAM.—The President shall establish
22 a program to provide to eligible entities (as identified by
23 the President) grants for use in—

1 (1) providing financial support for not more
2 than 4 nor less than 6 demonstration facilities
3 that—

4 (A) use woody biomass to deploy advanced
5 technologies for production of thermal and elec-
6 tric energy, biofuels, and bioproducts; and

7 (B) are targeted at regional feedstocks and
8 markets;

9 (2) conducting targeted research for the devel-
10 opment of cellulosic ethanol and other liquid fuels
11 from woody or other biomass that may be used in
12 transportation or stationary applications, such as in-
13 dustrial processes or industrial, commercial, and res-
14 idential heating;

15 (3) conducting research into the best scientif-
16 ically-based and periodically-updated methods of as-
17 sessing and certifying the impacts of each low-car-
18 bon fuel with respect to—

19 (A) the reduction in lifecycle greenhouse
20 gas emissions of each fuel as compared to—

21 (i) the fuel emission baseline; and

22 (ii) the greenhouse gas emissions of
23 other sectors, such as the agricultural, in-
24 dustrial, and manufacturing sectors;

1 (B) the contribution of the fuel toward en-
2 hancing the energy security of the United
3 States by displacing imported petroleum and
4 petroleum products;

5 (C) any impacts of the fuel on wildlife
6 habitat, biodiversity, water quality, and air
7 quality; and

8 (D) any effect of the fuel with respect to
9 rural and regional economies;

10 (4) conducting research to determine to what
11 extent the use of low-carbon fuels in the transpor-
12 tation sector would impact greenhouse gas emissions
13 in other sectors, such as the agricultural, industrial,
14 and manufacturing sectors;

15 (5) conducting research for the development of
16 the supply infrastructure that may provide renew-
17 able biomass feedstocks in a consistent, predictable,
18 and environmentally-sustainable manner;

19 (6) conducting research for the development of
20 supply infrastructure that may provide renewable
21 low-carbon fuels in a consistent, predictable, and en-
22 vironmentally-sustainable manner; and

23 (7) conducting policy research on the global
24 movement of low-carbon fuels in a consistent, pre-
25 dictable, and environmentally-sustainable manner.

1 (e) AUTHORIZATION OF APPROPRIATIONS.—Of the
2 funding authorized under section 122, there are author-
3 ized to be appropriated to carry out this section—

4 (1) \$45,000,000 for fiscal year 2009;

5 (2) \$50,000,000 for fiscal year 2010;

6 (3) \$55,000,000 for fiscal year 2011;

7 (4) \$60,000,000 for fiscal year 2012; and

8 (5) \$65,000,000 for fiscal year 2013.

9 **Subtitle C—Studies**

10 **SEC. 141. STUDY OF ADVANCED BIOFUELS TECHNOLOGIES.**

11 (a) IN GENERAL.—Not later than October 1, 2012,
12 the Secretary shall offer to enter into a contract with the
13 National Academy of Sciences under which the Academy
14 shall conduct a study of technologies relating to the pro-
15 duction, transportation, and distribution of advanced
16 biofuels.

17 (b) SCOPE.—In conducting the study, the Academy
18 shall—

19 (1) include an assessment of the maturity of
20 advanced biofuels technologies;

21 (2) consider whether the rate of development of
22 those technologies will be sufficient to meet the ad-
23 vanced biofuel standards required under section 111;

24 (3) consider the effectiveness of the research
25 and development programs and activities of the De-

1 department of Energy relating to advanced biofuel
2 technologies; and

3 (4) make policy recommendations to accelerate
4 the development of those technologies to commercial
5 viability, as appropriate.

6 (c) REPORT.—Not later than November 30, 2014,
7 the Secretary shall submit to the Committee on Energy
8 and Natural Resources of the Senate and the Committee
9 on Energy and Commerce of the House of Representatives
10 a report describing the results of the study conducted
11 under this section.

12 **SEC. 142. STUDY OF INCREASED CONSUMPTION OF ETH-**
13 **ANOL-BLENDED GASOLINE WITH HIGHER**
14 **LEVELS OF ETHANOL.**

15 (a) IN GENERAL.—The Secretary, in cooperation
16 with the Secretary of Agriculture, the Administrator of the
17 Environmental Protection Agency, and the Secretary of
18 Transportation, and after providing notice and an oppor-
19 tunity for public comment, shall conduct a study of the
20 feasibility of increasing consumption in the United States
21 of ethanol-blended gasoline with levels of ethanol that are
22 not less than 10 percent and not more than 40 percent.

23 (b) STUDY.—The study under subsection (a) shall in-
24 clude—

1 (1) a review of production and infrastructure
2 constraints on increasing consumption of ethanol;

3 (2) an evaluation of the economic, market, and
4 energy-related impacts of State and regional dif-
5 ferences in ethanol blends;

6 (3) an evaluation of the economic, market, and
7 energy-related impacts on gasoline retailers and con-
8 sumers of separate and distinctly labeled fuel stor-
9 age facilities and dispensers;

10 (4) an evaluation of the environmental impacts
11 of mid-level ethanol blends on evaporative and ex-
12 haust emissions from on-road, off-road, and marine
13 engines, recreational boats, vehicles, and equipment;

14 (5) an evaluation of the impacts of mid-level
15 ethanol blends on the operation, durability, and per-
16 formance of on-road, off-road, and marine engines,
17 recreational boats, vehicles, and equipment; and

18 (6) an evaluation of the safety impacts of mid-
19 level ethanol blends on consumers that own and op-
20 erate off-road and marine engines, recreational
21 boats, vehicles, or equipment.

22 (c) REPORT.—Not later than 1 year after the date
23 of enactment of this Act, the Secretary shall submit to
24 Congress a report describing the results of the study con-
25 ducted under this section.

1 **SEC. 143. PIPELINE FEASIBILITY STUDY.**

2 (a) IN GENERAL.—The Secretary, in coordination
3 with the Secretary of Agriculture and the Secretary of
4 Transportation, shall conduct a study of the feasibility of
5 the construction of dedicated ethanol pipelines.

6 (b) FACTORS.—In conducting the study, the Sec-
7 retary shall consider—

8 (1) the quantity of ethanol production that
9 would make dedicated pipelines economically viable;

10 (2) existing or potential barriers to dedicated
11 ethanol pipelines, including technical, siting, financ-
12 ing, and regulatory barriers;

13 (3) market risk (including throughput risk) and
14 means of mitigating the risk;

15 (4) regulatory, financing, and siting options
16 that would mitigate risk in those areas and help en-
17 sure the construction of 1 or more dedicated ethanol
18 pipelines;

19 (5) financial incentives that may be necessary
20 for the construction of dedicated ethanol pipelines,
21 including the return on equity that sponsors of the
22 initial dedicated ethanol pipelines will require to in-
23 vest in the pipelines;

24 (6) technical factors that may compromise the
25 safe transportation of ethanol in pipelines, identi-

1 fying remedial and preventative measures to ensure
2 pipeline integrity; and

3 (7) such other factors as the Secretary con-
4 siders appropriate.

5 (c) REPORT.—Not later than 15 months after the
6 date of enactment of this Act, the Secretary shall submit
7 to Congress a report describing the results of the study
8 conducted under this section.

9 **SEC. 144. STUDY OF OPTIMIZATION OF FLEXIBLE FUELED**
10 **VEHICLES TO USE E-85 FUEL.**

11 (a) IN GENERAL.—The Secretary shall conduct a
12 study of methods of increasing the fuel efficiency of flexi-
13 ble fueled vehicles by optimizing flexible fueled vehicles to
14 operate using E-85 fuel.

15 (b) REPORT.—Not later than 180 days after the date
16 of enactment of this Act, the Secretary shall submit to
17 the Committee on Energy and Natural Resources of the
18 Senate and the Committee on Natural Resources of the
19 House of Representatives a report that describes the re-
20 sults of the study, including any recommendations of the
21 Secretary.

22 **SEC. 145. STUDY OF CREDITS FOR USE OF RENEWABLE**
23 **ELECTRICITY IN ELECTRIC VEHICLES.**

24 (a) DEFINITION OF ELECTRIC VEHICLE.—In this
25 section, the term “electric vehicle” means an electric

1 motor vehicle (as defined in section 601 of the Energy Pol-
2 icy Act of 1992 (42 U.S.C. 13271)) for which the re-
3 chargeable storage battery—

4 (1) receives a charge directly from a source of
5 electric current that is external to the vehicle; and

6 (2) provides a minimum of 80 percent of the
7 motive power of the vehicle.

8 (b) STUDY.—The Secretary shall conduct a study on
9 the feasibility of issuing credits under the program estab-
10 lished under section 111(d) to electric vehicles powered by
11 electricity produced from renewable energy sources.

12 (c) REPORT.—Not later than 18 months after the
13 date of enactment of this Act, the Secretary shall submit
14 to the Committee on Energy and Natural Resources of
15 the Senate and the Committee on Energy and Commerce
16 of the House of Representatives a report that describes
17 the results of the study, including a description of—

18 (1) existing programs and studies on the use of
19 renewable electricity as a means of powering electric
20 vehicles; and

21 (2) alternatives for—

22 (A) designing a pilot program to determine
23 the feasibility of using renewable electricity to
24 power electric vehicles as an adjunct to a re-
25 newable fuels mandate;

1 (B) allowing the use, under the pilot pro-
2 gram designed under subparagraph (A), of elec-
3 tricity generated from nuclear energy as an ad-
4 ditional source of supply;

5 (C) identifying the source of electricity
6 used to power electric vehicles; and

7 (D) equating specific quantities of elec-
8 tricity to quantities of renewable fuel under sec-
9 tion 111(d).

10 **SEC. 146. STUDY OF ENGINE DURABILITY ASSOCIATED**
11 **WITH THE USE OF BIODIESEL.**

12 (a) IN GENERAL.—Not later than 30 days after the
13 date of enactment of this Act, the Secretary shall initiate
14 a study on the effects of the use of biodiesel on engine
15 durability.

16 (b) COMPONENTS.—The study under this section
17 shall include—

18 (1) an assessment of whether the use of bio-
19 diesel in conventional diesel engines lessens engine
20 durability; and

21 (2) an assessment of the effects referred to in
22 subsection (a) with respect to biodiesel blends at
23 varying concentrations, including—

24 (A) B5;

25 (B) B10;

1 (C) B20; and

2 (D) B30.

3 **SEC. 147. STUDY OF INCENTIVES FOR RENEWABLE FUELS.**

4 (a) **STUDY.**—The President shall conduct a study of
5 the renewable fuels industry and markets in the United
6 States, including—

7 (1) the costs to produce conventional and ad-
8 vanced biofuels;

9 (2) the factors affecting the future market
10 prices for those biofuels, including world oil prices;
11 and

12 (3) the financial incentives necessary to en-
13 hance, to the maximum extent practicable, the
14 biofuels industry of the United States to reduce the
15 dependence of the United States on foreign oil dur-
16 ing calendar years 2011 through 2030.

17 (b) **GOALS.**—The study shall include an analysis of
18 the options for financial incentives and the advantage and
19 disadvantages of each option.

20 (c) **REPORT.**—Not later than 1 year after the date
21 of enactment of this Act, the President shall submit to
22 Congress a report that describes the results of the study.

1 **SEC. 148. STUDY OF STREAMLINED LIFECYCLE ANALYSIS**
2 **TOOLS FOR THE EVALUATION OF RENEW-**
3 **ABLE CARBON CONTENT OF BIOFUELS.**

4 (a) IN GENERAL.—The Secretary, in consultation
5 with the Secretary of Agriculture and the Administrator
6 of the Environmental Protection Agency, shall conduct a
7 study of—

8 (1) published methods for evaluating the
9 lifecycle fossil and renewable carbon content of fuels,
10 including conventional and advanced biofuels; and

11 (2) methods for performing simplified, stream-
12 lined lifecycle analyses of the fossil and renewable
13 carbon content of biofuels.

14 (b) REPORT.—Not later than 1 year after the date
15 of enactment of this Act, the Secretary shall submit to
16 the Committee on Energy and Natural Resources of the
17 Senate and the Committee on Energy and Commerce of
18 the House of Representatives a report that describes the
19 results of the study under subsection (a), including rec-
20 ommendations for a method for performing a simplified,
21 streamlined lifecycle analysis of the fossil and renewable
22 carbon content of biofuels that includes—

23 (1) carbon inputs to feedstock production; and

24 (2) carbon inputs to the biofuel production
25 process, including the carbon associated with elec-
26 trical and thermal energy inputs.

1 **SEC. 149. STUDY OF EFFECTS OF ETHANOL-BLENDED GASO-**
2 **LINE ON OFF-ROAD VEHICLES.**

3 (a) STUDY.—

4 (1) IN GENERAL.—The Secretary, in consulta-
5 tion with the Secretary of Transportation and the
6 Administrator of the Environmental Protection
7 Agency, shall conduct a study to determine the ef-
8 fects of ethanol-blended gasoline on off-road vehicles
9 and recreational boats.

10 (2) EVALUATION.—The study shall include an
11 evaluation of the operational, safety, durability, and
12 environmental impacts of ethanol-blended gasoline
13 on off-road and marine engines, recreational boats,
14 and related equipment.

15 (b) REPORT.—Not later than 1 year after the date
16 of enactment of this Act, the Secretary shall submit to
17 Congress a report describing the results of the study.

18 **SEC. 150. STUDY OF OFFSHORE WIND RESOURCES.**

19 (a) DEFINITIONS.—In this section:

20 (1) ELIGIBLE INSTITUTION.—The term “eligi-
21 ble institution” means a college or university that—

22 (A) as of the date of enactment of this
23 Act, has an offshore wind power research pro-
24 gram; and

25 (B) is located in a region of the United
26 States that is in reasonable proximity to the

1 eastern outer Continental Shelf, as determined
2 by the Secretary.

3 (2) SECRETARY.—The term “Secretary” means
4 the Secretary of the Interior, acting through the Di-
5 rector of the Minerals Management Service.

6 (b) STUDY.—The Secretary, in cooperation with an
7 eligible institution, as selected by the Secretary, shall con-
8 duct a study to assess each offshore wind resource located
9 in the region of the eastern outer Continental Shelf.

10 (c) REPORT.—Upon completion of the study under
11 subsection (b), the Secretary shall submit to Congress a
12 report that includes—

13 (1) a description of—

14 (A) the locations and total power genera-
15 tion resources of the best offshore wind re-
16 sources located in the region of the eastern
17 outer Continental Shelf, as determined by the
18 Secretary;

19 (B) based on conflicting zones relating to
20 any infrastructure that, as of the date of enact-
21 ment of this Act, is located in close proximity
22 to any offshore wind resource, the likely exclu-
23 sion zones of each offshore wind resource de-
24 scribed in subparagraph (A);

1 (C) the relationship of the temporal vari-
2 ation of each offshore wind resource described
3 in subparagraph (A) with—

4 (i) any other offshore wind resource;

5 and

6 (ii) with loads and corresponding sys-
7 tem operator markets;

8 (D) the geological compatibility of each
9 offshore wind resource described in subpara-
10 graph (A) with any potential technology relat-
11 ing to sea floor towers; and

12 (E) with respect to each area in which an
13 offshore wind resource described in subpara-
14 graph (A) is located, the relationship of the au-
15 thority under any coastal management plan of
16 the State in which the area is located with the
17 Federal Government; and

18 (2) recommendations on the manner by which
19 to handle offshore wind intermittence.

20 (d) INCORPORATION OF STUDY.—Effective beginning
21 on the date on which the Secretary completes the study
22 under subsection (b), the Secretary shall incorporate the
23 findings included in the report under subsection (c) into
24 the planning process documents for any wind energy lease
25 sale—

1 (1) relating to any offshore wind resource lo-
2 cated in any appropriate area of the outer Conti-
3 nental Shelf, as determined by the Secretary; and

4 (2) that is completed on or after the date of en-
5 actment of this Act.

6 (e) EFFECT.—Nothing in this section—

7 (1) delays any final regulation to be promul-
8 gated by the Secretary of the Interior to carry out
9 section 8(p) of the Outer Continental Shelf Lands
10 Act (43 U.S.C. 1337(p)); or

11 (2) limits the authority of the Secretary to lease
12 any offshore wind resource located in any appro-
13 priate area of the outer Continental Shelf, as deter-
14 mined by the Secretary.

15 (f) AUTHORIZATION OF APPROPRIATIONS.—There is
16 authorized to be appropriated to carry out this section
17 \$5,000,000, to remain available until expended.

18 **Subtitle D—Environmental**
19 **Safeguards**

20 **SEC. 161. GRANTS FOR PRODUCTION OF ADVANCED**
21 **BIOFUELS.**

22 (a) IN GENERAL.—The Secretary shall establish a
23 grant program to encourage the production of advanced
24 biofuels.

1 (b) REQUIREMENTS AND PRIORITY.—In making
2 grants under this section, the Secretary—

3 (1) shall make awards to the proposals for ad-
4 vanced biofuels with the greatest reduction in
5 lifecycle greenhouse gas emissions compared to the
6 comparable motor vehicle fuel lifecycle emissions
7 during calendar year 2007; and

8 (2) shall not make an award to a project that
9 does not achieve at least a 50-percent reduction in
10 such lifecycle greenhouse gas emissions.

11 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
12 authorized to be appropriated to carry out this section
13 \$500,000,000 for the period of fiscal years 2008 through
14 2015.

15 **SEC. 162. STUDIES OF EFFECTS OF RENEWABLE FUEL USE.**

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

18 “(t) STUDIES OF EFFECTS OF RENEWABLE FUEL
19 USE.—

20 “(1) IN GENERAL.—Not later than 1 year after
21 the date of enactment of this subsection, the Admin-
22 istrator shall offer to enter into appropriate arrange-
23 ments with the National Academy of Sciences and
24 any other independent research institute determined
25 to be appropriate by the Administrator, in consulta-

1 tion with appropriate Federal agencies, to conduct 2
2 studies on the effects of increased domestic use of
3 renewable fuels under the Renewable Fuels, Con-
4 sumer Protection, and Energy Efficiency Act of
5 2007.

6 “(2) MATTERS TO BE STUDIED.—

7 “(A) IN GENERAL.—The studies under this
8 subsection shall assess, quantify, and rec-
9 ommend analytical methodologies in relation to
10 environmental changes associated with the in-
11 creased domestic use of renewable fuels under
12 the Renewable Fuels, Consumer Protection, and
13 Energy Efficiency Act of 2007, including pro-
14 duction, handling, transportation, and use of
15 the fuels.

16 “(B) SPECIFIC MATTERS.—The studies
17 shall include an assessment and quantification,
18 to the maximum extent practicable, of signifi-
19 cant changes—

20 “(i) in air and water quality and the
21 quality of other natural resources;

22 “(ii) in land use patterns;

23 “(iii) in the rate of deforestation in
24 the United States and globally;

25 “(iv) to greenhouse gas emissions;

1 “(v) to significant geographic areas
2 and habitats with high biodiversity values
3 (including species richness, the presence of
4 species that are exclusively native to a
5 place, or the presence of endangered spe-
6 cies); or

7 “(vi) in the long-term capacity of the
8 United States to produce biomass feed-
9 stocks.

10 “(C) BASELINE COMPARISON.—In making
11 an assessment or quantifying effects of in-
12 creased use of renewable fuels, the studies shall
13 use an appropriate baseline involving increased
14 use of the conventional transportation fuels, if
15 displacement by use of renewable fuels had not
16 occurred.

17 “(3) REPORTS TO CONGRESS.—The Adminis-
18 trator shall submit to Congress a report summa-
19 rizing the assessments and findings of—

20 “(A) the first study, along with any rec-
21 ommendations by the Administrator to mitigate
22 adverse effects identified by the study, not later
23 than 3 years after the date of enactment of this
24 subsection; and

1 “(B) the second study, along with any rec-
2 ommendations by the Administrator to mitigate
3 adverse effects identified by the study, not later
4 December 31, 2015.”.

5 **SEC. 163. INTEGRATED CONSIDERATION OF WATER QUAL-**
6 **ITY IN DETERMINATIONS ON FUELS AND**
7 **FUEL ADDITIVES.**

8 Section 211(c)(1) of the Clean Air Act (42 U.S.C.
9 7545(c)(1)) is amended—

10 (1) by striking “nonroad vehicle (A) if in the
11 judgment of the Administrator” and inserting
12 “nonroad vehicle—

13 “(A) if, in the judgment of the Adminis-
14 trator, any fuel or fuel additive or”;

15 (2) in subparagraph (A), by striking “air pollu-
16 tion which” and inserting “air pollution or water
17 pollution (including any degradation in the quality of
18 groundwater) that”; and

19 (3) by striking “, or (B) if” and inserting the
20 following: “; or

21 “(B) if”.

22 **SEC. 164. ANTI-BACKSLIDING.**

23 Section 211 of the Clean Air Act (42 U.S.C. 7545)
24 (as amended by section 162) is amended by adding at the
25 end the following:

1 “(u) PREVENTION OF AIR QUALITY DETERIORA-
2 TION.—

3 “(1) STUDY.—

4 “(A) IN GENERAL.—Not later than 18
5 months after the date of enactment of the Re-
6 newable Fuels, Consumer Protection, and En-
7 ergy Efficiency Act of 2007, the Administrator
8 shall complete a study to determine whether the
9 renewable fuel volumes required by that Act will
10 adversely impact air quality as a result of
11 changes in vehicle and engine emissions of air
12 pollutants regulated under this Act.

13 “(B) CONSIDERATIONS.—The study shall
14 include consideration of—

15 “(i) different blend levels, types of re-
16 newable fuels, and available vehicle tech-
17 nologies; and

18 “(ii) appropriate national, regional,
19 and local air quality control measures.

20 “(2) REGULATIONS.—Not later than 3 years
21 after the date of enactment of the Renewable Fuels,
22 Consumer Protection, and Energy Efficiency Act of
23 2007, the Administrator shall—

24 “(A) promulgate regulations to implement
25 appropriate measures to mitigate, to the great-

1 est extent achievable, considering the results of
2 the study under paragraph (1), any adverse im-
3 pacts on air quality, as the result of the renew-
4 able volumes required by that Act; or

5 “(B) make a determination that no such
6 measures are necessary.

7 “(3) OTHER REQUIREMENTS.—Nothing in title
8 I of the Renewable Fuels, Consumer Protection, and
9 Energy Efficiency Act of 2007 supercedes or other-
10 wise affects any Federal or State requirement under
11 any other provision of law that is more stringent
12 than any requirement of this title.”.

13 **TITLE II—ENERGY EFFICIENCY** 14 **PROMOTION**

15 **SEC. 201. SHORT TITLE.**

16 This title may be cited as the “Energy Efficiency
17 Promotion Act of 2007”.

18 **SEC. 202. DEFINITION OF SECRETARY.**

19 In this title, the term “Secretary” means the Sec-
20 retary of Energy.

1 **Subtitle A—Promoting Advanced**
2 **Lighting Technologies**

3 **SEC. 211. ACCELERATED PROCUREMENT OF ENERGY EFFI-**
4 **CIENT LIGHTING.**

5 Section 553 of the National Energy Conservation
6 Policy Act (42 U.S.C. 8259b) is amended by adding the
7 following:

8 “(f) ACCELERATED PROCUREMENT OF ENERGY EF-
9 FICIENT LIGHTING.—

10 “(1) IN GENERAL.—Not later than October 1,
11 2013, in accordance with guidelines issued by the
12 Secretary, all general purpose lighting in Federal
13 buildings shall be Energy Star products or products
14 designated under the Federal Energy Management
15 Program.

16 “(2) GUIDELINES.—

17 “(A) IN GENERAL.—Not later than 1 year
18 after the date of enactment of this subsection,
19 the Secretary shall issue guidelines to carry out
20 this subsection.

21 “(B) REPLACEMENT COSTS.—The guide-
22 lines shall take into consideration the costs of
23 replacing all general service lighting and the re-
24 duced cost of operation and maintenance ex-
25 pected to result from such replacement.”.

1 **SEC. 212. INCANDESCENT REFLECTOR LAMP EFFICIENCY**
2 **STANDARDS.**

3 (a) DEFINITIONS.—Section 321 of the Energy Policy
4 and Conservation Act (42 U.S.C. 6291) is amended—

5 (1) in paragraph (30)(C)(ii)—

6 (A) in the matter preceding subclause

7 (I)—

8 (i) by striking “or similar bulb shapes

9 (excluding ER or BR)” and inserting “ER,

10 BR, BPAR, or similar bulb shapes”; and

11 (ii) by striking “2.75” and inserting

12 “2.25”; and

13 (B) by striking “is either—” and all that

14 follows through subclause (II) and inserting

15 “has a rated wattage that is 40 watts or high-

16 er”; and

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

18 “(52) BPAR INCANDESCENT REFLECTOR

19 LAMP.—The term ‘BPAR incandescent reflector

20 lamp’ means a reflector lamp as shown in figure

21 C78.21–278 on page 32 of ANSI C78.21–2003.

22 “(53) BR INCANDESCENT REFLECTOR LAMP;

23 BR30; BR40.—

24 “(A) BR INCANDESCENT REFLECTOR

25 LAMP.—The term ‘BR incandescent reflector

26 lamp’ means a reflector lamp that has—

1 “(i) a bulged section below the major
2 diameter of the bulb and above the approx-
3 imate baseline of the bulb, as shown in fig-
4 ure 1 (RB) on page 7 of ANSI C79.1–
5 1994, incorporated by reference in section
6 430.22 of title 10, Code of Federal Regula-
7 tions (as in effect on the date of enactment
8 of this paragraph); and

9 “(ii) a finished size and shape shown
10 in ANSI C78.21–1989, including the ref-
11 erenced reflective characteristics in part 7
12 of ANSI C78.21–1989, incorporated by
13 reference in section 430.22 of title 10,
14 Code of Federal Regulations (as in effect
15 on the date of enactment of this para-
16 graph).

17 “(B) BR30.—The term ‘BR30’ means a
18 BR incandescent reflector lamp with a diameter
19 of 30/8ths of an inch.

20 “(C) BR40.—The term ‘BR40’ means a
21 BR incandescent reflector lamp with a diameter
22 of 40/8ths of an inch.

23 “(54) ER INCANDESCENT REFLECTOR LAMP;
24 ER30; ER40.—

1 “(A) ER INCANDESCENT REFLECTOR
2 LAMP.—The term ‘ER incandescent reflector
3 lamp’ means a reflector lamp that has—

4 “(i) an elliptical section below the
5 major diameter of the bulb and above the
6 approximate baseline of the bulb, as shown
7 in figure 1 (RE) on page 7 of ANSI
8 C79.1–1994, incorporated by reference in
9 section 430.22 of title 10, Code of Federal
10 Regulations (as in effect on the date of en-
11 actment of this paragraph); and

12 “(ii) a finished size and shape shown
13 in ANSI C78.21–1989, incorporated by
14 reference in section 430.22 of title 10,
15 Code of Federal Regulations (as in effect
16 on the date of enactment of this para-
17 graph).

18 “(B) ER30.—The term ‘ER30’ means an
19 ER incandescent reflector lamp with a diameter
20 of 30/8ths of an inch.

21 “(C) ER40.—The term ‘ER40’ means an
22 ER incandescent reflector lamp with a diameter
23 of 40/8ths of an inch.

24 “(55) R20 INCANDESCENT REFLECTOR
25 LAMP.—The term ‘R20 incandescent reflector lamp’

1 means a reflector lamp that has a face diameter of
 2 approximately 2.5 inches, as shown in figure 1(R)
 3 on page 7 of ANSI C79.1–1994.”.

4 (b) STANDARDS FOR FLUORESCENT LAMPS AND IN-
 5 CANDESCENT REFLECTOR LAMPS.—Section 325(i) of the
 6 Energy Policy and Conservation Act (42 U.S.C. 6925(i))
 7 is amended by striking paragraph (1) and inserting the
 8 following:

9 “(1) STANDARDS.—

10 “(A) DEFINITION OF EFFECTIVE DATE.—

11 In this paragraph (other than subparagraph
 12 (D)), the term ‘effective date’ means, with re-
 13 spect to each type of lamp specified in a table
 14 contained in subparagraph (B), the last day of
 15 the period of months corresponding to that type
 16 of lamp (as specified in the table) that follows
 17 October 24, 1992.

18 “(B) MINIMUM STANDARDS.—Each of the
 19 following general service fluorescent lamps and
 20 incandescent reflector lamps manufactured
 21 after the effective date specified in the tables
 22 contained in this paragraph shall meet or ex-
 23 ceed the following lamp efficacy and CRI stand-
 24 ards:

“FLUORESCENT LAMPS

4-foot medium bi-pin	>35 W	69	75.0	36
----------------------------	-------	----	------	----

“FLUORESCENT LAMPS—Continued

	≤35 W	45	75.0	36
2-foot U-shaped	>35 W	69	68.0	36
	≤35 W	45	64.0	36
8-foot slimline	65 W	69	80.0	18
	≤65 W	45	80.0	18
8-foot high output	>100 W	69	80.0	18
	≤100 W	45	80.0	18

“INCANDESCENT REFLECTOR LAMPS

40–50	10.5	36
51–66	11.0	36
67–85	12.5	36
86–115	14.0	36
116–155	14.5	36
156–205	15.0	36

1 “(C) EXEMPTIONS.—The standards speci-
 2 fied in subparagraph (B) shall not apply to the
 3 following types of incandescent reflector lamps:

4 “(i) Lamps rated at 50 watts or less
 5 that are ER30, BR30, BR40, or ER40
 6 lamps.

7 “(ii) Lamps rated at 65 watts that
 8 are BR30, BR40, or ER40 lamps.

9 “(iii) R20 incandescent reflector
 10 lamps rated 45 watts or less.

11 “(D) EFFECTIVE DATES.—

12 “(i) ER, BR, AND BPAR LAMPS.—The
 13 standards specified in subparagraph (B)
 14 shall apply with respect to ER incandes-
 15 cent reflector lamps, BR incandescent re-
 16 flector lamps, BPAR incandescent reflector

1 lamps, and similar bulb shapes on and
2 after January 1, 2008.

3 “(ii) LAMPS BETWEEN 2.25–2.75
4 INCHES IN DIAMETER.—The standards
5 specified in subparagraph (B) shall apply
6 with respect to incandescent reflector
7 lamps with a diameter of more than 2.25
8 inches, but not more than 2.75 inches, on
9 and after January 1, 2008.”.

10 **SEC. 213. BRIGHT TOMORROW LIGHTING PRIZES.**

11 (a) ESTABLISHMENT.—Not later than 1 year after
12 the date of enactment of this Act, as part of the program
13 carried out under section 1008 of the Energy Policy Act
14 of 2005 (42 U.S.C. 16396), the Secretary shall establish
15 and award Bright Tomorrow Lighting Prizes for solid
16 state lighting in accordance with this section.

17 (b) PRIZE SPECIFICATIONS.—

18 (1) 60-WATT INCANDESCENT REPLACEMENT
19 LAMP PRIZE.—The Secretary shall award a 60-Watt
20 Incandescent Replacement Lamp Prize to an entrant
21 that produces a solid-state light package simulta-
22 neously capable of—

23 (A) producing a luminous flux greater than
24 900 lumens;

1 (B) consuming less than or equal to 10
2 watts;

3 (C) having an efficiency greater than 90
4 lumens per watt;

5 (D) having a color rendering index greater
6 than 90;

7 (E) having a correlated color temperature
8 of not less than 2,750, and not more than
9 3,000, degrees Kelvin;

10 (F) having 70 percent of the lumen value
11 under subparagraph (A) exceeding 25,000
12 hours under typical conditions expected in resi-
13 dential use;

14 (G) having a light distribution pattern
15 similar to a soft 60-watt incandescent A19
16 bulb;

17 (H) having a size and shape that fits with-
18 in the maximum dimensions of an A19 bulb in
19 accordance with American National Standards
20 Institute standard C78.20–2003, figure
21 C78.20–211;

22 (I) using a single contact medium screw
23 socket; and

24 (J) mass production for a competitive sales
25 commercial market satisfied by the submission

1 of 10,000 such units equal to or exceeding the
2 criteria described in subparagraphs (A) through
3 (I).

4 (2) PAR TYPE 38 HALOGEN REPLACEMENT
5 LAMP PRIZE.—The Secretary shall award a
6 Parabolic Aluminized Reflector Type 38 Halogen
7 Replacement Lamp Prize (referred to in this section
8 as the “PAR Type 38 Halogen Replacement Lamp
9 Prize”) to an entrant that produces a solid-state-
10 light package simultaneously capable of—

11 (A) producing a luminous flux greater than
12 or equal to 1,350 lumens;

13 (B) consuming less than or equal to 11
14 watts;

15 (C) having an efficiency greater than 123
16 lumens per watt;

17 (D) having a color rendering index greater
18 than or equal to 90;

19 (E) having a correlated color coordinate
20 temperature of not less than 2,750, and not
21 more than 3,000, degrees Kelvin;

22 (F) having 70 percent of the lumen value
23 under subparagraph (A) exceeding 25,000
24 hours under typical conditions expected in resi-
25 dential use;

1 (G) having a light distribution pattern
2 similar to a PAR 38 halogen lamp;

3 (H) having a size and shape that fits with-
4 in the maximum dimensions of a PAR 38 halo-
5 gen lamp in accordance with American National
6 Standards Institute standard C78-21-2003,
7 figure C78.21-238;

8 (I) using a single contact medium screw
9 socket; and

10 (J) mass production for a competitive sales
11 commercial market satisfied by the submission
12 of 10,000 such units equal to or exceeding the
13 criteria described in subparagraphs (A) through
14 (I).

15 (3) TWENTY-FIRST CENTURY LAMP PRIZE.—

16 The Secretary shall award a Twenty-First Century
17 Lamp Prize to an entrant that produces a solid-
18 state-light-light capable of—

19 (A) producing a light output greater than
20 1,200 lumens;

21 (B) having an efficiency greater than 150
22 lumens per watt;

23 (C) having a color rendering index greater
24 than 90;

1 (D) having a color coordinate temperature
2 between 2,800 and 3,000 degrees Kelvin; and
3 (E) having a lifetime exceeding 25,000
4 hours.

5 (c) PRIVATE FUNDS.—The Secretary may accept and
6 use funding from private sources as part of the prizes
7 awarded under this section.

8 (d) TECHNICAL REVIEW.—The Secretary shall estab-
9 lish a technical review committee composed of non-Federal
10 officers to review entrant data submitted under this sec-
11 tion to determine whether the data meets the prize speci-
12 fications described in subsection (b).

13 (e) THIRD PARTY ADMINISTRATION.—The Secretary
14 may competitively select a third party to administer
15 awards under this section.

16 (f) AWARD AMOUNTS.—Subject to the availability of
17 funds to carry out this section, the amount of—

18 (1) the 60-Watt Incandescent Replacement
19 Lamp Prize described in subsection (b)(1) shall be
20 \$10,000,000;

21 (2) the PAR Type 38 Halogen Replacement
22 Lamp Prize described in subsection (b)(2) shall be
23 \$5,000,000; and

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

1 (g) FEDERAL PROCUREMENT OF SOLID-STATE-
2 LIGHTS.—

3 (1) 60-WATT INCANDESCENT REPLACEMENT.—

4 Subject to paragraph (3), as soon as practicable
5 after the successful award of the 60-Watt Incandes-
6 cent Replacement Lamp Prize under subsection
7 (b)(1), the Secretary (in consultation with the Ad-
8 ministrator of General Services) shall develop gov-
9 ernmentwide Federal purchase guidelines with a goal
10 of replacing the use of 60-watt incandescent lamps
11 in Federal Government buildings with a solid-state-
12 light package described in subsection (b)(1) by not
13 later than the date that is 5 years after the date the
14 award is made.

15 (2) PAR 38 HALOGEN REPLACEMENT LAMP RE-
16 PLACEMENT.—Subject to paragraph (3), as soon as
17 practicable after the successful award of the PAR
18 Type 38 Halogen Replacement Lamp Prize under
19 subsection (b)(2), the Secretary (in consultation with
20 the Administrator of General Services) shall develop
21 governmentwide Federal purchase guidelines with
22 the goal of replacing the use of PAR 38 halogen
23 lamps in Federal Government buildings with a solid-
24 state-light package described in subsection (b)(2) by

1 not later than the date that is 5 years after the date
2 the award is made.

3 (3) WAIVERS.—

4 (A) IN GENERAL.—The Secretary or the
5 Administrator of General Services may waive
6 the application of paragraph (1) or (2) if the
7 Secretary or Administrator determines that the
8 return on investment from the purchase of a
9 solid-state-light package described in paragraph
10 (1) or (2) of subsection (b), respectively, is cost
11 prohibitive.

12 (B) REPORT OF WAIVER.—If the Secretary
13 or Administrator waives the application of para-
14 graph (1) or (2), the Secretary or Adminis-
15 trator, respectively, shall submit to Congress an
16 annual report that describes the waiver and
17 provides a detailed justification for the waiver.

18 (h) REPORT.—Not later than 2 years after the date
19 of enactment of this Act, and annually thereafter, the Ad-
20 ministrator of General Services shall submit to the Energy
21 Information Agency a report describing the quantity, type,
22 and cost of each lighting product purchased by the Federal
23 Government.

24 (i) BRIGHT LIGHT TOMORROW AWARD FUND.—

1 (4) national policy can support a rapid substi-
2 tution of new, energy-efficient light bulbs for the less
3 efficient products in widespread use; and

4 (5) transforming the United States market to
5 use of more efficient lighting technologies can—

6 (A) reduce electric costs in the United
7 States by more than \$18,000,000,000 annually;

8 (B) save the equivalent electricity that is
9 produced by 80 base load coal-fired power
10 plants; and

11 (C) reduce fossil fuel related emissions by
12 approximately 158,000,000 tons each year.

13 (b) SENSE OF THE SENATE.—It is the sense of the
14 Senate that the Senate should—

15 (1) pass a set of mandatory, technology-neutral
16 standards to establish firm energy efficiency per-
17 formance targets for lighting products;

18 (2) ensure that the standards become effective
19 within the next 10 years; and

20 (3) in developing the standards—

21 (A) establish the efficiency requirements to
22 ensure that replacement lamps will provide con-
23 sumers with the same quantity of light while
24 using significantly less energy;

1 (B) ensure that consumers will continue to
2 have multiple product choices, including energy-
3 saving halogen, incandescent, compact fluores-
4 cent, and LED light bulbs; and

5 (C) work with industry and key stake-
6 holders on measures that can assist consumers
7 and businesses in making the important transi-
8 tion to more efficient lighting.

9 **SEC. 215. RENEWABLE ENERGY CONSTRUCTION GRANTS.**

10 (a) DEFINITIONS.—In this section:

11 (1) ALASKA SMALL HYDROELECTRIC POWER.—
12 The term “Alaska small hydroelectric power” means
13 power that—

14 (A) is generated—

15 (i) in the State of Alaska;

16 (ii) without the use of a dam or im-
17 poundment of water; and

18 (iii) through the use of—

19 (I) a lake tap (but not a perched
20 alpine lake); or

21 (II) a run-of-river screened at the
22 point of diversion; and

23 (B) has a nameplate capacity rating of a
24 wattage that is not more than 15 megawatts.

1 (2) ELIGIBLE APPLICANT.—The term “eligible
2 applicant” means any—

3 (A) governmental entity;

4 (B) private utility;

5 (C) public utility;

6 (D) municipal utility;

7 (E) cooperative utility;

8 (F) Indian tribes; and

9 (G) Regional Corporation (as defined in
10 section 3 of the Alaska Native Claims Settle-
11 ment Act (43 U.S.C. 1602)).

12 (3) OCEAN ENERGY.—

13 (A) INCLUSIONS.—The term “ocean en-
14 ergy” includes current, wave, and tidal energy.

15 (B) EXCLUSION.—The term “ocean en-
16 ergy” excludes thermal energy.

17 (4) RENEWABLE ENERGY PROJECT.—The term
18 “renewable energy project” means a project—

19 (A) for the commercial generation of elec-
20 tricity; and

21 (B) that generates electricity from—

22 (i) solar, wind, or geothermal energy
23 or ocean energy;

1 (ii) biomass (as defined in section
2 203(b) of the Energy Policy Act of 2005
3 (42 U.S.C. 15852(b)));

4 (iii) landfill gas; or

5 (iv) Alaska small hydroelectric power.

6 (b) RENEWABLE ENERGY CONSTRUCTION
7 GRANTS.—

8 (1) IN GENERAL.—The Secretary shall use
9 amounts appropriated under this section to make
10 grants for use in carrying out renewable energy
11 projects.

12 (2) CRITERIA.—Not later than 180 days after
13 the date of enactment of this Act, the Secretary
14 shall set forth criteria for use in awarding grants
15 under this section.

16 (3) APPLICATION.—To receive a grant from the
17 Secretary under paragraph (1), an eligible applicant
18 shall submit to the Secretary an application at such
19 time, in such manner, and containing such informa-
20 tion as the Secretary may require, including a writ-
21 ten assurance that—

22 (A) all laborers and mechanics employed
23 by contractors or subcontractors during con-
24 struction, alteration, or repair that is financed,
25 in whole or in part, by a grant under this sec-

1 tion shall be paid wages at rates not less than
2 those prevailing on similar construction in the
3 locality, as determined by the Secretary of
4 Labor in accordance with sections 3141–3144,
5 3146, and 3147 of title 40, United States Code;
6 and

7 (B) the Secretary of Labor shall, with re-
8 spect to the labor standards described in this
9 paragraph, have the authority and functions set
10 forth in Reorganization Plan Numbered 14 of
11 1950 (5 U.S.C. App.) and section 3145 of title
12 40, United States Code.

13 (4) NON-FEDERAL SHARE.—Each eligible appli-
14 cant that receives a grant under this subsection shall
15 contribute to the total cost of the renewable energy
16 project constructed by the eligible applicant an
17 amount not less than 50 percent of the total cost of
18 the project.

19 (c) AUTHORIZATION OF APPROPRIATIONS.—There
20 are authorized to be appropriated to the Fund such sums
21 as are necessary to carry out this section.

1 **Subtitle B—Expediting New**
2 **Energy Efficiency Standards**

3 **SEC. 221. DEFINITION OF ENERGY CONSERVATION STAND-**
4 **ARD.**

5 Section 321 of the Energy Policy and Conservation
6 Act (42 U.S.C. 6291) is amended by striking paragraph
7 (6) and inserting the following:

8 “(6) ENERGY CONSERVATION STANDARD.—

9 “(A) IN GENERAL.—The term ‘energy con-
10 servation standard’ means 1 or more perform-
11 ance standards that—

12 “(i) for covered products (excluding
13 clothes washers, dishwashers, showerheads,
14 faucets, water closets, and urinals), pre-
15 scribe a minimum level of energy efficiency
16 or a maximum quantity of energy use, de-
17 termined in accordance with test proce-
18 dures prescribed under section 323;

19 “(ii) for showerheads, faucets, water
20 closets, and urinals, prescribe a minimum
21 level of water efficiency or a maximum
22 quantity of water use, determined in ac-
23 cordance with test procedures prescribed
24 under section 323; and

1 “(iii) for clothes washers and dish-
2 washers—

3 “(I) prescribe a minimum level of
4 energy efficiency or a maximum quan-
5 tity of energy use, determined in ac-
6 cordance with test procedures pre-
7 scribed under section 323; and

8 “(II) may include a minimum
9 level of water efficiency or a maximum
10 quantity of water use, determined in
11 accordance with those test procedures.

12 “(B) INCLUSIONS.—The term ‘energy con-
13 servation standard’ includes—

14 “(i) 1 or more design requirements, if
15 the requirements were established—

16 “(I) on or before the date of en-
17 actment of this subclause; or

18 “(II) as part of a consensus
19 agreement under section 325(hh); and

20 “(ii) any other requirements that the
21 Secretary may prescribe under section
22 325(r).

23 “(C) EXCLUSION.—The term ‘energy con-
24 servation standard’ does not include a perform-
25 ance standard for a component of a finished

1 covered product, unless regulation of the com-
2 ponent is authorized or established pursuant to
3 this title.”.

4 **SEC. 222. REGIONAL EFFICIENCY STANDARDS FOR HEAT-**
5 **ING AND COOLING PRODUCTS.**

6 (a) IN GENERAL.—Section 327 of the Energy Policy
7 and Conservation Act (42 U.S.C. 6297) is amended—

8 (1) by redesignating subsections (e), (f), and
9 (g) as subsections (f), (g), and (h), respectively; and

10 (2) by inserting after subsection (d) the fol-
11 lowing:

12 “(e) REGIONAL EFFICIENCY STANDARDS FOR HEAT-
13 ING AND COOLING PRODUCTS.—

14 “(1) IN GENERAL.—

15 “(A) DETERMINATION.—The Secretary
16 may determine, after notice and comment, that
17 more stringent Federal energy conservation
18 standards are appropriate for furnaces, boilers,
19 or central air conditioning equipment than ap-
20 plicable Federal energy conservation standards.

21 “(B) FINDING.—The Secretary may deter-
22 mine that more stringent standards are appro-
23 priate for up to 2 different regions only after
24 finding that the regional standards—

1 “(i) would contribute to energy sav-
2 ings that are substantially greater than
3 that of a single national energy standard;
4 and

5 “(ii) are economically justified.

6 “(C) REGIONS.—On making a determina-
7 tion described in subparagraph (B), the Sec-
8 retary shall establish the regions so that the
9 more stringent standards would achieve the
10 maximum level of energy savings that is techno-
11 logically feasible and economically justified.

12 “(D) FACTORS.—In determining the ap-
13 propriateness of 1 or more regional standards
14 for furnaces, boilers, and central and commer-
15 cial air conditioning equipment, the Secretary
16 shall consider all of the factors described in
17 paragraphs (1) through (4) of section 325(o).

18 “(2) STATE PETITION.—After a determination
19 made by the Secretary under paragraph (1), a State
20 may petition the Secretary requesting a rule that a
21 State regulation that establishes a standard for fur-
22 naces, boilers, or central air conditioners become ef-
23 fective at a level determined by the Secretary to be
24 appropriate for the region that includes the State.

1 “(3) RULE.—Subject to paragraphs (4) through
2 (7), the Secretary may issue the rule during the pe-
3 riod described in paragraph (4) and after consider-
4 ation of the petition and the comments of interested
5 persons.

6 “(4) PROCEDURE.—

7 “(A) NOTICE.—The Secretary shall pro-
8 vide notice of any petition filed under para-
9 graph (2) and afford interested persons a rea-
10 sonable opportunity to make written comments,
11 including rebuttal comments, on the petition.

12 “(B) DECISION.—Except as provided in
13 subparagraph (C), during the 180-day period
14 beginning on the date on which the petition is
15 filed, the Secretary shall issue the requested
16 rule or deny the petition.

17 “(C) EXTENSION.—The Secretary may
18 publish in the Federal Register a notice—

19 “(i) extending the period to a speci-
20 fied date, but not longer than 1 year after
21 the date on which the petition is filed; and

22 “(ii) describing the reasons for the
23 delay.

24 “(D) DENIALS.—If the Secretary denies a
25 petition under this subsection, the Secretary

1 shall publish in the Federal Register notice of,
2 and the reasons for, the denial.

3 “(5) FINDING OF SIGNIFICANT BURDEN ON
4 MANUFACTURING, MARKETING, DISTRIBUTION, SALE,
5 OR SERVICING OF COVERED PRODUCT ON NATIONAL
6 BASIS.—

7 “(A) IN GENERAL.—The Secretary may
8 not issue a rule under this subsection if the
9 Secretary finds (and publishes the finding) that
10 interested persons have established, by a pre-
11 ponderance of the evidence, that the State regu-
12 lation will significantly burden manufacturing,
13 marketing, distribution, sale, or servicing of a
14 covered product on a national basis.

15 “(B) FACTORS.—In determining whether
16 to make a finding described in subparagraph
17 (A), the Secretary shall evaluate all relevant
18 factors, including—

19 “(i) the extent to which the State reg-
20 ulation will increase manufacturing or dis-
21 tribution costs of manufacturers, distribu-
22 tors, and others;

23 “(ii) the extent to which the State
24 regulation will disadvantage smaller manu-
25 facturers, distributors, or dealers or lessen

1 competition in the sale of the covered prod-
2 uct in the State; and

3 “(iii) the extent to which the State
4 regulation would cause a burden to manu-
5 facturers to redesign and produce the cov-
6 ered product type (or class), taking into
7 consideration the extent to which the regu-
8 lation would result in a reduction—

9 “(I) in the current models, or in
10 the projected availability of models,
11 that could be shipped on the effective
12 date of the regulation to the State
13 and within the United States; or

14 “(II) in the current or projected
15 sales volume of the covered product
16 type (or class) in the State and the
17 United States.

18 “(6) APPLICATION.—No State regulation shall
19 become effective under this subsection with respect
20 to any covered product manufactured before the date
21 specified in the determination made by the Secretary
22 under paragraph (1).

23 “(7) PETITION TO WITHDRAW FEDERAL RULE
24 FOLLOWING AMENDMENT OF FEDERAL STAND-
25 ARD.—

1 “(A) IN GENERAL.—If a State has issued
2 a rule under paragraph (3) with respect to a
3 covered product and subsequently a Federal en-
4 ergy conservation standard concerning the prod-
5 uct is amended pursuant to section 325, any
6 person subject to the State regulation may file
7 a petition with the Secretary requesting the
8 Secretary to withdraw the rule issued under
9 paragraph (3) with respect to the product in
10 the State.

11 “(B) BURDEN OF PROOF.—The Secretary
12 shall consider the petition in accordance with
13 paragraph (5) and the burden shall be on the
14 petitioner to show by a preponderance of the
15 evidence that the rule received by the State
16 under paragraph (3) should be withdrawn as a
17 result of the amendment to the Federal stand-
18 ard.

19 “(C) WITHDRAWAL.—If the Secretary de-
20 termines that the petitioner has shown that the
21 rule issued by the Secretary under paragraph
22 (3) should be withdrawn in accordance with
23 subparagraph (B), the Secretary shall withdraw
24 the rule.”.

25 (b) CONFORMING AMENDMENTS.—

1 (1) Section 327 of the Energy Policy and Con-
2 servation Act (42 U.S.C. 6297) is amended—

3 (A) in subsection (b)—

4 (i) in paragraph (2), by striking “sub-
5 section (e)” and inserting “subsection (f)”;

6 and

7 (ii) in paragraph (3)—

8 (I) by striking “subsection
9 (f)(1)” and inserting “subsection
10 (g)(1)”; and

11 (II) by striking “subsection
12 (f)(2)” and inserting “subsection
13 (g)(2)”; and

14 (B) in subsection (c)(3), by striking “sub-
15 section (f)(3)” and inserting “subsection
16 (g)(3)”.

17 (2) Section 345(b)(2) of the Energy Policy and
18 Conservation Act (42 U.S.C. 6316(b)(2)) is amend-
19 ed by adding at the end the following:

20 “(E) RELATIONSHIP TO CERTAIN STATE
21 REGULATIONS.—Notwithstanding subparagraph
22 (A), a standard prescribed or established under
23 section 342(a) with respect to the equipment
24 specified in subparagraphs (B), (C), (D), (H),
25 (I), and (J) of section 340 shall not supersede

1 a State regulation that is effective under the
2 terms, conditions, criteria, procedures, and
3 other requirements of section 327(e).”.

4 **SEC. 223. FURNACE FAN RULEMAKING.**

5 Section 325(f)(3) of the Energy Policy and Conserva-
6 tion Act (42 U.S.C. 6295(f)(3)) is amended by adding at
7 the end the following:

8 “(E) FINAL RULE.—

9 “(i) IN GENERAL.—The Secretary
10 shall publish a final rule to carry out this
11 subsection not later than December 31,
12 2014.

13 “(ii) CRITERIA.—The standards shall
14 meet the criteria established under sub-
15 section (o).”.

16 **SEC. 224. EXPEDITED RULEMAKINGS.**

17 (a) PROCEDURE FOR PRESCRIBING NEW OR AMEND-
18 ED STANDARDS.—Section 325(p) of the Energy Policy
19 and Conservation Act (42 U.S.C. 6295(p)) is amended by
20 adding at the end the following:

21 “(5) DIRECT FINAL RULES.—

22 “(A) IN GENERAL.—On receipt of a state-
23 ment that is submitted jointly by interested per-
24 sons that are fairly representative of relevant
25 points of view (including representatives of

1 manufacturers of covered products, States, and
2 efficiency advocates), as determined by the Sec-
3 retary, and contains recommendations with re-
4 spect to an energy or water conservation stand-
5 ard—

6 “(i) if the Secretary determines that
7 the recommended standard contained in
8 the statement is in accordance with sub-
9 section (o) or section 342(a)(6)(B), as ap-
10 plicable, the Secretary may issue a final
11 rule that establishes an energy or water
12 conservation standard and is published si-
13 multaneously with a notice of proposed
14 rulemaking that proposes a new or amend-
15 ed energy or water conservation standard
16 that is identical to the standard established
17 in the final rule to establish the rec-
18 ommended standard (referred to in this
19 paragraph as a ‘direct final rule’); or

20 “(ii) if the Secretary determines that
21 a direct final rule cannot be issued based
22 on the statement, the Secretary shall pub-
23 lish a notice of the determination, together
24 with an explanation of the reasons for the
25 determination.

1 “(B) PUBLIC COMMENT.—The Secretary
2 shall—

3 “(i) solicit public comment with re-
4 spect to each direct final rule issued by the
5 Secretary under subparagraph (A)(i); and

6 “(ii) publish a response to each com-
7 ment so received.

8 “(C) WITHDRAWAL OF DIRECT FINAL
9 RULES.—

10 “(i) IN GENERAL.—Not later than
11 120 days after the date on which a direct
12 final rule issued under subparagraph (A)(i)
13 is published in the Federal Register, the
14 Secretary shall withdraw the direct final
15 rule if—

16 “(I) the Secretary receives 1 or
17 more adverse public comments relat-
18 ing to the direct final rule under sub-
19 paragraph (B)(i); and

20 “(II) based on the complete rule-
21 making record relating to the direct
22 final rule, the Secretary tentatively
23 determines that the adverse public
24 comments are relevant under sub-

1 section (o), section 342(a)(6)(B), or
2 any other applicable law.

3 “(ii) ACTION ON WITHDRAWAL.—On
4 withdrawal of a direct final rule under
5 clause (i), the Secretary shall—

6 “(I) proceed with the notice of
7 proposed rulemaking published simul-
8 taneously with the direct final rule as
9 described in subparagraph (A)(i); and

10 “(II) publish in the Federal Reg-
11 ister the reasons why the direct final
12 rule was withdrawn.

13 “(iii) TREATMENT OF WITHDRAWN DI-
14 RECT FINAL RULES.—A direct final rule
15 that is withdrawn under clause (i) shall
16 not be considered to be a final rule for
17 purposes of subsection (o).

18 “(D) EFFECT OF PARAGRAPH.—Nothing
19 in this paragraph authorizes the Secretary to
20 issue a direct final rule based solely on receipt
21 of more than 1 statement containing rec-
22 ommended standards relating to the direct final
23 rule.”.

24 (b) CONFORMING AMENDMENT.—Section 345(b)(1)
25 of the Energy Policy and Conservation Act (42 U.S.C.

1 6316(b)(1)) is amended in the first sentence by inserting
2 “section 325(p)(5),” after “The provisions of”.

3 **SEC. 225. PERIODIC REVIEWS.**

4 (a) TEST PROCEDURES.—Section 323(b)(1) of the
5 Energy Policy and Conservation Act (42 U.S.C.
6 6293(b)(1)) is amended by striking “(1)” and all that fol-
7 lows through the end of the paragraph and inserting the
8 following:

9 “(1) TEST PROCEDURES.—

10 “(A) AMENDMENT.—At least once every 7
11 years, the Secretary shall review test procedures
12 for all covered products and—

13 “(i) amend test procedures with re-
14 spect to any covered product, if the Sec-
15 retary determines that amended test proce-
16 dures would more accurately or fully com-
17 ply with the requirements of paragraph
18 (3); or

19 “(ii) publish notice in the Federal
20 Register of any determination not to
21 amend a test procedure.”.

22 (b) ENERGY CONSERVATION STANDARDS.—Section
23 325(m) of the Energy Policy and Conservation Act (42
24 U.S.C. 6295(m)) is amended—

1 (1) by designating the first and second sen-
2 tences as paragraphs (1) and (4), respectively;

3 (2) by striking paragraph (1) (as so designated)
4 and inserting the following:

5 “(1) IN GENERAL.—After issuance of the last
6 final rules required for a product under this part,
7 the Secretary shall, not later than 5 years after the
8 date of issuance of a final rule establishing or
9 amending a standard or determining not to amend
10 a standard, publish a final rule to determine whether
11 standards for the product should or should not be
12 amended based on the criteria in subsection (n)(2).

13 “(2) ANALYSIS.—Prior to publication of the de-
14 termination, the Secretary shall publish a notice of
15 availability describing the analysis of the Depart-
16 ment and provide opportunity for written comment.

17 “(3) FINAL RULE.—Not later than 3 years
18 after a positive determination under paragraph (1),
19 the Secretary shall publish a final rule amending the
20 standard for the product.”; and

21 (3) in paragraph (4) (as so designated), by
22 striking “(4) An” and inserting the following:

23 “(4) APPLICATION OF AMENDMENT.—An”.

24 (c) STANDARDS.—Section 342(a)(6) of the Energy
25 Policy and Conservation Act (42 U.S.C. 6313(a)(6)) is

1 amended by striking “(6)(A)(i)” and all that follows
2 through the end of subparagraph (A) and inserting the
3 following:

4 “(6) AMENDED ENERGY EFFICIENCY STAND-
5 ARDS.—

6 “(A) IN GENERAL.—

7 “(i) ANALYSIS OF POTENTIAL ENERGY
8 SAVINGS.—If ASHRAE/IES Standard
9 90.1 is amended with respect to any small
10 commercial package air conditioning and
11 heating equipment, large commercial pack-
12 age air conditioning and heating equip-
13 ment, very large commercial package air
14 conditioning and heating equipment, pack-
15 aged terminal air conditioners, packaged
16 terminal heat pumps, warm-air furnaces,
17 packaged boilers, storage water heaters, in-
18 stantaneous water heaters, or unfired hot
19 water storage tanks, not later than 180
20 days after the amendment of the standard,
21 the Secretary shall publish in the Federal
22 Register for public comment an analysis of
23 the energy savings potential of amended
24 energy efficiency standards.

1 “(ii) AMENDED UNIFORM NATIONAL
2 STANDARD FOR PRODUCTS.—

3 “(I) IN GENERAL.—Except as
4 provided in subclause (II), not later
5 than 18 months after the date of pub-
6 lication of the amendment to the
7 ASHRAE/IES Standard 90.1 for a
8 product described in clause (i), the
9 Secretary shall establish an amended
10 uniform national standard for the
11 product at the minimum level speci-
12 fied in the amended ASHRAE/IES
13 Standard 90.1.

14 “(II) MORE STRINGENT STAND-
15 ARD.—Subclause (I) shall not apply if
16 the Secretary determines, by rule pub-
17 lished in the Federal Register, and
18 supported by clear and convincing evi-
19 dence, that adoption of a uniform na-
20 tional standard more stringent than
21 the amended ASHRAE/IES Standard
22 90.1 for the product would result in
23 significant additional conservation of
24 energy and is technologically feasible
25 and economically justified.

1 “(iii) RULE.—If the Secretary makes
2 a determination described in clause (ii)(II)
3 for a product described in clause (i), not
4 later than 30 months after the date of
5 publication of the amendment to the
6 ASHRAE/IES Standard 90.1 for the prod-
7 uct, the Secretary shall issue the rule es-
8 tablishing the amended standard.”.

9 (d) TEST PROCEDURES.—Section 343(a) of the En-
10 ergy Policy and Conservation Act (42 U.S.C. 6313(a)) is
11 amended by striking “(a)” and all that follows through
12 the end of paragraph (1) and inserting the following:

13 “(a) PRESCRIPTION BY SECRETARY; REQUIRE-
14 MENTS.—

15 “(1) TEST PROCEDURES.—

16 “(A) AMENDMENT.—At least once every 7
17 years, the Secretary shall conduct an evaluation
18 of each class of covered equipment and—

19 “(i) if the Secretary determines that
20 amended test procedures would more accu-
21 rately or fully comply with the require-
22 ments of paragraphs (2) and (3), shall pre-
23 scribe test procedures for the class in ac-
24 cordance with this section; or

1 “(ii) shall publish notice in the Fed-
2 eral Register of any determination not to
3 amend a test procedure.”.

4 (e) EFFECTIVE DATE.—The amendments made by
5 subsections (b) and (c) take effect on January 1, 2012.

6 **SEC. 226. ENERGY EFFICIENCY LABELING FOR CONSUMER**
7 **ELECTRONIC PRODUCTS.**

8 (a) IN GENERAL.—Section 324(a) of the Energy Pol-
9 icy and Conservation Act (42 U.S.C. 6294(a)) is amend-
10 ed—

11 (1) in paragraph (2), by adding at the end the
12 following:

13 “(H) LABELING REQUIREMENTS.—

14 “(i) IN GENERAL.—Subject to clauses
15 (ii) through (iv), not later than 18 months
16 after the date of issuance of applicable De-
17 partment of Energy testing procedures, the
18 Commission, in consultation with the Sec-
19 retary and the Administrator of the Envi-
20 ronmental Protection Agency (acting
21 through the Energy Star program), shall,
22 by regulation, promulgate labeling or other
23 disclosure requirements for the energy use
24 of—

25 “(I) televisions;

- 1 “(II) personal computers;
2 “(III) cable or satellite set-top
3 boxes;
4 “(IV) stand-alone digital video
5 recorder boxes; and
6 “(V) personal computer monitors.

7 “(ii) ALTERNATE TESTING PROCE-
8 DURES.—In the absence of applicable test-
9 ing procedures described in clause (i) for
10 products described in subclauses (I)
11 through (V) of that clause, the Commis-
12 sion may by regulation promulgate labeling
13 requirements for a consumer product cat-
14 egory described in clause (i) if the Com-
15 mission—

16 “(I) identifies adequate non-De-
17 partment of Energy testing proce-
18 dures for those products; and

19 “(II) determines that labeling of
20 those products is likely to assist con-
21 sumers in making purchasing deci-
22 sions.

23 “(iii) DEADLINE AND REQUIREMENTS
24 FOR LABELING.—

1 “(I) DEADLINE.—Not later than
2 18 months after the date of promulga-
3 tion of any requirements under clause
4 (i) or (ii), the Commission shall re-
5 quire labeling of electronic products
6 described in clause (i).

7 “(II) REQUIREMENTS.—The re-
8 quirements promulgated under clause
9 (i) or (ii) may include specific require-
10 ments for each electronic product to
11 be labeled with respect to the place-
12 ment, size, and content of Energy
13 Guide labels.

14 “(iv) DETERMINATION OF FEASI-
15 BILITY.—Clause (i) or (ii) shall not apply
16 in any case in which the Commission de-
17 termines that labeling in accordance with
18 this subsection—

19 “(I) is not technologically or eco-
20 nomicallly feasible; or

21 “(II) is not likely to assist con-
22 sumers in making purchasing deci-
23 sions.”; and

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

1 “(6) AUTHORITY TO INCLUDE ADDITIONAL
2 PRODUCT CATEGORIES.—The Commission may re-
3 quire labeling in accordance with this subsection for
4 any consumer product not specified in this sub-
5 section or section 322 if the Commission determines
6 that labeling for the product is likely to assist con-
7 sumers in making purchasing decisions.”.

8 (b) CONTENT OF LABEL.—Section 324(c) of the En-
9 ergy Policy and Conservation Act (42 U.S.C. 6924(c)) is
10 amended by adding at the end the following:

11 “(9) DISCRETIONARY APPLICATION.—The Com-
12 mission may apply paragraphs (1), (2), (3), (5), and
13 (6) of this subsection to the labeling of any product
14 covered by paragraph (2)(H) or (6) of subsection
15 (a).”.

16 **SEC. 227. RESIDENTIAL BOILER EFFICIENCY STANDARDS.**

17 Section 325(f) of the Energy Policy and Conservation
18 Act (42 U.S.C. 6295(f)) is amended—

19 (1) by redesignating paragraph (3) as para-
20 graph (4); and

21 (2) by inserting after paragraph (2) the fol-
22 lowing:

23 “(3) BOILERS.—

24 “(A) IN GENERAL.—Subject to subpara-
25 graphs (B) and (C), boilers manufactured on or

1 after September 1, 2012, shall meet the fol-
 2 lowing requirements:

Gas Hot Water	82%	No Constant Burning Pilot, Automatic Means for Adjust- ing Water Temperature
Gas Steam	80%	No Constant Burning Pilot
Oil Hot Water	84%	Automatic Means for Adjusting Temperature
Oil Steam	82%	None
Electric Hot Water	None	Automatic Means for Adjusting Temperature
Electric Steam	None	None

3 “(B) PILOTS.—The manufacturer shall not
 4 equip gas hot water or steam boilers with con-
 5 stant-burning pilot lights.

6 “(C) AUTOMATIC MEANS FOR ADJUSTING
 7 WATER TEMPERATURE.—

8 “(i) IN GENERAL.—The manufacturer
 9 shall equip each gas, oil, and electric hot
 10 water boiler (other than a boiler equipped
 11 with tankless domestic water heating coils)
 12 with an automatic means for adjusting the
 13 temperature of the water supplied by the
 14 boiler to ensure that an incremental
 15 change in inferred heat load produces a
 16 corresponding incremental change in the
 17 temperature of water supplied.

18 “(ii) CERTAIN BOILERS.—For a boiler
 19 that fires at 1 input rate, the requirements
 20 of this subparagraph may be satisfied by

1 providing an automatic means that allows
2 the burner or heating element to fire only
3 when the means has determined that the
4 inferred heat load cannot be met by the re-
5 sidual heat of the water in the system.

6 “(iii) NO INFERRED HEAT LOAD.—
7 When there is no inferred heat load with
8 respect to a hot water boiler, the automatic
9 means described in clauses (i) and (ii)
10 shall limit the temperature of the water in
11 the boiler to not more than 140 degrees
12 Fahrenheit.

13 “(iv) OPERATION.—A boiler described
14 in clause (i) or (ii) shall be operable only
15 when the automatic means described in
16 clauses (i), (ii), and (iii) is installed.”.

17 **SEC. 228. TECHNICAL CORRECTIONS.**

18 (a) DEFINITION OF FLUORESCENT LAMP.—Section
19 321(30)(B)(viii) of the Energy Policy and Conservation
20 Act (42 U.S.C. 6291(30)(B)(viii)) is amended by striking
21 “82” and inserting “87”.

22 (b) STANDARDS FOR COMMERCIAL PACKAGE AIR
23 CONDITIONING AND HEATING EQUIPMENT.—Section
24 342(a)(1) of the Energy Policy and Conservation Act (42
25 U.S.C. 6313(a)(1)) is amended in the matter preceding

1 subparagraph (A) by striking “but before January 1,
2 2010,”.

3 (c) MERCURY VAPOR LAMP BALLASTS.—

4 (1) DEFINITIONS.—Section 321 of the Energy
5 Policy and Conservation Act (42 U.S.C. 6291) (as
6 amended by section 212(a)(2)) is amended—

7 (A) in paragraph (46)(A)—

8 (i) in clause (i), by striking “bulb”
9 and inserting “the arc tube”; and

10 (ii) in clause (ii), by striking “has a
11 bulb” and inserting “wall loading is”;

12 (B) in paragraph (47)(A), by striking “op-
13 erating at a partial” and inserting “typically
14 operating at a partial vapor”;

15 (C) in paragraph (48), by inserting “in-
16 tended for general illumination” after “lamps”;
17 and

18 (D) by adding at the end the following:

19 “(56) The term ‘specialty application mercury
20 vapor lamp ballast’ means a mercury vapor lamp
21 ballast that—

22 “(A) is designed and marketed for medical
23 use, optical comparators, quality inspection, in-
24 dustrial processing, or scientific use, including
25 fluorescent microscopy, ultraviolet curing, and

1 the manufacture of microchips, liquid crystal
2 displays, and printed circuit boards; and

3 “(B) in the case of a specialty application
4 mercury vapor lamp ballast, is labeled as a spe-
5 cialty application mercury vapor lamp ballast.”.

6 (2) STANDARD SETTING AUTHORITY.—Section
7 325(ee) of the Energy Policy and Conservation Act
8 (42 U.S.C. 6295(ee)) is amended by inserting
9 “(other than specialty application mercury vapor
10 lamp ballasts)” after “ballasts”.

11 **SEC. 229. ELECTRIC MOTOR EFFICIENCY STANDARDS.**

12 (a) DEFINITIONS.—Section 340(13) of the Energy
13 Policy and Conservation Act (42 U.S.C. 6311(13)) is
14 amended by striking subparagraph (A) and inserting the
15 following:

16 “(A)(i) The term ‘electric motor’ means—

17 “(I) a general purpose electric motor—
18 subtype I; and

19 “(II) a general purpose electric motor—
20 subtype II.

21 “(ii) The term ‘general purpose electric
22 motor—subtype I’ means any motor that is consid-
23 ered a general purpose motor under section 431.12
24 of title 10, Code of Federal Regulations (or suc-
25 cessor regulations).

1 “(iii) The term ‘general purpose electric
2 motor—subtype II’ means a motor that, in addition
3 to the design elements for a general purpose electric
4 motor—subtype I, incorporates the design elements
5 (as established in National Electrical Manufacturers
6 Association MG–1 (2006)) for any of the following:

7 “(I) A U–Frame Motor.

8 “(II) A Design C Motor.

9 “(III) A close-coupled pump motor.

10 “(IV) A footless motor.

11 “(V) A vertical solid shaft normal thrust
12 (tested in a horizontal configuration).

13 “(VI) An 8-pole motor.

14 “(VII) A poly-phase motor with voltage of
15 not more than 600 volts (other than 230 or 460
16 volts).”.

17 (b) STANDARDS.—Section 342(b) of the Energy Pol-
18 icy and Conservation Act (42 U.S.C. 6313(13)) is amend-
19 ed by striking paragraph (1) and inserting the following:

20 “(1) STANDARDS.—

21 “(A) GENERAL PURPOSE ELECTRIC MO-
22 TORS—SUBTYPE I.—

23 “(i) IN GENERAL.—Except as other-
24 wise provided in this subparagraph, a gen-
25 eral purpose electric motor—subtype I

1 with a power rating of not less than 1, and
2 not more than 200, horsepower manufac-
3 tured (alone or as a component of another
4 piece of equipment) after the 3-year period
5 beginning on the date of enactment of this
6 subparagraph, shall have a nominal full
7 load efficiency established in Table 12–12
8 of National Electrical Manufacturers Asso-
9 ciation (referred to in this paragraph as
10 ‘NEMA’) MG–1 (2006).

11 “(ii) FIRE PUMP MOTORS.—A fire
12 pump motor shall have a nominal full load
13 efficiency established in Table 12–11 of
14 NEMA MG–1 (2006).

15 “(B) GENERAL PURPOSE ELECTRIC MO-
16 TORS—SUBTYPE II.—A general purpose electric
17 motor—subtype II with a power rating of not
18 less than 1, and not more than 200, horsepower
19 manufactured (alone or as a component of an-
20 other piece of equipment) after the 3-year pe-
21 riod beginning on the date of enactment of this
22 subparagraph, shall have a nominal full load ef-
23 ficiency established in Table 12–11 of NEMA
24 MG–1 (2006).

1 “(C) DESIGN B, GENERAL PURPOSE ELEC-
2 TRIC MOTORS.—A NEMA Design B, general
3 purpose electric motor with a power rating of
4 not less than 201, and not more than 500,
5 horsepower manufactured (alone or as a compo-
6 nent of another piece of equipment) after the 3-
7 year period beginning on the date of the enact-
8 ment of this subparagraph shall have a nominal
9 full load efficiency established in Table 12–11
10 of NEMA MG–1 (2006).”.

11 (c) EFFECTIVE DATE.—The amendments made by
12 this section take effect on the date that is 3 years after
13 the date of enactment of this Act.

14 **SEC. 230. ENERGY STANDARDS FOR HOME APPLIANCES.**

15 (a) DEFINITION OF ENERGY CONSERVATION STAND-
16 ARD.—Section 321(6)(A) of the Energy Policy and Con-
17 servation Act (42 U.S.C. 6291(6)(A)) is amended by strik-
18 ing “or, in the case of” and inserting “and, in the case
19 of residential clothes washers, residential dishwashers,”.

20 (b) REFRIGERATORS, REFRIGERATOR-FREEZERS,
21 AND FREEZERS.—Section 325(b) of the Energy Policy
22 and Conservation Act (42 U.S.C. 6295(b)) is amended by
23 adding at the end the following:

24 “(4) REFRIGERATORS, REFRIGERATOR-FREEZ-
25 ERS, AND FREEZERS MANUFACTURED ON OR AFTER

1 JANUARY 1, 2014.—Not later than December 31,
2 2010, the Secretary shall publish a final rule deter-
3 mining whether to amend the standards in effect for
4 refrigerators, refrigerator-freezers, and freezers
5 manufactured on or after January 1, 2014, and in-
6 cluding any amended standards.”.

7 (c) RESIDENTIAL CLOTHES WASHERS AND DISH-
8 WASHERS.—Section 325(g)(4) of the Energy Policy and
9 Conservation Act (42 U.S.C. 6295(g)(4)) is amended by
10 adding at the end the following:

11 “(D) CLOTHES WASHERS.—

12 “(i) CLOTHES WASHERS MANUFAC-
13 TURED ON OR AFTER JANUARY 1, 2011.—
14 A residential clothes washer manufactured
15 on or after January 1, 2011, shall have—

16 “(I) a modified energy factor of
17 at least 1.26; and

18 “(II) a water factor of not more
19 than 9.5.

20 “(ii) CLOTHES WASHERS MANUFAC-
21 TURED ON OR AFTER JANUARY 1, 2015.—
22 Not later than January 1, 2015, the Sec-
23 retary shall publish a final rule deter-
24 mining whether to amend the standards in
25 effect for residential clothes washers manu-

1 factured on or after January 1, 2015, and
2 including any amended standards.

3 “(E) DISHWASHERS.—

4 “(i) DISHWASHERS MANUFACTURED
5 ON OR AFTER JANUARY 1, 2010.—A dish-
6 washer manufactured on or after January
7 1, 2010, shall use not more than—

8 “(I) in the case of a standard-
9 size dishwasher, 355 kWh per year or
10 6.5 gallons of water per cycle; and

11 “(II) in the case of a compact-
12 size dishwasher, 260 kWh per year or
13 4.5 gallons of water per cycle.

14 “(ii) DISHWASHERS MANUFACTURED
15 ON OR AFTER JANUARY 1, 2018.—Not later
16 than January 1, 2015, the Secretary shall
17 publish a final rule determining whether to
18 amend the standards for dishwashers man-
19 ufactured on or after January 1, 2018,
20 and including any amended standards.”.

21 (d) DEHUMIDIFIERS.—Section 325(cc) of the Energy
22 Policy and Conservation Act (42 U.S.C. 6295(cc)) is
23 amended—

24 (1) in paragraph (1), by inserting “and before
25 October 1, 2012,” after “2007,”; and

1 (2) by striking paragraph (2) and inserting the
 2 following:

3 “(2) DEHUMIDIFIERS MANUFACTURED ON OR
 4 AFTER OCTOBER 1, 2012.—Dehumidifiers manufac-
 5 tured on or after October 1, 2012, shall have an En-
 6 ergy Factor that meets or exceeds the following val-
 7 ues:

Up to 35.00	1.35
35.01–45.00	1.50
45.01–54.00	1.60
54.01–75.00	1.70
Greater than 75.00	2.5.”.

8 (e) ENERGY STAR PROGRAM.—Section 324A(d)(2) of
 9 the Energy Policy and Conservation Act (42 U.S.C.
 10 6294a(d)(2)) is amended by striking “2010” and inserting
 11 “2009”.

12 **SEC. 231. IMPROVED ENERGY EFFICIENCY FOR APPLI-**
 13 **ANCES AND BUILDINGS IN COLD CLIMATES.**

14 (a) RESEARCH.—Section 911(a)(2) of the Energy
 15 Policy Act of 2005 (42 U.S.C. 16191(a)(2)) is amended—

16 (1) in subparagraph (C), by striking “and” at
 17 the end;

18 (2) in subparagraph (D), by striking the period
 19 at the end and inserting “; and”; and

20 (3) by adding at the end the following:

1 “(E) technologies to improve the energy ef-
2 ficiency of appliances and mechanical systems
3 for buildings in cold climates, including com-
4 bined heat and power units and increased use
5 of renewable resources, including fuel.”.

6 (b) REBATES.—Section 124 of the Energy Policy Act
7 of 2005 (42 U.S.C. 15821) is amended—

8 (1) in subsection (b)(1), by inserting “, or prod-
9 ucts with improved energy efficiency in cold cli-
10 mates,” after “residential Energy Star products”;
11 and

12 (2) in subsection (e), by inserting “or product
13 with improved energy efficiency in a cold climate”
14 after “residential Energy Star product” each place
15 it appears.

16 **SEC. 232. DEPLOYMENT OF NEW TECHNOLOGIES FOR**
17 **HIGH-EFFICIENCY CONSUMER PRODUCTS.**

18 (a) DEFINITIONS.—In this section:

19 (1) ENERGY SAVINGS.—The term “energy sav-
20 ings” means megawatt-hours of electricity or million
21 British thermal units of natural gas saved by a
22 product, in comparison to projected energy consump-
23 tion under the energy efficiency standard applicable
24 to the product.

1 (2) HIGH-EFFICIENCY CONSUMER PRODUCT.—

2 The term “high-efficiency consumer product” means
3 a product that exceeds the energy efficiency of com-
4 parable products available in the market by a per-
5 centage determined by the Secretary to be an appro-
6 priate benchmark for the consumer product category
7 competing for an award under this section.

8 (b) FINANCIAL INCENTIVES PROGRAM.—Effective
9 beginning October 1, 2007, the Secretary shall competi-
10 tively award financial incentives under this section for the
11 manufacture of high-efficiency consumer products.

12 (c) REQUIREMENTS.—

13 (1) IN GENERAL.—The Secretary shall make
14 awards under this section to manufacturers of high-
15 efficiency consumer products, based on the bid of
16 each manufacturer in terms of dollars per megawatt-
17 hour or million British thermal units saved.

18 (2) ACCEPTANCE OF BIDS.—In making awards
19 under this section, the Secretary shall—

20 (A) solicit bids for reverse auction from
21 appropriate manufacturers, as determined by
22 the Secretary; and

23 (B) award financial incentives to the man-
24 ufacturers that submit the lowest bids that

1 meet the requirements established by the Sec-
2 retary.

3 (d) FORMS OF AWARDS.—An award for a high-effi-
4 ciency consumer product under this section shall be in the
5 form of a lump sum payment in an amount equal to the
6 product obtained by multiplying—

7 (1) the amount of the bid by the manufacturer
8 of the high-efficiency consumer product; and

9 (2) the energy savings during the projected use-
10 ful life of the high-efficiency consumer product, not
11 to exceed 10 years, as determined under regulations
12 issued by the Secretary.

13 **SEC. 233. INDUSTRIAL EFFICIENCY PROGRAM.**

14 (a) DEFINITIONS.—In this section:

15 (1) ELIGIBLE ENTITY.—The term eligible entity
16 means—

17 (A) an institution of higher education
18 under contract or in partnership with a non-
19 profit or for-profit private entity acting on be-
20 half of an industrial or commercial sector or
21 subsector;

22 (B) a nonprofit or for-profit private entity
23 acting on behalf on an industrial or commercial
24 sector or subsector; or

1 (C) a consortia of entities acting on behalf
2 of an industrial or commercial sector or sub-
3 sector.

4 (2) ENERGY-INTENSIVE COMMERCIAL APPLICA-
5 TIONS.—The term “energy-intensive commercial ap-
6 plications” means processes and facilities that use
7 significant quantities of energy as part of the pri-
8 mary economic activities of the processes and facili-
9 ties, including—

10 (A) information technology data centers;

11 (B) product manufacturing; and

12 (C) food processing.

13 (3) FEEDSTOCK.—The term “feedstock” means
14 the raw material supplied for use in manufacturing,
15 chemical, and biological processes.

16 (4) MATERIALS MANUFACTURERS.—The term
17 “materials manufacturers” means the energy-inten-
18 sive primary manufacturing industries, including the
19 aluminum, chemicals, forest and paper products,
20 glass, metal casting, and steel industries.

21 (5) PARTNERSHIP.—The term “partnership”
22 means an energy efficiency and utilization partner-
23 ship established under subsection (e)(1)(A).

1 (6) PROGRAM.—The term “program” means
2 the industrial efficiency program established under
3 subsection (b).

4 (b) ESTABLISHMENT OF PROGRAM.—The Secretary
5 shall establish a program under which the Secretary, in
6 cooperation with materials manufacturers, companies en-
7 gaged in energy-intensive commercial applications, and
8 national industry trade associations representing the man-
9 ufactures and companies, shall support, develop, and pro-
10 mote the use of new materials manufacturing and indus-
11 trial and commercial processes, technologies, and tech-
12 niques to optimize energy efficiency and the economic
13 competitiveness of the United States.

14 (c) PARTNERSHIPS.—

15 (1) IN GENERAL.—As part of the program, the
16 Secretary shall—

17 (A) establish energy efficiency and utiliza-
18 tion partnerships between the Secretary and eli-
19 gible entities to conduct research on, develop,
20 and demonstrate new processes, technologies,
21 and operating practices and techniques to sig-
22 nificantly improve energy efficiency and utiliza-
23 tion by materials manufacturers and in energy-
24 intensive commercial applications, including the
25 conduct of activities to—

1 (i) increase the energy efficiency of in-
2 dustrial and commercial processes and fa-
3 cilities in energy-intensive commercial ap-
4 plication sectors;

5 (ii) research, develop, and dem-
6 onstrate advanced technologies capable of
7 energy intensity reductions and increased
8 environmental performance in energy-in-
9 tensive commercial application sectors; and

10 (iii) promote the use of the processes,
11 technologies, and techniques described in
12 clauses (i) and (ii); and

13 (B) pay the Federal share of the cost of
14 any eligible partnership activities for which a
15 proposal has been submitted and approved in
16 accordance with paragraph (3)(B).

17 (2) ELIGIBLE ACTIVITIES.—Partnership activi-
18 ties eligible for financial assistance under this sub-
19 section include—

20 (A) feedstock and recycling research, devel-
21 opment, and demonstration activities to identify
22 and promote—

23 (i) opportunities for meeting manufac-
24 turing feedstock requirements with more

- 1 energy efficient and flexible sources of
2 feedstock or energy supply;
- 3 (ii) strategies to develop and deploy
4 technologies that improve the quality and
5 quantity of feedstocks recovered from pro-
6 cess and waste streams; and
- 7 (iii) other methods using recycling,
8 reuse, and improved industrial materials;
- 9 (B) industrial and commercial energy effi-
10 ciency and sustainability assessments to—
- 11 (i) assist individual industrial and
12 commercial sectors in developing tools,
13 techniques, and methodologies to assess—
- 14 (I) the unique processes and fa-
15 cilities of the sectors;
- 16 (II) the energy utilization re-
17 quirements of the sectors; and
- 18 (III) the application of new, more
19 energy efficient technologies; and
- 20 (ii) conduct energy savings assess-
21 ments;
- 22 (C) the incorporation of technologies and
23 innovations that would significantly improve the
24 energy efficiency and utilization of energy-inten-
25 sive commercial applications; and

1 (D) any other activities that the Secretary
2 determines to be appropriate.

3 (3) PROPOSALS.—

4 (A) IN GENERAL.—To be eligible for finan-
5 cial assistance under this subsection, a partner-
6 ship shall submit to the Secretary a proposal
7 that describes the proposed research, develop-
8 ment, or demonstration activity to be conducted
9 by the partnership.

10 (B) REVIEW.—After reviewing the sci-
11 entific, technical, and commercial merit of a
12 proposals submitted under subparagraph (A),
13 the Secretary shall approve or disapprove the
14 proposal.

15 (C) COMPETITIVE AWARDS.—The provision
16 of financial assistance under this subsection
17 shall be on a competitive basis.

18 (4) COST-SHARING REQUIREMENT.—In carrying
19 out this section, the Secretary shall require cost
20 sharing in accordance with section 988 of the En-
21 ergy Policy Act of 2005 (42 U.S.C. 16352).

22 (d) AUTHORIZATION OF APPROPRIATIONS.—

23 (1) IN GENERAL.—There are authorized to be
24 appropriated to the Secretary to carry out this sec-
25 tion—

- 1 (A) \$184,000,000 for fiscal year 2008;
2 (B) \$190,000,000 for fiscal year 2009;
3 (C) \$196,000,000 for fiscal year 2010;
4 (D) \$202,000,000 for fiscal year 2011;
5 (E) \$208,000,000 for fiscal year 2012; and
6 (F) such sums as are necessary for fiscal
7 year 2013 and each fiscal year thereafter.

8 (2) PARTNERSHIP ACTIVITIES.—Of the
9 amounts made available under paragraph (1), not
10 less than 50 percent shall be used to pay the Fed-
11 eral share of partnership activities under subsection
12 (c).

13 **Subtitle C—Promoting High Effi-**
14 **ciency Vehicles, Advanced Bat-**
15 **teries, and Energy Storage**

16 **SEC. 241. LIGHTWEIGHT MATERIALS RESEARCH AND DE-**
17 **VELOPMENT.**

18 (a) IN GENERAL.—As soon as practicable after the
19 date of enactment of this Act, the Secretary shall establish
20 a research and development program to determine ways
21 in which—

- 22 (1) the weight of vehicles may be reduced to im-
23 prove fuel efficiency without compromising pas-
24 senger safety; and

1 **SEC. 243. ADVANCED TECHNOLOGY VEHICLES MANUFAC-**
2 **TURING INCENTIVE PROGRAM.**

3 (a) DEFINITIONS.—In this section:

4 (1) ADJUSTED AVERAGE FUEL ECONOMY.—The
5 term “adjusted average fuel economy” means the av-
6 erage fuel economy of a manufacturer for all light
7 duty vehicles produced by the manufacturer, ad-
8 justed such that the fuel economy of each vehicle
9 that qualifies for an award shall be considered to be
10 equal to the average fuel economy for vehicles of a
11 similar footprint for model year 2005.

12 (2) ADVANCED TECHNOLOGY VEHICLE.—The
13 term “advanced technology vehicle” means a light
14 duty vehicle that meets—

15 (A) the Bin 5 Tier II emission standard
16 established in regulations issued by the Admin-
17 istrator of the Environmental Protection Agen-
18 cy under section 202(i) of the Clean Air Act
19 (42 U.S.C. 7521(i)), or a lower-numbered Bin
20 emission standard;

21 (B) any new emission standard for fine
22 particulate matter prescribed by the Adminis-
23 trator under that Act (42 U.S.C. 7401 et seq.);
24 and

25 (C) at least 125 percent of the average
26 base year combined fuel economy, calculated on

1 an energy-equivalent basis, for vehicles of a
2 substantially similar footprint.

3 (3) COMBINED FUEL ECONOMY.—The term
4 “combined fuel economy” means—

5 (A) the combined city/highway miles per
6 gallon values, as reported in accordance with
7 section 32908 of title 49, United States Code;
8 and

9 (B) in the case of an electric drive vehicle
10 with the ability to recharge from an off-board
11 source, the reported mileage, as determined in
12 a manner consistent with the Society of Auto-
13 motive Engineers recommended practice for
14 that configuration or a similar practice rec-
15 ommended by the Secretary, using a petroleum
16 equivalence factor for the off-board electricity
17 (as defined in section 474 of title 10, Code of
18 Federal Regulations).

19 (4) ENGINEERING INTEGRATION COSTS.—The
20 term “engineering integration costs” includes the
21 cost of engineering tasks relating to—

22 (A) incorporating qualifying components
23 into the design of advanced technology vehicles;
24 and

1 (B) designing new tooling and equipment
2 and developing new manufacturing processes
3 and material suppliers for production facilities
4 that produce qualifying components or ad-
5 vanced technology vehicles.

6 (5) QUALIFYING COMPONENTS.—The term
7 “qualifying components” means components that the
8 Secretary determines to be—

9 (A) specially designed for advanced tech-
10 nology vehicles; and

11 (B) installed for the purpose of meeting
12 the performance requirements of advanced tech-
13 nology vehicles.

14 (b) ADVANCED VEHICLES MANUFACTURING FACIL-
15 ITY.—The Secretary shall provide facility funding awards
16 under this section to automobile manufacturers and com-
17 ponent suppliers to pay not more than 30 percent of the
18 cost of—

19 (1) reequipping, expanding, or establishing a
20 manufacturing facility in the United States to
21 produce—

22 (A) qualifying advanced technology vehi-
23 cles; or

24 (B) qualifying components; and

1 (2) engineering integration performed in the
2 United States of qualifying vehicles and qualifying
3 components.

4 (c) PERIOD OF AVAILABILITY.—An award under sub-
5 section (b) shall apply to—

6 (1) facilities and equipment placed in service
7 before December 30, 2017; and

8 (2) engineering integration costs incurred dur-
9 ing the period beginning on the date of enactment
10 of this Act and ending on December 30, 2017.

11 (d) IMPROVEMENT.—The Secretary shall issue regu-
12 lations that require that, in order for an automobile manu-
13 facturer to be eligible for an award under this section dur-
14 ing a particular year, the adjusted average fuel economy
15 of the manufacturer for light duty vehicles produced by
16 the manufacturer during the most recent year for which
17 data are available shall be not less than the average fuel
18 economy for all light duty vehicles of the manufacturer
19 for model year 2005.

20 (e) SET ASIDE FOR SMALL AUTOMOBILE MANUFAC-
21 TURERS AND COMPONENT SUPPLIERS.—

22 (1) DEFINITION OF COVERED FIRM.—In this
23 subsection, the term “covered firm” means a firm
24 that—

25 (A) employs less than 500 individuals; and

1 (B) manufactures automobiles or compo-
2 nents of automobiles.

3 (2) SET ASIDE.—Of the amount of funds that
4 are used to provide awards for each fiscal year
5 under this section, the Secretary shall use not less
6 than 30 percent of the amount to provide awards to
7 covered firms or consortia led by a covered firm.

8 **SEC. 244. ENERGY STORAGE COMPETITIVENESS.**

9 (a) SHORT TITLE.—This section may be cited as the
10 “United States Energy Storage Competitiveness Act of
11 2007”.

12 (b) ENERGY STORAGE SYSTEMS FOR MOTOR TRANS-
13 PORTATION AND ELECTRICITY TRANSMISSION AND DIS-
14 TRIBUTION.—

15 (1) DEFINITIONS.—In this subsection:

16 (A) COUNCIL.—The term “Council” means
17 the Energy Storage Advisory Council estab-
18 lished under paragraph (3).

19 (B) COMPRESSED AIR ENERGY STOR-
20 AGE.—The term “compressed air energy stor-
21 age” means, in the case of an electricity grid
22 application, the storage of energy through the
23 compression of air.

24 (C) DEPARTMENT.—The term “Depart-
25 ment” means the Department of Energy.

1 (D) FLYWHEEL.—The term “flywheel”
2 means, in the case of an electricity grid applica-
3 tion, a device used to store rotational kinetic
4 energy.

5 (E) ULTRACAPACITOR.—The term
6 “ultracapacitor” means an energy storage de-
7 vice that has a power density comparable to
8 conventional capacitors but capable of exceeding
9 the energy density of conventional capacitors by
10 several orders of magnitude.

11 (2) PROGRAM.—The Secretary shall carry out a
12 research, development, and demonstration program
13 to support the ability of the United States to remain
14 globally competitive in energy storage systems for
15 motor transportation and electricity transmission
16 and distribution.

17 (3) ENERGY STORAGE ADVISORY COUNCIL.—

18 (A) ESTABLISHMENT.—Not later than 90
19 days after the date of enactment of this Act,
20 the Secretary shall establish an Energy Storage
21 Advisory Council.

22 (B) COMPOSITION.—

23 (i) IN GENERAL.—Subject to clause
24 (ii), the Council shall consist of not less
25 than 15 individuals appointed by the Sec-

1 retary, based on recommendations of the
2 National Academy of Sciences.

3 (ii) ENERGY STORAGE INDUSTRY.—

4 The Council shall consist primarily of rep-
5 resentatives of the energy storage industry
6 of the United States.

7 (iii) CHAIRPERSON.—The Secretary

8 shall select a Chairperson for the Council
9 from among the members appointed under
10 clause (i).

11 (C) MEETINGS.—

12 (i) IN GENERAL.—The Council shall

13 meet not less than once a year.

14 (ii) FEDERAL ADVISORY COMMITTEE

15 ACT.—The Federal Advisory Committee
16 Act (5 U.S.C. App. 2) shall apply to a
17 meeting of the Council.

18 (D) PLANS.—No later than 1 year after

19 the date of enactment of this Act, in conjunc-
20 tion with the Secretary, the Council shall de-
21 velop 5-year plans for integrating basic and ap-
22 plied research so that the United States retains
23 a globally competitive domestic energy storage
24 industry for motor transportation and elec-
25 tricity transmission and distribution.

1 (E) REVIEW.—The Council shall—

2 (i) assess the performance of the De-
3 partment in meeting the goals of the plans
4 developed under subparagraph (D); and

5 (ii) make specific recommendations to
6 the Secretary on programs or activities
7 that should be established or terminated to
8 meet those goals.

9 (4) BASIC RESEARCH PROGRAM.—

10 (A) BASIC RESEARCH.—The Secretary
11 shall conduct a basic research program on en-
12 ergy storage systems to support motor trans-
13 portation and electricity transmission and dis-
14 tribution, including—

15 (i) materials design;

16 (ii) materials synthesis and character-
17 ization;

18 (iii) electrode-active materials, includ-
19 ing electrolytes and bioelectrolytes;

20 (iv) surface and interface dynamics;

21 (v) modeling and simulation; and

22 (vi) thermal behavior and life deg-
23 radation mechanisms; and

24 (vii) thermal behavior and life deg-
25 radation mechanisms.

1 (B) NANOSCIENCE CENTERS.—The Sec-
2 retary, in cooperation with the Council, shall co-
3 ordinate the activities of the nanoscience cen-
4 ters of the Department to help the nanoscience
5 centers of the Department maintain a globally
6 competitive posture in energy storage systems
7 for motor transportation and electricity trans-
8 mission and distribution.

9 (5) APPLIED RESEARCH PROGRAM.—The Sec-
10 retary shall conduct an applied research program on
11 energy storage systems to support motor transpor-
12 tation and electricity transmission and distribution
13 technologies, including—

14 (A) ultracapacitors;

15 (B) flywheels;

16 (C) batteries and battery systems (includ-
17 ing flow batteries);

18 (D) compressed air energy systems;

19 (E) power conditioning electronics;

20 (F) manufacturing technologies for energy
21 storage systems; and

22 (G) thermal management systems.

23 (6) ENERGY STORAGE RESEARCH CENTERS.—

24 (A) IN GENERAL.—The Secretary shall es-
25 tablish, through competitive bids, not more than

1 4 energy storage research centers to translate
2 basic research into applied technologies to ad-
3 vance the capability of the United States to
4 maintain a globally competitive posture in en-
5 ergy storage systems for motor transportation
6 and electricity transmission and distribution.

7 (B) PROGRAM MANAGEMENT.—The centers
8 shall be jointly managed by the Under Sec-
9 retary for Science of the Department.

10 (C) PARTICIPATION AGREEMENTS.—As a
11 condition of participating in a center, a partici-
12 pant shall enter into a participation agreement
13 with the center that requires that activities con-
14 ducted by the participant for the center pro-
15 mote the goal of enabling the United States to
16 compete successfully in global energy storage
17 markets.

18 (D) PLANS.—A center shall conduct activi-
19 ties that promote the achievement of the goals
20 of the plans of the Council under paragraph
21 (3)(D).

22 (E) COST SHARING.—In carrying out this
23 paragraph, the Secretary shall require cost-
24 sharing in accordance with section 988 of the
25 Energy Policy Act of 2005 (42 U.S.C. 16352).

1 (F) NATIONAL LABORATORIES.—A na-
2 tional laboratory (as defined in section 2 of the
3 Energy Policy Act of 2005 (42 U.S.C. 15801))
4 may participate in a center established under
5 this paragraph, including a cooperative research
6 and development agreement (as defined in sec-
7 tion 12(d) of the Stevenson-Wydler Technology
8 Innovation Act of 1980 (15 U.S.C. 3710a(d))).

9 (7) DISCLOSURE.—Section 623 of the Energy
10 Policy Act of 1992 (42 U.S.C. 13293) may apply to
11 any project carried out through a grant, contract, or
12 cooperative agreement under this section.

13 (8) INTELLECTUAL PROPERTY.—In accordance
14 with section 202(a)(ii) of title 35, United States
15 Code, section 152 of the Atomic Energy Act of 1954
16 (42 U.S.C. 2182), and section 9 of the Federal Non-
17 nuclear Research and Development Act of 1974 (42
18 U.S.C. 5908), the Secretary may require, for any
19 new invention developed under paragraph (6)—

20 (A) that any industrial participant that is
21 active in a Energy Storage Research Center es-
22 tablished under paragraph (6) related to the
23 advancement of energy storage technologies car-
24 ried out, in whole or in part, with Federal fund-
25 ing, be granted the first option to negotiate

1 with the invention owner, at least in the field of
2 energy storage technologies, nonexclusive li-
3 censes and royalties on terms that are reason-
4 able, as determined by the Secretary;

5 (B) that, during a 2-year period beginning
6 on the date on which an invention is made, the
7 patent holder shall not negotiate any license or
8 royalty agreement with any entity that is not an
9 industrial participant under paragraph (6);

10 (C) that, during the 2-year period de-
11 scribed in subparagraph (B), the patent holder
12 shall negotiate nonexclusive licenses and royal-
13 ties in good faith with any interested industrial
14 participant under paragraph (6); and

15 (D) such other terms as the Secretary de-
16 termines to be necessary to promote the acceler-
17 ated commercialization of inventions made
18 under paragraph (6) to advance the capability
19 of the United States to successfully compete in
20 global energy storage markets.

21 (9) REVIEW BY NATIONAL ACADEMY OF
22 SCIENCES.—Not later than 3 years after the date of
23 enactment of this Act, the Secretary shall offer to
24 enter into an arrangement with the National Acad-

1 emy of Sciences to assess the performance of the
2 Department in carrying out this section.

3 (10) AUTHORIZATION OF APPROPRIATIONS.—

4 There are authorized to be appropriated to carry
5 out—

6 (A) the basic research program under
7 paragraph (4) \$50,000,000 for each of fiscal
8 years 2008 through 2017;

9 (B) the applied research program under
10 paragraph (5) \$80,000,000 for each of fiscal
11 years 2008 through 2017; and

12 (C) the energy storage research center pro-
13 gram under paragraph (6) \$100,000,000 for
14 each of fiscal years 2008 through 2017.

15 **SEC. 245. ADVANCED TRANSPORTATION TECHNOLOGY**
16 **PROGRAM.**

17 (a) **ELECTRIC DRIVE VEHICLE DEMONSTRATION**
18 **PROGRAM.—**

19 (1) **DEFINITIONS.—**In this subsection—

20 (A) **BATTERY.—**The term “battery” means
21 an electrochemical energy storage device pow-
22 ered directly by electrical current.

23 (B) **PLUG-IN ELECTRIC DRIVE VEHICLE.—**
24 The term “plug-in electric drive vehicle” means
25 a precommercial vehicle that—

1 (i) draws motive power from a battery
2 with a capacity of at least 4 kilowatt-
3 hours;

4 (ii) can be recharged from an external
5 source of electricity for motive power; and

6 (iii) is a light-, medium-, or heavy-
7 duty onroad or nonroad vehicle.

8 (2) PROGRAM.—The Secretary shall establish a
9 competitive program to provide grants for dem-
10 onstrations of plug-in electric drive vehicles.

11 (3) ELIGIBILITY.—

12 (A) IN GENERAL.—A State government,
13 local government, metropolitan transportation
14 authority, air pollution control district, private
15 entity, and nonprofit entity shall be eligible to
16 receive a grant under this subsection.

17 (B) CERTAIN APPLICANTS.—A battery
18 manufacturer that proposes to supply to an ap-
19 plicant for a grant under this section a battery
20 with a capacity of greater than 1 kilowatt-hour
21 for use in a plug-in electric drive vehicle shall—

22 (i) ensure that the applicant includes
23 in the application a description of the price
24 of the battery per kilowatt-hour;

1 (ii) on approval by the Secretary of
2 the application, publish, or permit the Sec-
3 retary to publish, the price described in
4 clause (i); and

5 (iii) for any order received by the bat-
6 tery manufacturer for at least 1,000 bat-
7 teries, offer the batteries at that price.

8 (4) PRIORITY.—In making grants under this
9 subsection, the Secretary shall give priority to pro-
10 posals that—

11 (A) are likely to contribute to the commer-
12 cialization and production of plug-in electric
13 drive vehicles in the United States; and

14 (B) reduce petroleum usage.

15 (5) SCOPE OF DEMONSTRATIONS.—The Sec-
16 retary shall ensure, to the extent practicable, that
17 the program established under this subsection in-
18 cludes a variety of applications, manufacturers, and
19 end-uses.

20 (6) REPORTING.—The Secretary shall require a
21 grant recipient under this subsection to submit to
22 the Secretary, on an annual basis, data relating to
23 vehicle, performance, life cycle costs, and emissions
24 of vehicles demonstrated under the grant, including
25 emissions of greenhouse gases.

1 (7) COST SHARING.—Section 988 of the Energy
2 Policy Act of 2005 (42 U.S.C. 16352) shall apply to
3 a grant made under this subsection.

4 (8) AUTHORIZATIONS OF APPROPRIATIONS.—
5 There are authorized to be appropriated to carry out
6 this subsection \$60,000,000 for each of fiscal years
7 2008 through 2012, of which not less than
8 \$20,000,000 shall be available each fiscal year only
9 to make grants local and municipal governments.

10 (b) NEAR-TERM ELECTRIC DRIVE TRANSPORTATION
11 DEPLOYMENT PROGRAM.—

12 (1) DEFINITION OF QUALIFIED ELECTRIC
13 TRANSPORTATION PROJECT.—

14 (A) IN GENERAL.—In this subsection, the
15 term “qualified electric transportation project”
16 means a project that would simultaneously re-
17 duce emissions of criteria pollutants, green-
18 house gas emissions, and petroleum usage by at
19 least 40 percent as compared to commercially
20 available, petroleum-based technologies.

21 (B) INCLUSIONS.—In this subsection, the
22 term “qualified electric transportation project”
23 includes a project relating to—

24 (i) shipside or shoreside electrification
25 for vessels;

- 1 (ii) truck-stop electrification;
2 (iii) electric truck refrigeration units;
3 (iv) battery powered auxiliary power
4 units for trucks;
5 (v) electric airport ground support
6 equipment;
7 (vi) electric material and cargo han-
8 dling equipment;
9 (vii) electric or dual-mode electric
10 freight rail;
11 (viii) any distribution upgrades needed
12 to supply electricity to the project; and
13 (ix) any ancillary infrastructure, in-
14 cluding panel upgrades, battery chargers,
15 in-situ transformers, and trenching.

16 (2) ESTABLISHMENT.—Not later than 1 year
17 after the date of enactment of this Act, the Sec-
18 retary, in consultation with the Secretary of Trans-
19 portation and the Administrator of the Environ-
20 mental Protection Agency, shall establish a program
21 to provide grants and loans to eligible entities for
22 the conduct of qualified electric transportation
23 projects.

24 (3) GRANTS.—

1 (A) IN GENERAL.—Of the amounts made
2 available for grants under paragraph (2)—

3 (i) $\frac{2}{3}$ shall be made available by the
4 Secretary on a competitive basis for quali-
5 fied electric transportation projects based
6 on the overall cost-effectiveness of a quali-
7 fied electric transportation project in re-
8 ducing emissions of criteria pollutants,
9 emissions of greenhouse gases, and petro-
10 leum usage; and

11 (ii) $\frac{1}{3}$ shall be made available by the
12 Secretary for qualified electric transpor-
13 tation projects in the order that the grant
14 applications are received, if the qualified
15 electric transportation projects meet the
16 minimum standard for the reduction of
17 emissions of criteria pollutants, emissions
18 of greenhouse gases, and petroleum usage
19 described in paragraph (1)(A).

20 (B) PRIORITY.—In providing grants under
21 this paragraph, the Secretary shall give priority
22 to large-scale projects and large-scale
23 aggregators of projects.

24 (C) COST SHARING.—Section 988 of the
25 Energy Policy Act of 2005 (42 U.S.C. 16352)

1 shall apply to a grant made under this para-
2 graph.

3 (4) REVOLVING LOAN PROGRAM.—

4 (A) IN GENERAL.—The Secretary shall es-
5 tablish a revolving loan program to provide
6 loans to eligible entities for the conduct of
7 qualified electric transportation projects under
8 paragraph (2).

9 (B) CRITERIA.—The Secretary shall estab-
10 lish criteria for the provision of loans under this
11 paragraph.

12 (C) FUNDING.—Of amounts made avail-
13 able to carry out this subsection, the Secretary
14 shall use any amounts not used to provide
15 grants under paragraph (3) to carry out the re-
16 volving loan program under this paragraph.

17 (c) MARKET ASSESSMENT PROGRAM.—The Adminis-
18 trator of the Environmental Protection Agency, in con-
19 sultation with the Secretary and private industry, shall
20 carry out a program—

21 (1) to inventory and analyze existing electric
22 drive transportation technologies and hybrid tech-
23 nologies and markets; and

24 (2) to identify and implement methods of re-
25 moving barriers for existing and emerging applica-

1 tions of electric drive transportation technologies
2 and hybrid transportation technologies.

3 (d) ELECTRICITY USAGE PROGRAM.—

4 (1) IN GENERAL.—The Secretary, in consulta-
5 tion with the Administrator of the Environmental
6 Protection Agency and private industry, shall carry
7 out a program—

8 (A) to work with utilities to develop low-
9 cost, simple methods of—

10 (i) using off-peak electricity; or

11 (ii) managing on-peak electricity use;

12 (B) to develop systems and processes—

13 (i) to enable plug-in electric vehicles
14 to enhance the availability of emergency
15 back-up power for consumers;

16 (ii) to study and demonstrate the po-
17 tential value to the electric grid to use the
18 energy stored in the on-board storage sys-
19 tems to improve the efficiency and reli-
20 ability of the grid generation system; and

21 (iii) to work with utilities and other
22 interested stakeholders to study and dem-
23 onstrate the implications of the introduc-
24 tion of plug-in electric vehicles and other
25 types of electric transportation on the pro-

1 duction of electricity from renewable re-
2 sources.

3 (2) OFF-PEAK ELECTRICITY USAGE GRANTS.—

4 In carrying out the program under paragraph (1),
5 the Secretary shall provide grants to assist eligible
6 public and private electric utilities for the conduct of
7 programs or activities to encourage owners of elec-
8 tric drive transportation technologies—

9 (A) to use off-peak electricity; or

10 (B) to have the load managed by the util-
11 ity.

12 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
13 authorized to be appropriated to carry out subsections (b),
14 (c), and (d) \$125,000,000 for each of fiscal years 2008
15 through 2013.

16 (f) ELECTRIC DRIVE TRANSPORTATION TECH-
17 NOLOGIES.—

18 (1) DEFINITIONS.—In this subsection:

19 (A) BATTERY.—The term “battery” means
20 an electrochemical energy storage device pow-
21 ered directly by electrical current.

22 (B) ELECTRIC DRIVE TRANSPORTATION
23 TECHNOLOGY.—The term “electric drive trans-
24 portation technology” means—

1 (i) technology used in vehicles that
2 use an electric motor for all or part of the
3 motive power of the vehicles, including bat-
4 tery electric, hybrid electric, plug-in hybrid
5 electric, fuel cell, and plug-in fuel cell vehi-
6 cles, or rail transportation; or

7 (ii) equipment relating to transpor-
8 tation or mobile sources of air pollution
9 that use an electric motor to replace an in-
10 ternal combustion engine for all or part of
11 the work of the equipment, including—

12 (I) corded electric equipment
13 linked to transportation or mobile
14 sources of air pollution; and

15 (II) electrification technologies at
16 airports, ports, truck stops, and mate-
17 rial-handling facilities.

18 (C) ENERGY STORAGE DEVICE.—

19 (i) IN GENERAL.—The term “energy
20 storage device” means the onboard device
21 used in an on-road or nonroad vehicle to
22 store energy, or a battery, ultracapacitor,
23 compressed air energy storage system, or
24 flywheel used to store energy in a sta-
25 tionary application.

1 (ii) INCLUSIONS.—The term “energy
2 storage device” includes—

3 (I) in the case of an electric or
4 hybrid electric or fuel cell vehicle, a
5 battery, ultracapacitor, or similar de-
6 vice; and

7 (II) in the case of a hybrid hy-
8 draulic vehicle, an accumulator or
9 similar device.

10 (D) ENGINE DOMINANT HYBRID VEHI-
11 CLE.—The term “engine dominant hybrid vehi-
12 cle” means an on-road or nonroad vehicle
13 that—

14 (i) is propelled by an internal combus-
15 tion engine or heat engine using—

16 (I) any combustible fuel; and

17 (II) an on-board, rechargeable
18 energy storage device; and

19 (ii) has no means of using an off-
20 board source of energy.

21 (E) NONROAD VEHICLE.—The term
22 “nonroad vehicle” means a vehicle—

23 (i) powered by—

1 (I) a nonroad engine, as that
2 term is defined in section 216 of the
3 Clean Air Act (42 U.S.C. 7550); or

4 (II) fully or partially by an elec-
5 tric motor powered by a fuel cell, a
6 battery, or an off-board source of elec-
7 tricity; and

8 (ii) that is not a motor vehicle or a ve-
9 hicle used solely for competition.

10 (F) PLUG-IN ELECTRIC DRIVE VEHICLE.—

11 In this section, the term “plug-in electric drive
12 vehicle” means a precommercial vehicle that—

13 (i) draws motive power from a battery
14 with a capacity of at least 4 kilowatt-
15 hours;

16 (ii) can be recharged from an external
17 source of electricity for motive power; and

18 (iii) is a light-, medium-, or heavy-
19 duty onroad or nonroad vehicle.

20 (2) EVALUATION OF PLUG-IN ELECTRIC DRIVE
21 TRANSPORTATION TECHNOLOGY BENEFITS.—

22 (A) IN GENERAL.—The Secretary, in co-
23 operation with the Administrator of the Envi-
24 ronmental Protection Agency, the heads of
25 other appropriate Federal agencies, and appro-

1 priate interested stakeholders, shall evaluate
2 and, as appropriate, modify existing test proto-
3 cols for fuel economy and emissions to ensure
4 that any protocols for electric drive transpor-
5 tation technologies, including plug-in electric
6 drive vehicles, accurately measure the fuel econ-
7 omy and emissions performance of the electric
8 drive transportation technologies.

9 (B) REQUIREMENTS.—Test protocols (in-
10 cluding any modifications to test protocols) for
11 electric drive transportation technologies under
12 subparagraph (A) shall—

13 (i) be designed to assess the full po-
14 tential of benefits in terms of reduction of
15 emissions of criteria pollutants, reduction
16 of energy use, and petroleum reduction;
17 and

18 (ii) consider—

19 (I) the vehicle and fuel as a sys-
20 tem, not just an engine;

21 (II) nightly off-board charging,
22 as applicable; and

23 (III) different engine-turn on
24 speed control strategies.

1 (3) PLUG-IN ELECTRIC DRIVE VEHICLE RE-
2 SEARCH AND DEVELOPMENT.—The Secretary shall
3 conduct an applied research program for plug-in
4 electric drive vehicle technology and engine dominant
5 hybrid vehicle technology, including—

6 (A) high-capacity, high-efficiency energy
7 storage devices that, as compared to existing
8 technologies that are in commercial service,
9 have improved life, energy storage capacity, and
10 power delivery capacity;

11 (B) high-efficiency on-board and off-board
12 charging components;

13 (C) high-power and energy-efficient
14 drivetrain systems for passenger and commer-
15 cial vehicles and for nonroad vehicles;

16 (D) development and integration of control
17 systems and power trains for plug-in electric ve-
18 hicles, plug-in hybrid fuel cell vehicles, and en-
19 gine dominant hybrid vehicles, including—

20 (i) development of efficient cooling
21 systems;

22 (ii) analysis and development of con-
23 trol systems that minimize the emissions
24 profile in cases in which clean diesel en-

1 gines are part of a plug-in hybrid drive
2 system; and

3 (iii) development of different control
4 systems that optimize for different goals,
5 including—

6 (I) prolonging energy storage de-
7 vice life;

8 (II) reduction of petroleum con-
9 sumption; and

10 (III) reduction of greenhouse gas
11 emissions;

12 (E) application of nanomaterial technology
13 to energy storage devices and fuel cell systems;
14 and

15 (F) use of smart vehicle and grid inter-
16 connection devices and software that enable
17 communications between the grid of the future
18 and electric drive transportation technology ve-
19 hicles.

20 (4) EDUCATION PROGRAM.—

21 (A) IN GENERAL.—The Secretary shall de-
22 velop a nationwide electric drive transportation
23 technology education program under which the
24 Secretary shall provide—

1 (i) teaching materials to secondary
2 schools and high schools; and

3 (ii) assistance for programs relating
4 to electric drive system and component en-
5 gineering to institutions of higher edu-
6 cation.

7 (B) ELECTRIC VEHICLE COMPETITION.—

8 The program established under subparagraph
9 (A) shall include a plug-in hybrid electric vehi-
10 cle competition for institutions of higher edu-
11 cation, which shall be known as the “Dr. An-
12 drew Frank Plug-In Electric Vehicle Competi-
13 tion”.

14 (C) ENGINEERS.—In carrying out the pro-
15 gram established under subparagraph (A), the
16 Secretary shall provide financial assistance to
17 institutions of higher education to create new,
18 or support existing, degree programs to ensure
19 the availability of trained electrical and me-
20 chanical engineers with the skills necessary for
21 the advancement of—

22 (i) plug-in electric drive vehicles; and

23 (ii) other forms of electric drive trans-
24 portation technology vehicles.

1 (5) AUTHORIZATION OF APPROPRIATIONS.—

2 There are authorized to be appropriated for each of
3 fiscal years 2008 through 2013—

4 (A) to carry out paragraph (3)
5 \$200,000,000; and

6 (B) to carry out paragraph (4)
7 \$5,000,000.

8 (g) COLLABORATION AND MERIT REVIEW.—

9 (1) COLLABORATION WITH NATIONAL LABORA-
10 TORIES.—To the maximum extent practicable, Na-
11 tional Laboratories shall collaborate with the public,
12 private, and academic sectors and with other Na-
13 tional Laboratories in the design, conduct, and dis-
14 semination of the results of programs and activities
15 authorized under this section.

16 (2) COLLABORATION WITH MOBILE ENERGY
17 STORAGE PROGRAM.—To the maximum extent prac-
18 ticable, the Secretary shall seek to coordinate the
19 stationary and mobile energy storage programs of
20 the Department of the Energy with the programs
21 and activities authorized under this section.

22 (3) MERIT REVIEW.—Notwithstanding section
23 989 of the Energy Policy Act of 2005 (42 U.S.C.
24 16353), of the amounts made available to carry out

1 this section, not more than 30 percent shall be pro-
2 vided to National Laboratories.

3 **SEC. 246. INCLUSION OF ELECTRIC DRIVE IN ENERGY POL-**
4 **ICY ACT OF 1992.**

5 Section 508 of the Energy Policy Act of 1992 (42
6 U.S.C. 13258) is amended—

7 (1) by redesignating subsections (a) through (d)
8 as subsections (b) through (e), respectively;

9 (2) by inserting before subsection (b) the fol-
10 lowing:

11 “(a) DEFINITIONS.—In this section:

12 “(1) FUEL CELL ELECTRIC VEHICLE.—The
13 term ‘fuel cell electric vehicle’ means an on-road or
14 nonroad vehicle that uses a fuel cell (as defined in
15 section 803 of the Spark M. Matsunaga Hydrogen
16 Act of 2005 (42 U.S.C. 16152)).

17 “(2) HYBRID ELECTRIC VEHICLE.—The term
18 ‘hybrid electric vehicle’ means a new qualified hybrid
19 motor vehicle (as defined in section 30B(d)(3) of the
20 Internal Revenue Code of 1986).

21 “(3) MEDIUM- OR HEAVY-DUTY ELECTRIC VE-
22 HICLE.—The term ‘medium- or heavy-duty electric
23 vehicle’ means an electric, hybrid electric, or plug-in
24 hybrid electric vehicle with a gross vehicle weight of
25 more than 8,501 pounds.

1 “(4) NEIGHBORHOOD ELECTRIC VEHICLE.—

2 The term ‘neighborhood electric vehicle’ means a 4-
3 wheeled on-road or nonroad vehicle that—

4 “(A) has a top attainable speed in 1 mile
5 of more than 20 mph and not more than 25
6 mph on a paved level surface; and

7 “(B) is propelled by an electric motor and
8 on-board, rechargeable energy storage system
9 that is rechargeable using an off-board source
10 of electricity.

11 “(5) PLUG-IN HYBRID ELECTRIC VEHICLE.—

12 The term ‘plug-in hybrid electric vehicle’ means a
13 light-duty, medium-duty, or heavy-duty on-road or
14 nonroad vehicle that is propelled by any combination
15 of—

16 “(A) an electric motor and on-board, re-
17 chargeable energy storage system capable of op-
18 erating the vehicle in intermittent or continuous
19 all-electric mode and which is rechargeable
20 using an off-board source of electricity; and

21 “(B) an internal combustion engine or
22 heat engine using any combustible fuel.”;

23 (3) in subsection (b) (as redesignated by para-
24 graph (1))—

1 (A) by striking “The Secretary” and in-
2 serting the following:

3 “(1) ALLOCATION.—The Secretary”; and

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

5 “(2) ELECTRIC VEHICLES.—Not later than
6 January 31, 2009, the Secretary shall—

7 “(A) allocate credit in an amount to be de-
8 termined by the Secretary for—

9 “(i) acquisition of—

10 “(I) a hybrid electric vehicle;

11 “(II) a plug-in hybrid electric ve-
12 hicle;

13 “(III) a fuel cell electric vehicle;

14 “(IV) a neighborhood electric ve-
15 hicle; or

16 “(V) a medium- or heavy-duty
17 electric vehicle; and

18 “(ii) investment in qualified alter-
19 native fuel infrastructure or nonroad
20 equipment, as determined by the Sec-
21 retary; and

22 “(B) allocate more than 1, but not to ex-
23 ceed 5, credits for investment in an emerging
24 technology relating to any vehicle described in
25 subparagraph (A) to encourage—

1 “(i) a reduction in petroleum demand;
2 “(ii) technological advancement; and
3 “(iii) a reduction in vehicle emis-
4 sions.”.

5 (4) in subsection (c) (as redesignated by para-
6 graph (1)), by striking “subsection (a)” and insert-
7 ing “subsection (b)”; and

8 (5) by adding at the end the following:

9 “(e) AUTHORIZATION OF APPROPRIATIONS.—There
10 are authorized to be appropriated such sums as are nec-
11 essary to carry out this section for each of fiscal years
12 2008 through 2013.”.

13 **SEC. 247. COMMERCIAL INSULATION DEMONSTRATION**
14 **PROGRAM.**

15 (a) DEFINITIONS.—In this section:

16 (1) ADVANCED INSULATION.—The term “ad-
17 vanced insulation” means insulation that has an R
18 value of not less than R35 per inch.

19 (2) COVERED REFRIGERATION UNIT.—The
20 term “covered refrigeration unit” means any—

21 (A) commercial refrigerated truck;

22 (B) commercial refrigerated trailer; and

23 (C) commercial refrigerator, freezer, or re-
24 frigerator-freezer described in section 342(c) of

1 the Energy Policy and Conservation Act (42
2 U.S.C. 6313(c)).

3 (b) REPORT.—Not later than 90 days after the date
4 of enactment of this Act, the Secretary shall submit to
5 Congress a report that includes an evaluation of—

6 (1) the state of technological advancement of
7 advanced insulation; and

8 (2) the projected amount of cost savings that
9 would be generated by implementing advanced insu-
10 lation into covered refrigeration units.

11 (c) DEMONSTRATION PROGRAM.—

12 (1) ESTABLISHMENT.—If the Secretary deter-
13 mines in the report described in subsection (b) that
14 the implementation of advanced insulation into cov-
15 ered refrigeration units would generate an economi-
16 cally justifiable amount of cost savings, the Sec-
17 retary, in cooperation with manufacturers of covered
18 refrigeration units, shall establish a demonstration
19 program under which the Secretary shall dem-
20 onstrate the cost-effectiveness of advanced insula-
21 tion.

22 (2) DISCLOSURE.—Section 623 of the Energy
23 Policy Act of 1992 (42 U.S.C. 13293) may apply to
24 any project carried out under this subsection.

1 (3) COST-SHARING.—Section 988 of the Energy
2 Policy Act of 2005 (42 U.S.C. 16352) shall apply to
3 any project carried out under this subsection.

4 (d) AUTHORIZATION OF APPROPRIATIONS.—Of the
5 funds authorized under section 911(b) of Public Law 109–
6 58, the Energy Policy Act of 2005, such sums shall be
7 allocated to carry out this program.

8 **Subtitle D—Setting Energy** 9 **Efficiency Goals**

10 **SEC. 251. OIL SAVINGS PLAN AND REQUIREMENTS.**

11 (a) OIL SAVINGS TARGET AND ACTION PLAN.—Not
12 later than 270 days after the date of enactment of this
13 Act, the Director of the Office of Management and Budget
14 (referred to in this section as the “Director”) shall publish
15 in the Federal Register an action plan consisting of—

16 (1) a list of requirements proposed or to be pro-
17 posed pursuant to subsection (b) that are authorized
18 to be issued under law in effect on the date of enact-
19 ment of this Act, and this Act, that will be suffi-
20 cient, when taken together, to save from the baseline
21 determined under subsection (e)—

22 (A) 2,500,000 barrels of oil per day on av-
23 erage during calendar year 2016;

24 (B) 7,000,000 barrels of oil per day on av-
25 erage during calendar year 2026; and

1 (C) 10,000,000 barrels per day on average
2 during calendar year 2031; and

3 (2) a Federal Government-wide analysis dem-
4 onstrating—

5 (A) the expected oil savings from the base-
6 line to be accomplished by each requirement;
7 and

8 (B) that all such requirements, taken to-
9 gether, will achieve the oil savings specified in
10 this subsection.

11 (b) STANDARDS AND REQUIREMENTS.—

12 (1) IN GENERAL.—On or before the date of
13 publication of the action plan under subsection (a),
14 the Secretary of Energy, the Secretary of Transpor-
15 tation, the Secretary of Defense, the Secretary of
16 Agriculture, the Secretary of the Treasury, the Ad-
17 ministrator of the Environmental Protection Agency,
18 and the head of any other agency the President de-
19 termines appropriate shall each propose, or issue a
20 notice of intent to propose, regulations establishing
21 each standard or other requirement listed in the ac-
22 tion plan that is under the jurisdiction of the respec-
23 tive agency using authorities described in paragraph
24 (2).

1 (2) AUTHORITIES.—The head of each agency
2 described in paragraph (1) shall use to carry out
3 this subsection—

4 (A) any authority in existence on the date
5 of enactment of this Act (including regulations);
6 and

7 (B) any new authority provided under this
8 Act (including an amendment made by this
9 Act).

10 (3) FINAL REGULATIONS.—Not later than 18
11 months after the date of enactment of this Act, the
12 head of each agency described in paragraph (1) shall
13 promulgate final versions of the regulations required
14 under this subsection.

15 (4) CONTENT OF REGULATIONS.—Each pro-
16 posed and final regulation promulgated under this
17 subsection shall—

18 (A) be sufficient to achieve at least the oil
19 savings resulting from the regulation under the
20 action plan published under subsection (a); and

21 (B) be accompanied by an analysis by the
22 applicable agency demonstrating that the regu-
23 lation will achieve the oil savings from the base-
24 line determined under subsection (e).

25 (c) INITIAL EVALUATION.—

1 (1) IN GENERAL.—Not later than 2 years after
2 the date of enactment of this Act, the Director
3 shall—

4 (A) publish in the Federal Register a Fed-
5 eral Government-wide analysis of—

6 (i) the oil savings achieved from the
7 baseline established under subsection (e);
8 and

9 (ii) the expected oil savings under the
10 standards and requirements of this Act
11 (and amendments made by this Act); and

12 (B) determine whether oil savings will
13 meet the targets established under subsection
14 (a).

15 (2) INSUFFICIENT OIL SAVINGS.—If the oil sav-
16 ings are less than the targets established under sub-
17 section (a), simultaneously with the analysis re-
18 quired under paragraph (1)—

19 (A) the Director shall publish a revised ac-
20 tion plan that is sufficient to achieve the tar-
21 gets; and

22 (B) the head of each agency referred to in
23 subsection (b)(1) shall propose new or revised
24 regulations that are sufficient to achieve the

1 targets under paragraphs (1), (2), and (3), re-
2 spectively, of subsection (b).

3 (3) FINAL REGULATIONS.—Not later than 180
4 days after the date on which regulations are pro-
5 posed under paragraph (2)(B), the head of each
6 agency referred to in subsection (b)(1) shall promul-
7 gate final versions of those regulations that comply
8 with subsection (b)(1).

9 (d) REVIEW AND UPDATE OF ACTION PLAN.—

10 (1) REVIEW.—Not later than January 1, 2011,
11 and every 3 years thereafter, the Director shall sub-
12 mit to Congress, and publish, a report that—

13 (A) evaluates the progress achieved in im-
14 plementing the oil savings targets established
15 under subsection (a);

16 (B) analyzes the expected oil savings under
17 the standards and requirements established
18 under this Act and the amendments made by
19 this Act; and

20 (C)(i) analyzes the potential to achieve oil
21 savings that are in addition to the savings re-
22 quired by subsection (a); and

23 (ii) if the President determines that it is in
24 the national interest, establishes a higher oil

1 savings target for calendar year 2017 or any
2 subsequent calendar year.

3 (2) INSUFFICIENT OIL SAVINGS.—If the oil sav-
4 ings are less than the targets established under sub-
5 section (a), simultaneously with the report required
6 under paragraph (1)—

7 (A) the Director shall publish a revised ac-
8 tion plan that is sufficient to achieve the tar-
9 gets; and

10 (B) the head of each agency referred to in
11 subsection (b)(1) shall propose new or revised
12 regulations that are sufficient to achieve the
13 targets under paragraphs (1), (2), and (3), re-
14 spectively, of subsection (b).

15 (3) FINAL REGULATIONS.—Not later than 180
16 days after the date on which regulations are pro-
17 posed under paragraph (2)(B), the head of each
18 agency referred to in subsection (b)(1) shall promul-
19 gate final versions of those regulations that comply
20 with subsection (b)(1).

21 (e) BASELINE AND ANALYSIS REQUIREMENTS.—In
22 performing the analyses and promulgating proposed or
23 final regulations to establish standards and other require-
24 ments necessary to achieve the oil savings required by this
25 section, the Secretary of Energy, the Secretary of Trans-

1 portation, the Secretary of Defense, the Secretary of Agri-
2 culture, the Administrator of the Environmental Protec-
3 tion Agency, and the head of any other agency the Presi-
4 dent determines to be appropriate shall—

5 (1) determine oil savings as the projected re-
6 duction in oil consumption from the baseline estab-
7 lished by the reference case contained in the report
8 of the Energy Information Administration entitled
9 “Annual Energy Outlook 2005”;

10 (2) determine the oil savings projections re-
11 quired on an annual basis for each of calendar years
12 2009 through 2026; and

13 (3) account for any overlap among the stand-
14 ards and other requirements to ensure that the pro-
15 jected oil savings from all the promulgated stand-
16 ards and requirements, taken together, are as accu-
17 rate as practicable.

18 (f) NONREGULATORY MEASURES.—The action plan
19 required under subsection (a) and the revised action plans
20 required under subsections (c) and (d) shall include—

21 (1) a projection of the barrels of oil displaced
22 by efficiency and sources of energy other than oil,
23 including biofuels, electricity, and hydrogen; and

1 (2) a projection of the barrels of oil saved
2 through enactment of this Act and the Energy Pol-
3 icy Act of 2005 (42 U.S.C. 15801 et seq.).

4 **SEC. 252. NATIONAL ENERGY EFFICIENCY IMPROVEMENT**
5 **GOALS.**

6 (a) GOALS.—The goals of the United States are—

7 (1) to achieve an improvement in the overall en-
8 ergy productivity of the United States (measured in
9 gross domestic product per unit of energy input) of
10 at least 2.5 percent per year by the year 2012; and

11 (2) to maintain that annual rate of improve-
12 ment each year through 2030.

13 (b) STRATEGIC PLAN.—

14 (1) IN GENERAL.—Not later than 1 year after
15 the date of enactment of this Act, the Secretary, in
16 cooperation with the Administrator of the Environ-
17 mental Protection Agency and the heads of other ap-
18 propriate Federal agencies, shall develop a strategic
19 plan to achieve the national goals for improvement
20 in energy productivity established under subsection
21 (a).

22 (2) PUBLIC INPUT AND COMMENT.—The Sec-
23 retary shall develop the plan in a manner that pro-
24 vides appropriate opportunities for public input and
25 comment.

1 (c) PLAN CONTENTS.—The strategic plan shall—

2 (1) establish future regulatory, funding, and
3 policy priorities to ensure compliance with the na-
4 tional goals;

5 (2) include energy savings estimates for each
6 sector; and

7 (3) include data collection methodologies and
8 compilations used to establish baseline and energy
9 savings data.

10 (d) PLAN UPDATES.—

11 (1) IN GENERAL.—The Secretary shall—

12 (A) update the strategic plan biennially;
13 and

14 (B) include the updated strategic plan in
15 the national energy policy plan required by sec-
16 tion 801 of the Department of Energy Organi-
17 zation Act (42 U.S.C. 7321).

18 (2) CONTENTS.—In updating the plan, the Sec-
19 retary shall—

20 (A) report on progress made toward imple-
21 menting efficiency policies to achieve the na-
22 tional goals established under subsection (a);
23 and

1 (B) verify, to the maximum extent prac-
2 ticable, energy savings resulting from the poli-
3 cies.

4 (e) REPORT TO CONGRESS AND PUBLIC.—The Sec-
5 retary shall submit to Congress, and make available to the
6 public, the initial strategic plan developed under sub-
7 section (b) and each updated plan.

8 **SEC. 253. NATIONAL MEDIA CAMPAIGN.**

9 (a) IN GENERAL.—The Secretary, acting through the
10 Assistant Secretary for Energy Efficiency and Renewable
11 Energy (referred to in this section as the “Secretary”),
12 shall develop and conduct a national media campaign—

13 (1) to increase energy efficiency throughout the
14 economy of the United States over the next decade;

15 (2) to promote the national security benefits as-
16 sociated with increased energy efficiency; and

17 (3) to decrease oil consumption in the United
18 States over the next decade.

19 (b) CONTRACT WITH ENTITY.—The Secretary shall
20 carry out subsection (a) directly or through—

21 (1) competitively bid contracts with 1 or more
22 nationally recognized media firms for the develop-
23 ment and distribution of monthly television, radio,
24 and newspaper public service announcements; or

1 (2) collective agreements with 1 or more nation-
2 ally recognized institutes, businesses, or nonprofit
3 organizations for the funding, development, and dis-
4 tribution of monthly television, radio, and newspaper
5 public service announcements.

6 (c) USE OF FUNDS.—

7 (1) IN GENERAL.—Amounts made available to
8 carry out this section shall be used for the following:

9 (A) ADVERTISING COSTS.—

10 (i) The purchase of media time and
11 space.

12 (ii) Creative and talent costs.

13 (iii) Testing and evaluation of adver-
14 tising.

15 (iv) Evaluation of the effectiveness of
16 the media campaign.

17 (B) ADMINISTRATIVE COSTS.—Operational
18 and management expenses.

19 (2) LIMITATIONS.—In carrying out this section,
20 the Secretary shall allocate not less than 85 percent
21 of funds made available under subsection (e) for
22 each fiscal year for the advertising functions speci-
23 fied under paragraph (1)(A).

24 (d) REPORTS.—The Secretary shall annually submit
25 to Congress a report that describes—

1 (1) the strategy of the national media campaign
2 and whether specific objectives of the campaign were
3 accomplished, including—

4 (A) determinations concerning the rate of
5 change of energy consumption, in both absolute
6 and per capita terms; and

7 (B) an evaluation that enables consider-
8 ation whether the media campaign contributed
9 to reduction of energy consumption;

10 (2) steps taken to ensure that the national
11 media campaign operates in an effective and effi-
12 cient manner consistent with the overall strategy
13 and focus of the campaign;

14 (3) plans to purchase advertising time and
15 space;

16 (4) policies and practices implemented to ensure
17 that Federal funds are used responsibly to purchase
18 advertising time and space and eliminate the poten-
19 tial for waste, fraud, and abuse; and

20 (5) all contracts or cooperative agreements en-
21 tered into with a corporation, partnership, or indi-
22 vidual working on behalf of the national media cam-
23 paign.

24 (e) AUTHORIZATION OF APPROPRIATIONS.—

1 (1) IN GENERAL.—There is authorized to be
2 appropriated to carry out this section \$5,000,000 for
3 each of fiscal years 2008 through 2012.

4 (2) DECREASED OIL CONSUMPTION.—The Sec-
5 retary shall use not less than 50 percent of the
6 amount that is made available under this section for
7 each fiscal year to develop and conduct a national
8 media campaign to decrease oil consumption in the
9 United States over the next decade.

10 **SEC. 254. MODERNIZATION OF ELECTRICITY GRID SYSTEM.**

11 (a) STATEMENT OF POLICY.—It is the policy of the
12 United States that developing and deploying advanced
13 technology to modernize and increase the efficiency of the
14 electricity grid system of the United States is essential to
15 maintain a reliable and secure electricity transmission and
16 distribution infrastructure that can meet future demand
17 growth.

18 (b) PROGRAMS.—The Secretary, the Federal Energy
19 Regulatory Commission, and other Federal agencies, as
20 appropriate, shall carry out programs to support the use,
21 development, and demonstration of advanced transmission
22 and distribution technologies, including real-time moni-
23 toring and analytical software—

24 (1) to maximize the capacity and efficiency of
25 electricity networks;

1 (2) to enhance grid reliability;

2 (3) to reduce line losses;

3 (4) to facilitate the transition to real-time elec-
4 tricity pricing;

5 (5) to allow grid incorporation of more onsite
6 renewable energy generators;

7 (6) to enable electricity to displace a portion of
8 the petroleum used to power the national transpor-
9 tation system of the United States; and

10 (7) to enable broad deployment of distributed
11 generation and demand side management tech-
12 nology.

13 **SEC. 255. SMART GRID SYSTEM REPORT.**

14 (a) IN GENERAL.—The Secretary, acting through the
15 Director of the Office of Electricity Delivery and Energy
16 Reliability (referred to in this section as the “Secretary”),
17 shall, after consulting with any interested individual or en-
18 tity as appropriate, no later than one year after enact-
19 ment, report to Congress concerning the status of smart
20 grid deployments nationwide and any regulatory or gov-
21 ernment barriers to continued deployment.

22 **SEC. 256. SMART GRID TECHNOLOGY RESEARCH, DEVELOP-**
23 **MENT, AND DEMONSTRATION.**

24 (a) POWER GRID DIGITAL INFORMATION TECH-
25 NOLOGY.—The Secretary, in consultation with the Federal

1 Energy Regulatory Commission and other appropriate
2 agencies, electric utilities, the States, and other stake-
3 holders, shall carry out a program—

4 (1) to develop advanced techniques for meas-
5 uring peak load reductions and energy-efficiency sav-
6 ings from smart metering, demand response, distrib-
7 uted generation, and electricity storage systems;

8 (2) to investigate means for demand response,
9 distributed generation, and storage to provide ancil-
10 lary services;

11 (3) to conduct research to advance the use of
12 wide-area measurement and control networks, in-
13 cluding data mining, visualization, advanced com-
14 puting, and secure and dependable communications
15 in a highly-distributed environment;

16 (4) to test new reliability technologies in a grid
17 control room environment against a representative
18 set of local outage and wide area blackout scenarios;

19 (5) to investigate the feasibility of a transition
20 to time-of-use and real-time electricity pricing;

21 (6) to develop algorithms for use in electric
22 transmission system software applications;

23 (7) to promote the use of underutilized elec-
24 tricity generation capacity in any substitution of

1 electricity for liquid fuels in the transportation sys-
2 tem of the United States; and

3 (8) in consultation with the Federal Energy
4 Regulatory Commission, to propose interconnection
5 protocols to enable electric utilities to access elec-
6 tricity stored in vehicles to help meet peak demand
7 loads.

8 (b) SMART GRID REGIONAL DEMONSTRATION INI-
9 TIATIVE.—

10 (1) IN GENERAL.—The Secretary shall establish
11 a smart grid regional demonstration initiative (re-
12 ferred to in this subsection as the “Initiative”) com-
13 posed of demonstration projects specifically focused
14 on advanced technologies for use in power grid sens-
15 ing, communications, analysis, and power flow con-
16 trol. The Secretary shall seek to leverage existing
17 smart grid deployments.

18 (2) GOALS.—The goals of the Initiative shall
19 be—

20 (A) to demonstrate the potential benefits
21 of concentrated investments in advanced grid
22 technologies on a regional grid;

23 (B) to facilitate the commercial transition
24 from the current power transmission and dis-

1 tribution system technologies to advanced tech-
2 nologies;

3 (C) to facilitate the integration of ad-
4 vanced technologies in existing electric networks
5 to improve system performance, power flow con-
6 trol, and reliability;

7 (D) to demonstrate protocols and stand-
8 ards that allow for the measurement and valida-
9 tion of the energy savings and fossil fuel emis-
10 sion reductions associated with the installation
11 and use of energy efficiency and demand re-
12 sponse technologies and practices; and

13 (E) to investigate differences in each re-
14 gion and regulatory environment regarding best
15 practices in implementing smart grid tech-
16 nologies.

17 (3) DEMONSTRATION PROJECTS.—

18 (A) IN GENERAL.—In carrying out the ini-
19 tiative, the Secretary shall carry out smart grid
20 demonstration projects in up to 5 electricity
21 control areas, including rural areas and at least
22 1 area in which the majority of generation and
23 transmission assets are controlled by a tax-ex-
24 empt entity.

1 (B) COOPERATION.—A demonstration
2 project under subparagraph (A) shall be carried
3 out in cooperation with the electric utility that
4 owns the grid facilities in the electricity control
5 area in which the demonstration project is car-
6 ried out.

7 (C) FEDERAL SHARE OF COST OF TECH-
8 NOLOGY INVESTMENTS.—The Secretary shall
9 provide to an electric utility described in sub-
10 subparagraph (B) financial assistance for use in
11 paying an amount equal to not more than 50
12 percent of the cost of qualifying advanced grid
13 technology investments made by the electric
14 utility to carry out a demonstration project.

15 (4) AUTHORIZATION OF APPROPRIATIONS.—
16 There are authorized to be appropriated—

17 (A) to carry out subsection (a), such sums
18 as are necessary for each of fiscal years 2008
19 through 2012; and

20 (B) to carry out subsection (b),
21 \$100,000,000 for each of fiscal years 2008
22 through 2012.

23 **SEC. 257. SMART GRID INTEROPERABILITY FRAMEWORK.**

24 (a) INTEROPERABILITY FRAMEWORK.—The Federal
25 Energy Regulatory Commission (referred to in this section

1 as the “Commission”), in cooperation with other relevant
2 federal agencies, shall coordinate with smart grid stake-
3 holders to develop protocols for the establishment of a
4 flexible framework for the connection of smart grid devices
5 and systems that would align policy, business, and tech-
6 nology approaches in a manner that would enable all elec-
7 tric resources, including demand-side resources, to con-
8 tribute to an efficient, reliable electricity network.

9 (c) SCOPE OF FRAMEWORK.—The framework devel-
10 oped under subsection (b) shall be designed—

11 (1) to accommodate traditional, centralized gen-
12 eration and transmission resources and consumer
13 distributed resources, including distributed genera-
14 tion, renewable generation, energy storage, energy
15 efficiency, and demand response and enabling de-
16 vices and systems;

17 (2) to be flexible to incorporate—

18 (A) regional and organizational differences;

19 and

20 (B) technological innovations; and

21 (3) to consider include voluntary uniform stand-
22 ards for certain classes of mass-produced electric ap-
23 pliances and equipment for homes and businesses
24 that enable customers, at their election and con-
25 sistent with applicable State and federal laws, and

1 are manufactured with the ability to respond to elec-
2 tric grid emergencies and demand response signals
3 by curtailing all, or a portion of, the electrical power
4 consumed by the appliances or equipment in re-
5 sponse to an emergency or demand response signal,
6 including through—

7 (A) load reduction to reduce total electrical
8 demand;

9 (B) adjustment of load to provide grid an-
10 cillary services; and

11 (C) in the event of a reliability crisis that
12 threatens an outage, short-term load shedding
13 to help preserve the stability of the grid.

14 (4) Such voluntary standards should incor-
15 porate appropriate manufacturer lead time.

16 **SEC. 258. STATE CONSIDERATION OF SMART GRID.**

17 Section 111(d) of the Public Utility Regulatory Poli-
18 cies Act of 1978 (16 U.S.C. 2621(d)) is amended by add-
19 ing at the end the following:

20 “(16) CONSIDERATION OF SMART GRID IN-
21 VESTMENTS.—Each State shall consider requir-
22 ing that, prior to undertaking investments in
23 nonadvanced grid technologies, an electric util-
24 ity of the State demonstrate to the State that
25 the electric utility considered an investment in

1 a qualified smart grid system based on appro-
2 priate factors, including—

3 “(i) total costs;

4 “(ii) cost-effectiveness;

5 “(iii) improved reliability;

6 “(iv) security;

7 “(v) system performance; and

8 “(vi) societal benefit.

9 “(B) RATE RECOVERY.—Each State
10 shall consider authorizing each electric
11 utility of the State to recover from rate-
12 payers any capital, operating expenditure,
13 or other costs of the electric utility relating
14 to the deployment of a qualified smart grid
15 system, including a reasonable rate of re-
16 turn on the capital expenditures of the
17 electric utility for the deployment of the
18 qualified smart grid system.

19 “(C) OBSOLETE EQUIPMENT.—Each
20 State shall consider authorizing any elec-
21 tric utility or other party of the State to
22 deploy a qualified smart grid system to re-
23 cover in a timely manner the remaining
24 book-value costs of any equipment ren-
25 dered obsolete by the deployment of the

1 qualified smart grid system, based on the
2 remaining depreciable life of the obsolete
3 equipment.”.

4 **SEC. 259. SUPPORT FOR ENERGY INDEPENDENCE OF THE**
5 **UNITED STATES.**

6 It is the policy of the United States to provide sup-
7 port for projects and activities to facilitate the energy
8 independence of the United States so as to ensure that
9 all but 10 percent of the energy needs of the United States
10 are supplied by domestic energy sources.

11 **SEC. 260. ENERGY POLICY COMMISSION.**

12 (a) ESTABLISHMENT.—

13 (1) IN GENERAL.—There is established a com-
14 mission, to be known as the “National Commission
15 on Energy Independence” (referred to in this section
16 as the “Commission”).

17 (2) MEMBERSHIP.—The Commission shall be
18 composed of 15 members, of whom—

19 (A) 3 shall be appointed by the President;

20 (B) 3 shall be appointed by the majority
21 leader of the Senate;

22 (C) 3 shall be appointed by the minority
23 leader of the Senate;

24 (D) 3 shall be appointed by the Speaker of
25 the House of Representatives; and

1 (E) 3 shall be appointed by the minority
2 leader of the House of Representatives.

3 (3) CO-CHAIRPERSONS.—

4 (A) IN GENERAL.—The President shall
5 designate 2 co-chairpersons from among the
6 members of the Commission appointed.

7 (B) POLITICAL AFFILIATION.—The co-
8 chairpersons designated under subparagraph
9 (A) shall not both be affiliated with the same
10 political party.

11 (4) DEADLINE FOR APPOINTMENT.—Members
12 of the Commission shall be appointed not later than
13 90 days after the date of enactment of this Act.

14 (5) TERM; VACANCIES.—

15 (A) TERM.—A member of the Commission
16 shall be appointed for the life of the Commis-
17 sion.

18 (B) VACANCIES.—Any vacancy in the
19 Commission—

20 (i) shall not affect the powers of the
21 Commission; and

22 (ii) shall be filled in the same manner
23 as the original appointment.

1 (b) PURPOSE.—The Commission shall conduct a
2 comprehensive review of the energy policy of the United
3 States by—

4 (1) reviewing relevant analyses of the current
5 and long-term energy policy of, and conditions in,
6 the United States;

7 (2) identifying problems that may threaten the
8 achievement by the United States of long-term en-
9 ergy policy goals, including energy independence;

10 (3) analyzing potential solutions to problems
11 that threaten the long-term ability of the United
12 States to achieve those energy policy goals; and

13 (4) providing recommendations that will ensure,
14 to the maximum extent practicable, that the energy
15 policy goals of the United States are achieved.

16 (c) REPORT AND RECOMMENDATIONS.—

17 (1) IN GENERAL.—Not later than December 31
18 of each of calendar years 2009, 2011, 2013, and
19 2015, the Commission shall submit to Congress and
20 the President a report on the progress of United
21 States in meeting the long-term energy policy goal
22 of energy independence, including a detailed state-
23 ment of the consensus findings, conclusions, and rec-
24 ommendations of the Commission.

1 (2) LEGISLATIVE LANGUAGE.—If a rec-
2 ommendation submitted under paragraph (1) in-
3 volves legislative action, the report shall include pro-
4 posed legislative language to carry out the action.

5 (d) COMMISSION PERSONNEL MATTERS.—

6 (1) STAFF AND DIRECTOR.—The Commission
7 shall have a staff headed by an Executive Director.

8 (2) STAFF APPOINTMENT.—The Executive Di-
9 rector may appoint such personnel as the Executive
10 Director and the Commission determine to be appro-
11 priate.

12 (3) EXPERTS AND CONSULTANTS.—With the
13 approval of the Commission, the Executive Director
14 may procure temporary and intermittent services
15 under section 3109(b) of title 5, United States Code.

16 (4) FEDERAL AGENCIES.—

17 (A) DETAIL OF GOVERNMENT EMPLOY-
18 EES.—

19 (i) IN GENERAL.—Upon the request
20 of the Commission, the head of any Fed-
21 eral agency may detail, without reimburse-
22 ment, any of the personnel of the Federal
23 agency to the Commission to assist in car-
24 rying out the duties of the Commission.

1 (ii) NATURE OF DETAIL.—Any detail
2 of a Federal employee under clause (i)
3 shall not interrupt or otherwise affect the
4 civil service status or privileges of the Fed-
5 eral employee.

6 (B) TECHNICAL ASSISTANCE.—Upon the
7 request of the Commission, the head of a Fed-
8 eral agency shall provide such technical assist-
9 ance to the Commission as the Commission de-
10 termines to be necessary to carry out the duties
11 of the Commission.

12 (e) RESOURCES.—

13 (1) IN GENERAL.—The Commission shall have
14 reasonable access to materials, resources, statistical
15 data, and such other information from Executive
16 agencies as the Commission determines to be nec-
17 essary to carry out the duties of the Commission.

18 (2) FORM OF REQUESTS.—The co-chairpersons
19 of the Commission shall make requests for access
20 described in paragraph (1) in writing, as necessary.

1 **Subtitle E—Promoting Federal**
2 **Leadership in Energy Efficiency**
3 **and Renewable Energy**

4 **SEC. 261. FEDERAL FLEET CONSERVATION REQUIRE-**
5 **MENTS.**

6 (a) FEDERAL FLEET CONSERVATION REQUIRE-
7 MENTS.—

8 (1) IN GENERAL.—Part J of title III of the En-
9 ergy Policy and Conservation Act (42 U.S.C. 6374
10 et seq.) is amended by adding at the end the fol-
11 lowing:

12 **“SEC. 400FF. FEDERAL FLEET CONSERVATION REQUIRE-**
13 **MENTS.**

14 **“(a) MANDATORY REDUCTION IN PETROLEUM CON-**
15 **SUMPTION.—**

16 **“(1) IN GENERAL.—**The Secretary shall issue
17 regulations (including provisions for waivers from
18 the requirements of this section) for Federal fleets
19 subject to section 400AA requiring that not later
20 than October 1, 2015, each Federal agency achieve
21 at least a 20 percent reduction in petroleum con-
22 sumption, and that each Federal agency increase al-
23 ternative fuel consumption by 10 percent annually,
24 as calculated from the baseline established by the
25 Secretary for fiscal year 2005.

1 “(2) PLAN.—

2 “(A) REQUIREMENT.—The regulations
3 shall require each Federal agency to develop a
4 plan to meet the required petroleum reduction
5 levels and the alternative fuel consumption in-
6 creases.

7 “(B) MEASURES.—The plan may allow an
8 agency to meet the required petroleum reduc-
9 tion level through—

10 “(i) the use of alternative fuels;

11 “(ii) the acquisition of vehicles with
12 higher fuel economy, including hybrid vehi-
13 cles, neighborhood electric vehicles, electric
14 vehicles, and plug-in hybrid vehicles if the
15 vehicles are commercially available;

16 “(iii) the substitution of cars for light
17 trucks;

18 “(iv) an increase in vehicle load fac-
19 tors;

20 “(v) a decrease in vehicle miles trav-
21 eled;

22 “(vi) a decrease in fleet size; and

23 “(vii) other measures.

24 “(b) FEDERAL EMPLOYEE INCENTIVE PROGRAMS
25 FOR REDUCING PETROLEUM CONSUMPTION.—

1 “(1) IN GENERAL.—Each Federal agency shall
2 actively promote incentive programs that encourage
3 Federal employees and contractors to reduce petro-
4 leum usage through the use of practices such as—

5 “(A) telecommuting;

6 “(B) public transit;

7 “(C) carpooling; and

8 “(D) bicycling and the use of 2-wheeled
9 electric drive devices.

10 “(2) MONITORING AND SUPPORT FOR INCEN-
11 TIVE PROGRAMS.—The Administrator of General
12 Services, the Director of the Office of Personnel
13 Management, and the Secretary of Energy shall
14 monitor and provide appropriate support to agency
15 programs described in paragraph (1).

16 “(3) RECOGNITION.—The Secretary may estab-
17 lish a program under which the Secretary recognizes
18 private sector employers and State and local govern-
19 ments for outstanding programs to reduce petroleum
20 usage through practices described in paragraph (1).

21 “(c) REPLACEMENT TIRES.—

22 “(1) IN GENERAL.—Except as provided in para-
23 graph (2), the regulations issued under subsection
24 (a)(1) shall include a requirement that, to the max-
25 imum extent practicable, each Federal agency pur-

1 chase energy-efficient replacement tires for the re-
2 spective fleet vehicles of the agency.

3 “(2) EXCEPTIONS.—This section does not apply
4 to—

5 “(A) law enforcement motor vehicles;

6 “(B) emergency motor vehicles; or

7 “(C) motor vehicles acquired and used for
8 military purposes that the Secretary of Defense
9 has certified to the Secretary must be exempt
10 for national security reasons.

11 “(d) ANNUAL REPORTS ON COMPLIANCE.—The Sec-
12 retary shall submit to Congress an annual report that
13 summarizes actions taken by Federal agencies to comply
14 with this section.”.

15 (2) TABLE OF CONTENTS AMENDMENT.—The
16 table of contents of the Energy Policy and Conserva-
17 tion Act (42 U.S.C. prec. 6201) is amended by add-
18 ing at the end of the items relating to part J of title
19 III the following:

“Sec. 400FF. Federal fleet conservation requirements.”.

20 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
21 authorized to be appropriated to carry out the amendment
22 made by this section \$10,000,000 for the period of fiscal
23 years 2008 through 2013.

1 **SEC. 262. FEDERAL REQUIREMENT TO PURCHASE ELEC-**
2 **TRICITY GENERATED BY RENEWABLE EN-**
3 **ERGY.**

4 Section 203 of the Energy Policy Act of 2005 (42
5 U.S.C. 15852) is amended—

6 (1) by striking subsection (a) and inserting the
7 following:

8 “(a) REQUIREMENT.—

9 “(1) IN GENERAL.—The President, acting
10 through the Secretary, shall require that, to the ex-
11 tent economically feasible and technically prac-
12 ticable, of the total quantity of domestic electric en-
13 ergy the Federal Government consumes during any
14 fiscal year, the following percentages shall be renew-
15 able energy from facilities placed in service after
16 January 1, 1999:

17 “(A) Not less than 10 percent in fiscal
18 year 2010.

19 “(B) Not less than 15 percent in fiscal
20 year 2015.

21 “(2) CAPITOL COMPLEX.—The Architect of the
22 Capitol, in consultation with the Secretary, shall en-
23 sure that, of the total quantity of electric energy the
24 Capitol complex consumes during any fiscal year, the
25 percentages prescribed in paragraph (1) shall be re-
26 newable energy.

1 “(3) WAIVER AUTHORITY.—The President may
2 reduce or waive the requirement under paragraph
3 (1) on a fiscal-year basis if the President determines
4 that complying with paragraph (1) for a fiscal year
5 would result in—

6 “(A) a negative impact on military training
7 or readiness activities conducted by the Depart-
8 ment of Defense;

9 “(B) a negative impact on domestic pre-
10 paredness activities conducted by the Depart-
11 ment of Homeland Security; or

12 “(C) a requirement that a Federal agency
13 provide emergency response services in the
14 event of a natural disaster or terrorist attack.”;
15 and

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

17 “(e) CONTRACTS FOR RENEWABLE ENERGY FROM
18 PUBLIC UTILITY SERVICES.—Notwithstanding section
19 501(b)(1)(B) of title 40, United States Code, a contract
20 for renewable energy may be made for a period of not
21 more than 50 years.”.

22 **SEC. 263. ENERGY SAVINGS PERFORMANCE CONTRACTS.**

23 (a) RETENTION OF SAVINGS.—Section 546(c) of the
24 National Energy Conservation Policy Act (42 U.S.C.
25 8256(c)) is amended by striking paragraph (5).

1 (b) SUNSET AND REPORTING REQUIREMENTS.—Sec-
2 tion 801 of the National Energy Conservation Policy Act
3 (42 U.S.C. 8287) is amended by striking subsection (c).

4 (c) DEFINITION OF ENERGY SAVINGS.—Section
5 804(2) of the National Energy Conservation Policy Act
6 (42 U.S.C. 8287c(2)) is amended—

7 (1) by redesignating subparagraphs (A), (B),
8 and (C) as clauses (i), (ii), and (iii), respectively,
9 and indenting appropriately;

10 (2) by striking “means a reduction” and insert-
11 ing “means—

12 “(A) a reduction”;

13 (3) by striking the period at the end and insert-
14 ing a semicolon; and

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

16 “(B) the increased efficient use of an exist-
17 ing energy source by cogeneration or heat re-
18 covery, and installation of renewable energy sys-
19 tems;

20 “(C) if otherwise authorized by Federal or
21 State law (including regulations), the sale or
22 transfer of electrical or thermal energy gen-
23 erated on-site from renewable energy sources or
24 cogeneration, but in excess of Federal needs, to
25 utilities or non-Federal energy users; and

1 “(D) the increased efficient use of existing
2 water sources in interior or exterior applica-
3 tions.”.

4 (d) NOTIFICATION.—

5 (1) AUTHORITY TO ENTER INTO CONTRACTS.—

6 Section 801(a)(2)(D) of the National Energy Con-
7 servation Policy Act (42 U.S.C. 8287(a)(2)(D)) is
8 amended—

9 (A) in clause (ii), by inserting “and” after
10 the semicolon at the end;

11 (B) by striking clause (iii); and

12 (C) by redesignating clause (iv) as clause
13 (iii).

14 (2) REPORTS.—Section 548(a)(2) of the Na-

15 tional Energy Conservation Policy Act (42 U.S.C.

16 8258(a)(2)) is amended by inserting “and any ter-

17 mination penalty exposure” after “the energy and

18 cost savings that have resulted from such con-

19 tracts”.

20 (3) CONFORMING AMENDMENT.—Section 2913

21 of title 10, United States Code, is amended by strik-

22 ing subsection (e).

23 (e) ENERGY AND COST SAVINGS IN NONBUILDING

24 APPLICATIONS.—

25 (1) DEFINITIONS.—In this subsection:

1 (A) NONBUILDING APPLICATION.—The
2 term “nonbuilding application” means—

3 (i) any class of vehicles, devices, or
4 equipment that is transportable under the
5 power of the applicable vehicle, device, or
6 equipment by land, sea, or air and that
7 consumes energy from any fuel source for
8 the purpose of—

9 (I) that transportation; or

10 (II) maintaining a controlled en-
11 vironment within the vehicle, device,
12 or equipment; and

13 (ii) any federally-owned equipment
14 used to generate electricity or transport
15 water.

16 (B) SECONDARY SAVINGS.—

17 (i) IN GENERAL.—The term “sec-
18 ondary savings” means additional energy
19 or cost savings that are a direct con-
20 sequence of the energy savings that result
21 from the energy efficiency improvements
22 that were financed and implemented pur-
23 suant to an energy savings performance
24 contract.

1 (ii) INCLUSIONS.—The term “sec-
2 ondary savings” includes—

3 (I) energy and cost savings that
4 result from a reduction in the need
5 for fuel delivery and logistical support;

6 (II) personnel cost savings and
7 environmental benefits; and

8 (III) in the case of electric gen-
9 eration equipment, the benefits of in-
10 creased efficiency in the production of
11 electricity, including revenues received
12 by the Federal Government from the
13 sale of electricity so produced.

14 (2) STUDY.—

15 (A) IN GENERAL.—As soon as practicable
16 after the date of enactment of this Act, the Sec-
17 retary and the Secretary of Defense shall joint-
18 ly conduct, and submit to Congress and the
19 President a report of, a study of the potential
20 for the use of energy savings performance con-
21 tracts to reduce energy consumption and pro-
22 vide energy and cost savings in nonbuilding ap-
23 plications.

24 (B) REQUIREMENTS.—The study under
25 this subsection shall include—

- 1 (i) an estimate of the potential energy
- 2 and cost savings to the Federal Govern-
- 3 ment, including secondary savings and
- 4 benefits, from increased efficiency in non-
- 5 building applications;
- 6 (ii) an assessment of the feasibility of
- 7 extending the use of energy savings per-
- 8 formance contracts to nonbuilding applica-
- 9 tions, including an identification of any
- 10 regulatory or statutory barriers to such
- 11 use; and
- 12 (iii) such recommendations as the
- 13 Secretary and Secretary of Defense deter-
- 14 mine to be appropriate.

15 **SEC. 264. ENERGY MANAGEMENT REQUIREMENTS FOR**
 16 **FEDERAL BUILDINGS.**

17 Section 543(a)(1) of the National Energy Conserva-
 18 tion Policy Act (42 U.S.C. 8253(a)(1)) is amended by
 19 striking the table and inserting the following:

“Fiscal year	Percentage reduction
2006	2
2007	4
2008	9
2009	12
2010	15
2011	18
2012	21
2013	24
2014	27
2015	30.”.

1 **SEC. 265. COMBINED HEAT AND POWER AND DISTRICT EN-**
2 **ERGY INSTALLATIONS AT FEDERAL SITES.**

3 Section 543 of the National Energy Conservation
4 Policy Act (42 U.S.C. 8253) is amended by adding at the
5 end the following:

6 “(f) COMBINED HEAT AND POWER AND DISTRICT
7 ENERGY INSTALLATIONS AT FEDERAL SITES.—

8 “(1) IN GENERAL.—Not later than 18 months
9 after the date of enactment of this subsection, the
10 Secretary, in consultation with the Administrator of
11 General Services and the Secretary of Defense, shall
12 identify Federal sites that could achieve significant
13 cost-effective energy savings through the use of com-
14 bined heat and power or district energy installations.

15 “(2) INFORMATION AND TECHNICAL ASSIST-
16 ANCE.—The Secretary shall provide agencies with
17 information and technical assistance that will enable
18 the agencies to take advantage of the energy savings
19 described in paragraph (1).

20 “(3) ENERGY PERFORMANCE REQUIRE-
21 MENTS.—Any energy savings from the installations
22 described in paragraph (1) may be applied to meet
23 the energy performance requirements for an agency
24 under subsection (a)(1).”.

1 **SEC. 266. FEDERAL BUILDING ENERGY EFFICIENCY PER-**
2 **FORMANCE STANDARDS.**

3 Section 305(a)(3)(A) of the Energy Conservation and
4 Production Act (42 U.S.C. 6834(a)(3)(A)) is amended—

5 (1) in the matter preceding clause (i), by strik-
6 ing “this paragraph” and by inserting “the Energy
7 Efficiency Promotion Act of 2007”; and

8 (2) in clause (i)—

9 (A) in subclause (I), by striking “and” at
10 the end;

11 (B) by redesignating subclause (II) as sub-
12 clause (III); and

13 (C) by inserting after subclause (I) the fol-
14 lowing:

15 “(II) the buildings be designed, to the ex-
16 tent economically feasible and technically prac-
17 ticable, so that the fossil fuel-generated energy
18 consumption of the buildings is reduced, as
19 compared with the fossil fuel-generated energy
20 consumption by a similar Federal building in
21 fiscal year 2003 (as measured by Commercial
22 Buildings Energy Consumption Survey or Resi-
23 dential Energy Consumption Survey data from
24 the Energy Information Agency), by the per-
25 centage specified in the following table:

“Fiscal year	Percentage reduction
2007	50
2010	60
2015	70
2020	80
2025	90
2030	100;

1 and”.

2 **SEC. 267. APPLICATION OF INTERNATIONAL ENERGY CON-**
3 **SERVATION CODE TO PUBLIC AND ASSISTED**
4 **HOUSING.**

5 Section 109 of the Cranston-Gonzalez National Af-
6 fordable Housing Act (42 U.S.C. 12709) is amended—

7 (1) in subsection (a)(1)(C), by striking, “,
8 where such standards are determined to be cost ef-
9 fective by the Secretary of Housing and Urban De-
10 velopment”;

11 (2) in subsection (a)(2)—

12 (A) by striking “the Council of American
13 Building Officials Model Energy Code, 1992”
14 and inserting “2006 International Energy Con-
15 servation Code”; and

16 (B) by striking “, and, with respect to re-
17 habilitation and new construction of public and
18 assisted housing funded by HOPE VI revital-
19 ization grants under section 24 of the United
20 States Housing Act of 1937 (42 U.S.C. 1437v),
21 the 2003 International Energy Conservation
22 Code”;

1 (3) in subsection (b)—

2 (A) in the heading, by striking “MODEL
3 ENERGY CODE.—” and inserting “**INTER-**
4 **NATIONAL ENERGY CONSERVATION**
5 **CODE.—**”;

6 (B) after “all new construction” in the
7 first sentence insert “and rehabilitation”; and

8 (C) by striking “, and, with respect to re-
9 habilitation and new construction of public and
10 assisted housing funded by HOPE VI revital-
11 ization grants under section 24 of the United
12 States Housing Act of 1937 (42 U.S.C. 1437v),
13 the 2003 International Energy Conservation
14 Code”;

15 (4) in subsection (c)—

16 (A) in the heading, by striking “MODEL
17 ENERGY CODE AND”;

18 (B) by striking “, or, with respect to reha-
19 bilitation and new construction of public and
20 assisted housing funded by HOPE VI revital-
21 ization grants under section 24 of the United
22 States Housing Act of 1937 (42 U.S.C. 1437v),
23 the 2003 International Energy Conservation
24 Code”;

25 (5) by adding at the end the following:

1 “(d) FAILURE TO AMEND THE STANDARDS.—If the
2 Secretaries have not, within 1 year after the requirements
3 of the 2006 IECC or the ASHRAE Standard 90.1–2004
4 are revised, amended the standards or made a determina-
5 tion under subsection (c) of this section, the Secretary of
6 Housing and Urban Development or the Secretary of Agri-
7 culture make a determination that the revised codes do
8 not negatively affect the availability or affordability of new
9 construction of assisted housing and single family and
10 multifamily residential housing (other than manufactured
11 homes) subject to mortgages insured under the National
12 Housing Act (12 U.S.C. 1701 et seq.) or insured, guaran-
13 teed, or made by the Secretary of Agriculture under title
14 V of the Housing Act of 1949 (42 U.S.C. 1471 et seq.),
15 respectively, and the Secretary of Energy has made a de-
16 termination under section 304 of the Energy Conservation
17 and Production Act (42 U.S.C. 6833) that the revised
18 code or standard would improve energy efficiency, all new
19 construction and rehabilitation of housing specified in sub-
20 section (a) shall meet the requirements of the revised code
21 or standard.”;

22 (6) by striking “CABO Model Energy Code,
23 1992” each place it appears and inserting “the 2006
24 IECC”; and

1 (7) by striking “1989” each place it appears
2 and inserting “2004”.

3 **SEC. 268. ENERGY EFFICIENT COMMERCIAL BUILDINGS**
4 **INITIATIVE.**

5 (a) DEFINITIONS.—In this section:

6 (1) CONSORTIUM.—The term “consortium”
7 means a working group that is comprised of—

8 (A) individuals representing—

9 (i) 1 or more businesses engaged in—

10 (I) commercial building develop-
11 ment;

12 (II) construction; or

13 (III) real estate;

14 (ii) financial institutions;

15 (iii) academic or research institutions;

16 (iv) State or utility energy efficiency
17 programs;

18 (v) nongovernmental energy efficiency
19 organizations; and

20 (vi) the Federal Government;

21 (B) 1 or more building designers; and

22 (C) 1 or more individuals who own or oper-
23 ate 1 or more buildings.

24 (2) ENERGY EFFICIENT COMMERCIAL BUILD-
25 ING.—The term “energy efficient commercial build-

1 ing” means a commercial building that is designed,
2 constructed, and operated—

3 (A) to require a greatly reduced quantity
4 of energy;

5 (B) to meet, on an annual basis, the bal-
6 ance of energy needs of the commercial building
7 from renewable sources of energy; and

8 (C) to be economically viable.

9 (3) INITIATIVE.—The term “initiative” means
10 the Energy Efficient Commercial Buildings Initia-
11 tive.

12 (b) INITIATIVE.—

13 (1) IN GENERAL.—The Secretary shall enter
14 into an agreement with the consortium to develop
15 and carry out the initiative—

16 (A) to reduce the quantity of energy con-
17 sumed by commercial buildings located in the
18 United States; and

19 (B) to achieve the development of energy
20 efficient commercial buildings in the United
21 States.

22 (2) GOAL OF INITIATIVE.—The goal of the ini-
23 tiative shall be to develop technologies and practices
24 and implement policies that lead to energy efficient
25 commercial buildings for—

1 (A) any commercial building newly con-
2 structed in the United States by 2030;

3 (B) 50 percent of the commercial building
4 stock of the United States by 2040; and

5 (C) all commercial buildings in the United
6 States by 2050.

7 (3) COMPONENTS.—In carrying out the initia-
8 tive, the Secretary, in collaboration with the consor-
9 tium, may—

10 (A) conduct research and development on
11 building design, materials, equipment and con-
12 trols, operation and other practices, integration,
13 energy use measurement and benchmarking,
14 and policies;

15 (B) conduct demonstration projects to
16 evaluate replicable approaches to achieving en-
17 ergy efficient commercial buildings for a variety
18 of building types in a variety of climate zones;

19 (C) conduct deployment activities to dis-
20 seminate information on, and encourage wide-
21 spread adoption of, technologies, practices, and
22 policies to achieve energy efficient commercial
23 buildings; and

24 (D) conduct any other activity necessary to
25 achieve any goal of the initiative, as determined

1 by the Secretary, in collaboration with the con-
2 sortium.

3 (c) AUTHORIZATION OF APPROPRIATIONS.—

4 (1) IN GENERAL.—There are authorized to be
5 appropriated such sums as are necessary to carry
6 out this section.

7 (2) ADDITIONAL FUNDING.—In addition to
8 amounts authorized to be appropriated under para-
9 graph (1), the Secretary may allocate funds from
10 other appropriations to the initiative without chang-
11 ing the purpose for which the funds are appro-
12 priated.

13 **SEC. 269. CLEAN ENERGY CORRIDORS.**

14 Section 216 of the Federal Power Act (16 U.S.C.
15 824p) is amended—

16 (1) in subsection (a)—

17 (A) by striking “(1) Not later than” and
18 inserting the following:

19 “(1) IN GENERAL.—Not later than”;

20 (B) by striking paragraph (2) and insert-
21 ing the following:

22 “(2) REPORT AND DESIGNATIONS.—

23 “(A) IN GENERAL.—After considering al-
24 ternatives and recommendations from interested
25 parties (including an opportunity for comment

1 from affected States), the Secretary shall issue
2 a report, based on the study conducted under
3 paragraph (1), in which the Secretary may des-
4 ignate as a national interest electric trans-
5 mission corridor any geographic area experi-
6 encing electric energy transmission capacity
7 constraints or congestion that adversely affects
8 consumers, including constraints or congestion
9 that—

10 “(i) increases costs to consumers;

11 “(ii) limits resource options to serve
12 load growth; or

13 “(iii) limits access to sources of clean
14 energy, such as wind, solar energy, geo-
15 thermal energy, and biomass.

16 “(B) ADDITIONAL DESIGNATIONS.—In ad-
17 dition to the corridor designations made under
18 subparagraph (A), the Secretary may designate
19 additional corridors in accordance with that
20 subparagraph upon the application by an inter-
21 ested person, on the condition that the Sec-
22 retary provides for an opportunity for notice
23 and comment by interested persons and af-
24 fected States on the application.”;

1 (C) in paragraph (3), the striking “(3) The
2 Secretary” and inserting the following:

3 “(3) CONSULTATION.—The Secretary”; and

4 (D) in paragraph (4)—

5 (i) by striking “(4) In determining”
6 and inserting the following:

7 “(4) BASIS FOR DETERMINATION.—In deter-
8 mining”; and

9 (ii) by striking subparagraphs (A)
10 through (E) and inserting the following:

11 “(A) the economic vitality and development
12 of the corridor, or the end markets served by
13 the corridor, may be constrained by lack of ade-
14 quate or reasonably priced electricity;

15 “(B)(i) economic growth in the corridor, or
16 the end markets served by the corridor, may be
17 jeopardized by reliance on limited sources of en-
18 ergy; and

19 “(ii) a diversification of supply is war-
20 ranted;

21 “(C) the energy independence of the
22 United States would be served by the designa-
23 tion;

24 “(D) the designation would be in the inter-
25 est of national energy policy; and

1 “(E) the designation would enhance na-
2 tional defense and homeland security.”; and

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

4 “(1) RATES AND RECOVERY OF COSTS.—

5 “(1) IN GENERAL.—Not later than 1 year after
6 the date of enactment of this subsection, the Com-
7 mission shall promulgate regulations providing for
8 the allocation and recovery of costs prudently in-
9 curred by public utilities in building and operating
10 facilities authorized under this section for trans-
11 mission of electric energy generated from clean
12 sources (such as wind, solar energy, geothermal en-
13 ergy, and biomass).

14 “(2) APPLICABLE PROVISIONS.—All rates ap-
15 proved under the regulations promulgated under
16 paragraph (1), including any revisions to the regula-
17 tions, shall be subject to the requirements under sec-
18 tions 205 and 206 that all rates, charges, terms, and
19 conditions be just and reasonable and not unduly
20 discriminatory or preferential.”.

21 **SEC. 270. FEDERAL STANDBY POWER STANDARD.**

22 (a) DEFINITIONS.—In this section:

23 (1) AGENCY.—

24 (A) IN GENERAL.—The term “Agency”
25 has the meaning given the term “Executive

1 agency” in section 105 of title 5, United States
2 Code.

3 (B) INCLUSIONS.—The term “Agency” in-
4 cludes military departments, as the term is de-
5 fined in section 102 of title 5, United States
6 Code.

7 (2) ELIGIBLE PRODUCT.—The term “eligible
8 product” means a commercially available, off-the-
9 shelf product that—

10 (A)(i) uses external standby power devices;

11 or

12 (ii) contains an internal standby power
13 function; and

14 (B) is included on the list compiled under
15 subsection (d).

16 (b) FEDERAL PURCHASING REQUIREMENT.—Subject
17 to subsection (c), if an Agency purchases an eligible prod-
18 uct, the Agency shall purchase—

19 (1) an eligible product that uses not more than
20 1 watt in the standby power consuming mode of the
21 eligible product; or

22 (2) if an eligible product described in paragraph
23 (1) is not available, the eligible product with the low-
24 est available standby power wattage in the standby
25 power consuming mode of the eligible product.

1 (c) LIMITATION.—The requirements of subsection (b)
2 shall apply to a purchase by an Agency only if—

3 (1) the lower-wattage eligible product is—

4 (A) lifecycle cost-effective; and

5 (B) practicable; and

6 (2) the utility and performance of the eligible
7 product is not compromised by the lower wattage re-
8 quirement.

9 (d) ELIGIBLE PRODUCTS.—The Secretary of Energy,
10 in consultation with the Secretary of Defense, the Admin-
11 istrator of the Environmental Protection Agency, and the
12 Administrator of General Services, shall compile a publicly
13 accessible list of cost-effective eligible products that shall
14 be subject to the purchasing requirements of subsection
15 (b).

16 **SEC. 270A. STANDARD RELATING TO SOLAR HOT WATER**
17 **HEATERS.**

18 Section 305(a)(3)(A) of the Energy Conservation and
19 Production Act (42 U.S.C. 6834(a)(3)(A)) (as amended
20 by section 266) is amended—

21 (1) in clause (i)(III), by striking “and” at the
22 end;

23 (2) in clause (ii), by striking the period at the
24 end and inserting “; and”; and

25 (3) by adding at the end the following:

1 “(iii) if life-cycle cost-effective, as
2 compared to other reasonably available
3 technologies, not less than 30 percent of
4 the hot water demand for each new or sub-
5 stantially modified Federal building be met
6 through the installation and use of solar
7 hot water heaters.”.

8 **SEC. 270B. RENEWABLE ENERGY INNOVATION MANUFAC-**
9 **TURING PARTNERSHIP.**

10 (a) ESTABLISHMENT.—The Secretary shall carry out
11 a program, to be known as the Renewable Energy Innova-
12 tion Manufacturing Partnership Program (referred to in
13 this section as the “Program”), to make assistance awards
14 to eligible entities for use in carrying out research, devel-
15 opment, and demonstration relating to the manufacturing
16 of renewable energy technologies.

17 (b) SOLICITATION.—To carry out the Program, the
18 Secretary shall annually conduct a competitive solicitation
19 for assistance awards for an eligible project described in
20 subsection (e).

21 (c) PROGRAM PURPOSES.—The purposes of the Pro-
22 gram are—

23 (1) to develop, or aid in the development of, ad-
24 vanced manufacturing processes, materials, and in-
25 frastructure;

1 (2) to increase the domestic production of re-
2 newable energy technology and components; and

3 (3) to better coordinate Federal, State, and pri-
4 vate resources to meet regional and national renew-
5 able energy goals through advanced manufacturing
6 partnerships.

7 (d) ELIGIBLE ENTITIES.—An entity shall be eligible
8 to receive an assistance award under the Program to carry
9 out an eligible project described in subsection (e) if the
10 entity is composed of—

11 (1) 1 or more public or private nonprofit insti-
12 tutions or national laboratories engaged in research,
13 development, demonstration, or technology transfer,
14 that would participate substantially in the project;
15 and

16 (2) 1 or more private entities engaged in the
17 manufacturing or development of renewable energy
18 system components (including solar energy, wind en-
19 ergy, biomass, geothermal energy, energy storage, or
20 fuel cells).

21 (e) ELIGIBLE PROJECTS.—An eligible entity may use
22 an assistance award provided under this section to carry
23 out a project relating to—

1 (1) the conduct of studies of market opportuni-
2 ties for component manufacturing of renewable en-
3 ergy systems;

4 (2) the conduct of multiyear applied research,
5 development, demonstration, and deployment
6 projects for advanced manufacturing processes, ma-
7 terials, and infrastructure for renewable energy sys-
8 tems; and

9 (3) other similar ventures, as approved by the
10 Secretary, that promote advanced manufacturing of
11 renewable technologies.

12 (f) CRITERIA AND GUIDELINES.—The Secretary shall
13 establish criteria and guidelines for the submission, eval-
14 uation, and funding of proposed projects under the Pro-
15 gram.

16 (g) COST SHARING.—Section 988 of the Energy Pol-
17 icy Act of 2005 (42 U.S.C. 16352) shall apply to a project
18 carried out under this section.

19 (h) DISCLOSURE.—Section 623 of the Energy Policy
20 Act of 1992 (42 U.S.C. 13293) shall apply to a project
21 carried out under this subsection.

22 (i) SENSE OF THE SENATE.—It is the sense of the
23 Senate that the Secretary should ensure that small busi-
24 nesses engaged in renewable manufacturing be considered

1 for loan guarantees authorized under title XVII of the En-
 2 ergy Policy Act of 2005 (42 U.S.C. 16511 et seq.).

3 (j) AUTHORIZATION OF APPROPRIATIONS.—There is
 4 authorized to be appropriated out of funds already author-
 5 ized to carry out this section \$25,000,000 for each of fis-
 6 cal years 2008 through 2013, to remain available until ex-
 7 pended.

8 **SEC. 270C. EXPRESS LOANS FOR RENEWABLE ENERGY AND**
 9 **ENERGY EFFICIENCY.**

10 Section 7(a)(31) of the Small Business Act (15
 11 U.S.C. 636(a)(31)) is amended by adding at the end the
 12 following:

13 “(F) EXPRESS LOANS FOR RENEWABLE
 14 ENERGY AND ENERGY EFFICIENCY.—

15 “(i) DEFINITIONS.—In this subpara-
 16 graph—

17 “(I) the term ‘biomass’—

18 “(aa) means any organic
 19 material that is available on a re-
 20 newable or recurring basis, in-
 21 cluding—

22 “(AA) agricultural
 23 crops;

24 “(BB) trees grown for
 25 energy production;

1 “(CC) wood waste and
2 wood residues;

3 “(DD) plants (includ-
4 ing aquatic plants and
5 grasses);

6 “(EE) residues;

7 “(FF) fibers;

8 “(GG) animal wastes
9 and other waste materials;
10 and

11 “(HH) fats, oils, and
12 greases (including recycled
13 fats, oils, and greases); and

14 “(bb) does not include—

15 “(AA) paper that is
16 commonly recycled; or

17 “(BB) unsegregated
18 solid waste;

19 “(II) the term ‘energy efficiency
20 project’ means the installation or up-
21 grading of equipment that results in a
22 significant reduction in energy usage;
23 and

1 “(III) the term ‘renewable energy
2 system’ means a system of energy de-
3 rived from—

4 “(aa) a wind, solar, biomass
5 (including biodiesel), or geo-
6 thermal source; or

7 “(bb) hydrogen derived from
8 biomass or water using an energy
9 source described in item (aa).

10 “(ii) LOANS.—Loans may be made
11 under the ‘Express Loan Program’ for the
12 purpose of—

13 “(I) purchasing a renewable en-
14 ergy system; or

15 “(II) an energy efficiency project
16 for an existing business.”.

17 **SEC. 270D. SMALL BUSINESS ENERGY EFFICIENCY.**

18 (a) DEFINITIONS.—In this section—

19 (1) the terms “Administration” and “Adminis-
20 trator” mean the Small Business Administration
21 and the Administrator thereof, respectively;

22 (2) the term “association” means the associa-
23 tion of small business development centers estab-
24 lished under section 21(a)(3)(A) of the Small Busi-
25 ness Act (15 U.S.C. 648(a)(3)(A));

1 (3) the term “disability” has the meaning given
2 that term in section 3 of the Americans with Dis-
3 abilities Act of 1990 (42 U.S.C. 12102);

4 (4) the term “electric utility” has the meaning
5 given that term in section 3 of the Public Utility
6 Regulatory Policies Act of 1978 (16 U.S.C. 2602);

7 (5) the term “on-bill financing” means a low in-
8 terest or no interest financing agreement between a
9 small business concern and an electric utility for the
10 purchase or installation of equipment, under which
11 the regularly scheduled payment of that small busi-
12 ness concern to that electric utility is not reduced by
13 the amount of the reduction in cost attributable to
14 the new equipment and that amount is credited to
15 the electric utility, until the cost of the purchase or
16 installation is repaid;

17 (6) the term “small business concern” has the
18 meaning given that term in section 3 of the Small
19 Business Act (15 U.S.C. 636);

20 (7) the term “small business development cen-
21 ter” means a small business development center de-
22 scribed in section 21 of the Small Business Act (15
23 U.S.C. 648);

24 (8) the term “telecommuting” means the use of
25 telecommunications to perform work functions under

1 circumstances which reduce or eliminate the need to
2 commute; and

3 (9) the term “veteran” has the meaning given
4 that term in section 101 of title 38, United States
5 Code.

6 (b) IMPLEMENTATION OF SMALL BUSINESS ENERGY
7 EFFICIENCY PROGRAM.—

8 (1) IN GENERAL.—Not later than 90 days after
9 the date of enactment of this Act, the Administrator
10 shall promulgate final rules establishing the Govern-
11 ment-wide program authorized under subsection (d)
12 of section 337 of the Energy Policy and Conserva-
13 tion Act (42 U.S.C. 6307) that ensure compliance
14 with that subsection by not later than 6 months
15 after such date of enactment.

16 (2) PLAN.—Not later than 90 days after the
17 date of enactment of this Act, the Administrator
18 shall publish a detailed plan regarding how the Ad-
19 ministrator will—

20 (A) assist small business concerns in be-
21 coming more energy efficient; and

22 (B) build on the Energy Star for Small
23 Business Program of the Department of En-
24 ergy and the Environmental Protection Agency.

1 (3) ASSISTANT ADMINISTRATOR FOR SMALL
2 BUSINESS ENERGY POLICY.—

3 (A) IN GENERAL.—There is in the Admin-
4 istration an Assistant Administrator for Small
5 Business Energy Policy, who shall be appointed
6 by, and report to, the Administrator.

7 (B) DUTIES.—The Assistant Adminis-
8 trator for Small Business Energy Policy shall—

9 (i) oversee and administer the require-
10 ments under this subsection and section
11 337(d) of the Energy Policy and Conserva-
12 tion Act (42 U.S.C. 6307(d)); and

13 (ii) promote energy efficiency efforts
14 for small business concerns and reduce en-
15 ergy costs of small business concerns.

16 (4) REPORTS.—The Administrator shall submit
17 to the Committee on Small Business and Entrepre-
18 neurship of the Senate and the Committee on Small
19 Business of the House of Representatives an annual
20 report on the progress of the Administrator in en-
21 couraging small business concerns to become more
22 energy efficient, including data on the rate of use of
23 the Small Business Energy Clearinghouse estab-
24 lished under section 337(d)(4) of the Energy Policy
25 and Conservation Act (42 U.S.C. 6307(d)(4)).

1 (c) SMALL BUSINESS ENERGY EFFICIENCY.—

2 (1) AUTHORITY.—The Administrator shall es-
3 tablish a Small Business Energy Efficiency Pilot
4 Program (in this subsection referred to as the “Effi-
5 ciency Pilot Program”) to provide energy efficiency
6 assistance to small business concerns through small
7 business development centers.

8 (2) SMALL BUSINESS DEVELOPMENT CEN-
9 TERS.—

10 (A) IN GENERAL.—In carrying out the Ef-
11 ficiency Pilot Program, the Administrator shall
12 enter into agreements with small business de-
13 velopment centers under which such centers
14 shall—

15 (i) provide access to information and
16 resources on energy efficiency practices, in-
17 cluding on-bill financing options;

18 (ii) conduct training and educational
19 activities;

20 (iii) offer confidential, free, one-on-
21 one, in-depth energy audits to the owners
22 and operators of small business concerns
23 regarding energy efficiency practices;

24 (iv) give referrals to certified profes-
25 sionals and other providers of energy effi-

1 ciency assistance who meet such standards
2 for educational, technical, and professional
3 competency as the Administrator shall es-
4 tablish; and

5 (v) act as a facilitator between small
6 business concerns, electric utilities, lenders,
7 and the Administration to facilitate on-bill
8 financing arrangements.

9 (B) REPORTS.—Each small business devel-
10 opment center participating in the Efficiency
11 Pilot Program shall submit to the Adminis-
12 trator and the Administrator of the Environ-
13 mental Protection Agency an annual report that
14 includes—

15 (i) a summary of the energy efficiency
16 assistance provided by that center under
17 the Efficiency Pilot Program;

18 (ii) the number of small business con-
19 cerns assisted by that center under the Ef-
20 ficiency Pilot Program;

21 (iii) statistics on the total amount of
22 energy saved as a result of assistance pro-
23 vided by that center under the Efficiency
24 Pilot Program; and

1 (iv) any additional information deter-
2 mined necessary by the Administrator, in
3 consultation with the association.

4 (C) REPORTS TO CONGRESS.—Not later
5 than 60 days after the date on which all reports
6 under subparagraph (B) relating to a year are
7 submitted, the Administrator shall submit to
8 the Committee on Small Business and Entre-
9 preneurship of the Senate and the Committee
10 on Small Business of the House of Representa-
11 tives a report summarizing the information re-
12 garding the Efficiency Pilot Program submitted
13 by small business development centers partici-
14 pating in that program.

15 (3) ELIGIBILITY.—A small business develop-
16 ment center shall be eligible to participate in the Ef-
17 ficiency Pilot Program only if that center is certified
18 under section 21(k)(2) of the Small Business Act
19 (15 U.S.C. 648(k)(2)).

20 (4) SELECTION OF PARTICIPATING STATE PRO-
21 GRAMS.—

22 (A) GROUPINGS.—

23 (i) SELECTION OF PROGRAMS.—The
24 Administrator shall select the small busi-
25 ness development center programs of 2

1 States from each of the groupings of
2 States described in clauses (ii) through (xi)
3 to participate in the pilot program estab-
4 lished under this subsection.

5 (ii) GROUP 1.—Group 1 shall consist
6 of Maine, Massachusetts, New Hampshire,
7 Connecticut, Vermont, and Rhode Island.

8 (iii) GROUP 2.—Group 2 shall consist
9 of New York, New Jersey, Puerto Rico,
10 and the Virgin Islands.

11 (iv) GROUP 3.—Group 3 shall consist
12 of Pennsylvania, Maryland, West Virginia,
13 Virginia, the District of Columbia, and
14 Delaware.

15 (v) GROUP 4.—Group 4 shall consist
16 of Georgia, Alabama, North Carolina,
17 South Carolina, Mississippi, Florida, Ken-
18 tucky, and Tennessee.

19 (vi) GROUP 5.—Group 5 shall consist
20 of Illinois, Ohio, Michigan, Indiana, Wis-
21 consin, and Minnesota.

22 (vii) GROUP 6.—Group 6 shall consist
23 of Texas, New Mexico, Arkansas, Okla-
24 homa, and Louisiana.

1 (viii) GROUP 7.—Group 7 shall consist
2 of Missouri, Iowa, Nebraska, and Kansas.

3 (ix) GROUP 8.—Group 8 shall consist
4 of Colorado, Wyoming, North Dakota,
5 South Dakota, Montana, and Utah.

6 (x) GROUP 9.—Group 9 shall consist
7 of California, Guam, American Samoa,
8 Hawaii, Nevada, and Arizona.

9 (xi) GROUP 10.—Group 10 shall con-
10 sist of Washington, Alaska, Idaho, and Or-
11 egon.

12 (5) MATCHING REQUIREMENT.—Subparagraphs
13 (A) and (B) of section 21(a)(4) of the Small Busi-
14 ness Act (15 U.S.C. 648(a)(4)) shall apply to assist-
15 ance made available under the Efficiency Pilot Pro-
16 gram.

17 (6) GRANT AMOUNTS.—Each small business de-
18 velopment center selected to participate in the Effi-
19 ciency Pilot Program under paragraph (4) shall be
20 eligible to receive a grant in an amount equal to—

21 (A) not less than \$100,000 in each fiscal
22 year; and

23 (B) not more than \$300,000 in each fiscal
24 year.

1 (7) EVALUATION AND REPORT.—The Comp-
2 troller General of the United States shall—

3 (A) not later than 30 months after the
4 date of disbursement of the first grant under
5 the Efficiency Pilot Program, initiate an evalua-
6 tion of that pilot program; and

7 (B) not later than 6 months after the date
8 of the initiation of the evaluation under sub-
9 paragraph (A), submit to the Administrator,
10 the Committee on Small Business and Entre-
11 preneurship of the Senate, and the Committee
12 on Small Business of the House of Representa-
13 tives, a report containing—

14 (i) the results of the evaluation; and

15 (ii) any recommendations regarding
16 whether the Efficiency Pilot Program, with
17 or without modification, should be ex-
18 tended to include the participation of all
19 small business development centers.

20 (8) GUARANTEE.—The Administrator may
21 guarantee the timely payment of a loan made to a
22 small business concern through an on-bill financing
23 agreement on such terms and conditions as the Ad-
24 ministrator shall establish through a formal rule

1 making, after providing notice and an opportunity
2 for comment.

3 (9) AUTHORIZATION OF APPROPRIATIONS.—

4 (A) IN GENERAL.—There are authorized to
5 be appropriated from such sums as are already
6 authorized under section 21 of the Small Busi-
7 ness Act to carry out this subsection—

8 (i) \$5,000,000 for the first fiscal year
9 beginning after the date of enactment of
10 this Act; and

11 (ii) \$5,000,000 for each of the 3 fiscal
12 years following the fiscal year described in
13 clause (i).

14 (B) LIMITATION ON USE OF OTHER
15 FUNDS.—The Administrator may carry out the
16 Efficiency Pilot Program only with amounts ap-
17 propriated in advance specifically to carry out
18 this subsection.

19 (10) TERMINATION.—The authority under this
20 subsection shall terminate 4 years after the date of
21 disbursement of the first grant under the Efficiency
22 Pilot Program.

23 (d) SMALL BUSINESS TELECOMMUTING.—

24 (1) PILOT PROGRAM.—

1 (A) IN GENERAL.—In accordance with this
2 subsection, the Administrator shall conduct, in
3 not more than 5 of the regions of the Adminis-
4 tration, a pilot program to provide information
5 regarding telecommuting to employers that are
6 small business concerns and to encourage such
7 employers to offer telecommuting options to
8 employees (in this subsection referred to as the
9 “Telecommuting Pilot Program”).

10 (B) SPECIAL OUTREACH TO INDIVIDUALS
11 WITH DISABILITIES.—In carrying out the Tele-
12 commuting Pilot Program, the Administrator
13 shall make a concerted effort to provide infor-
14 mation to—

15 (i) small business concerns owned by
16 or employing individuals with disabilities,
17 particularly veterans who are individuals
18 with disabilities;

19 (ii) Federal, State, and local agencies
20 having knowledge and expertise in assist-
21 ing individuals with disabilities, including
22 veterans who are individuals with disabil-
23 ities; and

24 (iii) any group or organization, the
25 primary purpose of which is to aid individ-

1 uals with disabilities or veterans who are
2 individuals with disabilities.

3 (C) PERMISSIBLE ACTIVITIES.—In car-
4 rying out the Telecommuting Pilot Program,
5 the Administrator may—

6 (i) produce educational materials and
7 conduct presentations designed to raise
8 awareness in the small business community
9 of the benefits and the ease of telecom-
10 muting;

11 (ii) conduct outreach—

12 (I) to small business concerns
13 that are considering offering telecom-
14 muting options; and

15 (II) as provided in subparagraph
16 (B); and

17 (iii) acquire telecommuting tech-
18 nologies and equipment to be used for
19 demonstration purposes.

20 (D) SELECTION OF REGIONS.—In deter-
21 mining which regions will participate in the
22 Telecommuting Pilot Program, the Adminis-
23 trator shall give priority consideration to re-
24 gions in which Federal agencies and private-sec-

1 tor employers have demonstrated a strong re-
2 gional commitment to telecommuting.

3 (2) REPORT TO CONGRESS.—Not later than 2
4 years after the date on which funds are first appro-
5 priated to carry out this subsection, the Adminis-
6 trator shall transmit to the Committee on Small
7 Business and Entrepreneurship of the Senate and
8 the Committee on Small Business of the House of
9 Representatives a report containing the results of an
10 evaluation of the Telecommuting Pilot Program and
11 any recommendations regarding whether the pilot
12 program, with or without modification, should be ex-
13 tended to include the participation of all regions of
14 the Administration.

15 (3) TERMINATION.—The Telecommuting Pilot
16 Program shall terminate 4 years after the date on
17 which funds are first appropriated to carry out this
18 subsection.

19 (4) AUTHORIZATION OF APPROPRIATIONS.—
20 There is authorized to be appropriated to the Ad-
21 ministration \$5,000,000 to carry out this subsection.

22 (e) ENCOURAGING INNOVATION IN ENERGY EFFI-
23 CIENCY.—Section 9 of the Small Business Act (15 U.S.C.
24 638) is amended by adding at the end the following:

1 “(z) ENCOURAGING INNOVATION IN ENERGY EFFI-
2 CIENCY.—

3 “(1) FEDERAL AGENCY ENERGY-RELATED PRI-
4 ORITY.—In carrying out its duties under this section
5 to SBIR and STTR solicitations by Federal agen-
6 cies, the Administrator shall—

7 “(A) ensure that such agencies give high
8 priority to small business concerns that partici-
9 pate in or conduct energy efficiency or renew-
10 able energy system research and development
11 projects; and

12 “(B) include in the annual report to Con-
13 gress under subsection (b)(7) a determination
14 of whether the priority described in subpara-
15 graph (A) is being carried out.

16 “(2) CONSULTATION REQUIRED.—The Adminis-
17 trator shall consult with the heads of other Federal
18 agencies and departments in determining whether
19 priority has been given to small business concerns
20 that participate in or conduct energy efficiency or
21 renewable energy system research and development
22 projects, as required by this section.

23 “(3) GUIDELINES.—The Administrator shall, as
24 soon as is practicable after the date of enactment of
25 this subsection, issue guidelines and directives to as-

1 sist Federal agencies in meeting the requirements of
2 this section.

3 “(4) DEFINITIONS.—In this subsection—

4 “(A) the term ‘biomass’—

5 “(i) means any organic material that
6 is available on a renewable or recurring
7 basis, including—

8 “(I) agricultural crops;

9 “(II) trees grown for energy pro-
10 duction;

11 “(III) wood waste and wood resi-
12 dues;

13 “(IV) plants (including aquatic
14 plants and grasses);

15 “(V) residues;

16 “(VI) fibers;

17 “(VII) animal wastes and other
18 waste materials; and

19 “(VIII) fats, oils, and greases
20 (including recycled fats, oils, and
21 greases); and

22 “(ii) does not include—

23 “(I) paper that is commonly re-
24 cycled; or

25 “(II) unsegregated solid waste;

1 “(B) the term ‘energy efficiency project’
2 means the installation or upgrading of equip-
3 ment that results in a significant reduction in
4 energy usage; and

5 “(C) the term ‘renewable energy system’
6 means a system of energy derived from—

7 “(i) a wind, solar, biomass (including
8 biodiesel), or geothermal source; or

9 “(ii) hydrogen derived from biomass
10 or water using an energy source described
11 in clause (i).”.

12 **Subtitle F—Assisting State and**
13 **Local Governments in Energy**
14 **Efficiency**

15 **SEC. 271. WEATHERIZATION ASSISTANCE FOR LOW-INCOME**
16 **PERSONS.**

17 Section 422 of the Energy Conservation and Produc-
18 tion Act (42 U.S.C. 6872) is amended by striking
19 “\$700,000,000 for fiscal year 2008” and inserting
20 “\$750,000,000 for each of fiscal years 2008 through
21 2012”.

22 **SEC. 272. STATE ENERGY CONSERVATION PLANS.**

23 Section 365(f) of the Energy Policy and Conservation
24 Act (42 U.S.C. 6325(f)) is amended by striking “fiscal

1 year 2008” and inserting “each of fiscal years 2008
2 through 2012”.

3 **SEC. 273. UTILITY ENERGY EFFICIENCY PROGRAMS.**

4 (a) **ELECTRIC UTILITIES.**—Section 111(d) of the
5 Public Utility Regulatory Policies Act of 1978 (16 U.S.C.
6 2621(d)) is amended by adding at the end the following:

7 “(16) **INTEGRATED RESOURCE PLANNING.**—

8 Each electric utility shall—

9 “(A) integrate energy efficiency resources
10 into utility, State, and regional plans; and

11 “(B) adopt policies establishing cost-effec-
12 tive energy efficiency as a priority resource.

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

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

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

19 and

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

22 “(B) **POLICY OPTIONS.**—In complying with
23 subparagraph (A), each State regulatory au-
24 thority and each nonregulated utility shall con-
25 sider—

1 “(i) removing the throughput incen-
2 tive and other regulatory and management
3 disincentives to energy efficiency;

4 “(ii) providing utility incentives for
5 the successful management of energy effi-
6 ciency programs;

7 “(iii) including the impact on adoption
8 of energy efficiency as 1 of the goals of re-
9 tail rate design, recognizing that energy ef-
10 ficiency must be balanced with other objec-
11 tives;

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

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

17 (b) **NATURAL GAS UTILITIES.**—Section 303(b) of the
18 Public Utility Regulatory Policies Act of 1978 (16 U.S.C.
19 3203(b)) is amended by adding at the end the following:

20 “(5) **ENERGY EFFICIENCY.**—Each natural gas
21 utility shall—

22 “(A) integrate energy efficiency resources
23 into the plans and planning processes of the
24 natural gas utility; and

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

5 “(6) RATE DESIGN MODIFICATIONS TO PRO-
6 MOTE ENERGY EFFICIENCY INVESTMENTS.—

7 “(A) IN GENERAL.—The rates allowed to
8 be charged by a natural gas utility shall align
9 utility incentives with the deployment of cost-ef-
10 fective energy efficiency.

11 “(B) POLICY OPTIONS.—In complying with
12 subparagraph (A), each State regulatory au-
13 thority and each nonregulated utility shall con-
14 sider—

15 “(i) separating fixed-cost revenue re-
16 covery from the volume of transportation
17 or sales service provided to the customer;

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

23 “(iii) promoting the impact on adop-
24 tion of energy efficiency as 1 of the goals
25 of retail rate design, recognizing that en-

1 ergy efficiency must be balanced with other
2 objectives; and

3 “(iv) adopting rate designs that en-
4 courage energy efficiency for each cus-
5 tomer class.”.

6 **SEC. 274. ENERGY EFFICIENCY AND DEMAND RESPONSE**
7 **PROGRAM ASSISTANCE.**

8 The Secretary shall provide technical assistance re-
9 garding the design and implementation of the energy effi-
10 ciency and demand response programs established under
11 this title, and the amendments made by this title, to State
12 energy offices, public utility regulatory commissions, and
13 nonregulated utilities through the appropriate national
14 laboratories of the Department of Energy.

15 **SEC. 275. ENERGY AND ENVIRONMENTAL BLOCK GRANT.**

16 Title I of the Housing and Community Development
17 Act of 1974 (42 U.S.C. 5301 et seq.) is amended by add-
18 ing at the end the following:

19 **“SEC. 123. ENERGY AND ENVIRONMENTAL BLOCK GRANT.**

20 “(a) DEFINITIONS.—In this section

21 “(1) ELIGIBLE ENTITY.—The term ‘eligible en-
22 tity’ means—

23 “(A) a State;

24 “(B) an eligible unit of local government
25 within a State; and

1 “(C) an Indian tribe.

2 “(2) ELIGIBLE UNIT OF LOCAL GOVERN-
3 MENT.—The term ‘eligible unit of local government’
4 means—

5 “(A) a city with a population—

6 “(i) of at least 35,000; or

7 “(ii) that causes the city to be 1 of
8 the top 10 most populous cities of the
9 State in which the city is located; and

10 “(B) a county with a population—

11 “(i) of at least 200,000; or

12 “(ii) that causes the county to be 1 of
13 the top 10 most populous counties of the
14 State in which the county is located.

15 “(3) SECRETARY.—The term ‘Secretary’ means
16 the Secretary of Energy.

17 “(4) STATE.—The term ‘State’ means—

18 “(A) a State;

19 “(B) the District of Columbia;

20 “(C) the Commonwealth of Puerto Rico;

21 and

22 “(D) any other territory or possession of
23 the United States.

1 “(b) PURPOSE.—The purpose of this section is to as-
2 sist State, Indian tribal, and local governments in imple-
3 menting strategies—

4 “(1) to reduce fossil fuel emissions created as
5 a result of activities within the boundaries of the
6 States or units of local government in an environ-
7 mentally sustainable way that, to the maximum ex-
8 tent practicable, maximizes benefits for local and re-
9 gional communities;

10 “(2) to reduce the total energy use of the
11 States, Indian tribes, and units of local government;
12 and

13 “(3) to improve energy efficiency in the trans-
14 portation sector, building sector, and any other ap-
15 propriate sectors.

16 “(c) PROGRAM.—

17 “(1) IN GENERAL.—The Secretary shall provide
18 to eligible entities block grants to carry out eligible
19 activities (as specified under paragraph (2)) relating
20 to the implementation of environmentally beneficial
21 energy strategies.

22 “(2) ELIGIBLE ACTIVITIES.—The Secretary, in
23 consultation with the Administrator of the Environ-
24 mental Protection Agency, the Secretary of Trans-
25 portation, and the Secretary of Housing and Urban

1 Development, shall establish a list of activities that
2 are eligible for assistance under the grant program.

3 “(3) ALLOCATION TO STATES, INDIAN TRIBES,
4 AND ELIGIBLE UNITS OF LOCAL GOVERNMENT.—

5 “(A) IN GENERAL.—Of the amounts made
6 available to provide grants under this sub-
7 section, the Secretary shall allocate—

8 “(i) 68 percent to eligible units of
9 local government;

10 “(ii) 28 percent to States; and

11 “(iii) 4 percent to Indian tribes.

12 “(B) DISTRIBUTION TO ELIGIBLE UNITS
13 OF LOCAL GOVERNMENT.—

14 “(i) IN GENERAL.—The Secretary
15 shall establish a formula for the distribu-
16 tion of amounts under subparagraph (A)(i)
17 to eligible units of local government, taking
18 into account any factors that the Secretary
19 determines to be appropriate, including the
20 residential and daytime population of the
21 eligible units of local government.

22 “(ii) CRITERIA.—Amounts shall be
23 distributed to eligible units of local govern-
24 ment under clause (i) only if the eligible
25 units of local government meet the criteria

1 for distribution established by the Sec-
2 retary for units of local government.

3 “(C) DISTRIBUTION TO STATES.—

4 “(i) IN GENERAL.—Of the amounts
5 provided to States under subparagraph
6 (A)(ii), the Secretary shall distribute—

7 “(I) at least 1.25 percent to each
8 State; and

9 “(II) the remainder among the
10 States, based on a formula, to be de-
11 termined by the Secretary, that takes
12 into account the population of the
13 States and any other criteria that the
14 Secretary determines to be appro-
15 priate.

16 “(ii) CRITERIA.—Amounts shall be
17 distributed to States under clause (i) only
18 if the States meet the criteria for distribu-
19 tion established by the Secretary for
20 States.

21 “(iii) LIMITATION ON USE OF STATE
22 FUNDS.—At least 40 percent of the
23 amounts distributed to States under this
24 subparagraph shall be used by the States
25 for the conduct of eligible activities in non-

1 entitlement areas in the States, in accord-
2 ance with any criteria established by the
3 Secretary.

4 “(D) DISTRIBUTION TO INDIAN TRIBES.—

5 “(i) IN GENERAL.—The Secretary
6 shall establish a formula for the distribu-
7 tion of amounts under subparagraph
8 (A)(iii) to eligible Indian tribes, taking into
9 account any factors that the Secretary de-
10 termines to be appropriate, including the
11 residential and daytime population of the
12 eligible Indian tribes.

13 “(ii) CRITERIA.—Amounts shall be
14 distributed to eligible Indian tribes under
15 clause (i) only if the eligible Indian tribes
16 meet the criteria for distribution estab-
17 lished by the Secretary for Indian tribes.

18 “(4) REPORT.—Not later than 2 years after the
19 date on which an eligible entity first receives a grant
20 under this section, and every 2 years thereafter, the
21 eligible entity shall submit to the Secretary a report
22 that describes any eligible activities carried out using
23 assistance provided under this subsection.

24 “(5) AUTHORIZATION OF APPROPRIATIONS.—

25 There are authorized to be appropriated such sums

1 as are necessary to carry out this subsection for
2 each of fiscal years 2008 through 2012.

3 “(d) ENVIRONMENTALLY BENEFICIAL ENERGY
4 STRATEGIES SUPPLEMENTAL GRANT PROGRAM.—

5 “(1) IN GENERAL.—The Secretary shall provide
6 to each eligible entity that meets the applicable cri-
7 teria under subparagraph (B)(ii), (C)(ii), or (D)(ii)
8 of subsection (c)(3) a supplemental grant to pay the
9 Federal share of the total costs of carrying out an
10 activity relating to the implementation of an environ-
11 mentally beneficial energy strategy.

12 “(2) REQUIREMENTS.—To be eligible for a
13 grant under paragraph (1), an eligible entity shall—

14 “(A) demonstrate to the satisfaction of the
15 Secretary that the eligible entity meets the ap-
16 plicable criteria under subparagraph (B)(ii),
17 (C)(ii), or (D)(ii) of subsection (c)(3); and

18 “(B) submit to the Secretary for approval
19 a plan that describes the activities to be funded
20 by the grant.

21 “(3) COST-SHARING REQUIREMENT.—

22 “(A) FEDERAL SHARE.—The Federal
23 share of the cost of carrying out any activities
24 under this subsection shall be 75 percent.

25 “(B) NON-FEDERAL SHARE.—

1 “(i) FORM.—Not more than 50 per-
2 cent of the non-Federal share may be in
3 the form of in-kind contributions.

4 “(ii) LIMITATION.—Amounts provided
5 to an eligible entity under subsection (c)
6 shall not be used toward the non-Federal
7 share.

8 “(4) MAINTENANCE OF EFFORT.—An eligible
9 entity shall provide assurances to the Secretary that
10 funds provided to the eligible entity under this sub-
11 section will be used only to supplement, not to sup-
12 plant, the amount of Federal, State, tribal, and local
13 funds otherwise expended by the eligible entity for
14 eligible activities under this subsection.

15 “(5) AUTHORIZATION OF APPROPRIATIONS.—
16 There are authorized to be appropriated such sums
17 as are necessary to carry out this subsection for
18 each of fiscal years 2008 through 2012.

19 “(e) GRANTS TO OTHER STATES AND COMMU-
20 NITIES.—

21 “(1) IN GENERAL.—Of the total amount of
22 funds that are made available each fiscal year to
23 carry out this section, the Secretary shall use 2 per-
24 cent of the amount to make competitive grants
25 under this section to States, Indian tribes, and units

1 of local government that are not eligible entities or
2 to consortia of such units of local government.

3 “(2) APPLICATIONS.—To be eligible for a grant
4 under this subsection, a State, Indian tribe, unit of
5 local government, or consortia described in para-
6 graph (1) shall apply to the Secretary for a grant
7 to carry out an activity that would otherwise be eli-
8 gible for a grant under subsection (c) or (d).

9 “(3) PRIORITY.—In awarding grants under this
10 subsection, the Secretary shall give priority to—

11 “(A) States with populations of less than
12 2,000,000; and

13 “(B) projects that would result in signifi-
14 cant energy efficiency improvements, reductions
15 in fossil fuel use, or capital improvements.”.

16 **SEC. 276. ENERGY SUSTAINABILITY AND EFFICIENCY**
17 **GRANTS FOR INSTITUTIONS OF HIGHER EDU-**
18 **CATION.**

19 Part G of title III of the Energy Policy and Conserva-
20 tion Act is amended by inserting after section 399 (42
21 U.S.C. 371h) the following:

22 **“SEC. 399A. ENERGY SUSTAINABILITY AND EFFICIENCY**
23 **GRANTS FOR INSTITUTIONS OF HIGHER EDU-**
24 **CATION.**

25 “(a) DEFINITIONS.—In this section:

1 “(1) ENERGY SUSTAINABILITY.—The term ‘en-
2 ergy sustainability’ includes using a renewable en-
3 ergy resource and a highly efficient technology for
4 electricity generation, transportation, heating, or
5 cooling.

6 “(2) INSTITUTION OF HIGHER EDUCATION.—
7 The term ‘institution of higher education’ has the
8 meaning given the term in section 2 of the Energy
9 Policy Act of 2005 (42 U.S.C. 15801).

10 “(b) GRANTS FOR ENERGY EFFICIENCY IMPROVE-
11 MENT.—

12 “(1) IN GENERAL.—The Secretary shall award
13 not more than 100 grants to institutions of higher
14 education to carry out projects to improve energy ef-
15 ficiency on the grounds and facilities of the institu-
16 tion of higher education, including not less than 1
17 grant to an institution of higher education in each
18 State.

19 “(2) CONDITION.—As a condition of receiving a
20 grant under this subsection, an institution of higher
21 education shall agree to—

22 “(A) implement a public awareness cam-
23 paign concerning the project in the community
24 in which the institution of higher education is
25 located; and

1 “(B) submit to the Secretary, and make
2 available to the public, reports on any efficiency
3 improvements, energy cost savings, and environ-
4 mental benefits achieved as part of a project
5 carried out under paragraph (1).

6 “(c) GRANTS FOR INNOVATION IN ENERGY SUSTAIN-
7 ABILITY.—

8 “(1) IN GENERAL.—The Secretary shall award
9 not more than 250 grants to institutions of higher
10 education to engage in innovative energy sustain-
11 ability projects, including not less than 2 grants to
12 institutions of higher education in each State.

13 “(2) INNOVATION PROJECTS.—An innovation
14 project carried out with a grant under this sub-
15 section shall—

16 “(A) involve—

17 “(i) an innovative technology that is
18 not yet commercially available; or

19 “(ii) available technology in an inno-
20 vative application that maximizes energy
21 efficiency and sustainability;

22 “(B) have the greatest potential for testing
23 or demonstrating new technologies or processes;
24 and

1 “(C) ensure active student participation in
2 the project, including the planning, implementa-
3 tion, evaluation, and other phases of the
4 project.

5 “(3) CONDITION.—As a condition of receiving a
6 grant under this subsection, an institution of higher
7 education shall agree to submit to the Secretary,
8 and make available to the public, reports that de-
9 scribe the results of the projects carried out under
10 paragraph (1).

11 “(d) AWARDING OF GRANTS.—

12 “(1) APPLICATION.—An institution of higher
13 education that seeks to receive a grant under this
14 section may submit to the Secretary an application
15 for the grant at such time, in such form, and con-
16 taining such information as the Secretary may pre-
17 scribe.

18 “(2) SELECTION.—The Secretary shall estab-
19 lish a committee to assist in the selection of grant
20 recipients under this section.

21 “(e) ALLOCATION TO INSTITUTIONS OF HIGHER
22 EDUCATION WITH SMALL ENDOWMENTS.—Of the
23 amount of grants provided for a fiscal year under this sec-
24 tion, the Secretary shall provide not less 50 percent of the
25 amount to institutions of higher education that have an

1 endowment of not more than \$100,000,000, with 50 per-
2 cent of the allocation set aside for institutions of higher
3 education that have an endowment of not more than
4 \$50,000,000.

5 “(f) GRANT AMOUNTS.—The maximum amount of
6 grants for a project under this section shall not exceed—

7 “(1) in the case of grants for energy efficiency
8 improvement under subsection (b), \$1,000,000; or

9 “(2) in the case of grants for innovation in en-
10 ergy sustainability under subsection (c), \$500,000.

11 “(g) AUTHORIZATION OF APPROPRIATIONS.—There
12 are authorized to be appropriated such sums as are nec-
13 essary to carry out this section for each of fiscal years
14 2008 through 2012.”.

15 **SEC. 277. ENERGY EFFICIENCY AND RENEWABLE ENERGY**
16 **WORKER TRAINING PROGRAM.**

17 Section 1101 of the Energy Policy Act of 2005 (42
18 U.S.C. 16411) is amended—

19 (1) by redesignating subsection (d) as sub-
20 section (e); and

21 (2) by inserting after subsection (c), the fol-
22 lowing:

23 “(d) ENERGY EFFICIENCY AND RENEWABLE EN-
24 ERGY WORKER TRAINING PROGRAM.—

1 “(1) PURPOSE.—It is the purpose of this sub-
2 section to—

3 “(A) create a sustainable, comprehensive
4 public program that provides quality training
5 that is linked to jobs that are created through
6 renewable energy and energy efficiency initia-
7 tives;

8 “(B) satisfy industry demand for a skilled
9 workforce, to support economic growth, to boost
10 America’s global competitiveness in the expand-
11 ing energy efficiency and renewable energy in-
12 dustries, and to provide economic self-suffi-
13 ciency and family-sustaining jobs for America’s
14 workers, including low wage workers, through
15 quality training and placement in job opportu-
16 nities in the growing energy efficiency and re-
17 newable energy industries;

18 “(C) provide grants for the safety, health,
19 and skills training and education of workers
20 who are, or may be engaged in, activities re-
21 lated to the energy efficiency and renewable en-
22 ergy industries; and

23 “(D) provide funds for national and State
24 industry-wide research, labor market informa-
25 tion and labor exchange programs, and the de-

1 velopment of nationally and State administered
2 training programs.

3 “(2) GRANT PROGRAM.—

4 “(A) IN GENERAL.—Not later than 6
5 months after the date of enactment of this Act,
6 the Secretary of Labor (referred to in this sub-
7 section as the ‘Secretary’), in consultation with
8 the Secretary of Energy, shall establish an en-
9 ergy efficiency and renewable energy worker
10 training program under which the Secretary
11 shall carry out the activities described in para-
12 graph (3) to achieve the purposes of this sub-
13 section.

14 “(B) ELIGIBILITY.—For purposes of pro-
15 viding assistance and services under the pro-
16 gram established under this subsection—

17 “(i) target populations of individuals
18 eligible for training and other services shall
19 include, but not be limited to—

20 “(I) veterans, or past and
21 present members of the reserve com-
22 ponents of the Armed Forces;

23 “(II) workers affected by na-
24 tional energy and environmental pol-
25 icy;

1 “(III) workers displaced by the
2 impacts of economic globalization;

3 “(IV) individuals, including at-
4 risk youth, seeking employment path-
5 ways out of poverty and into economic
6 self-sufficiency;

7 “(V) formerly incarcerated, adju-
8 dicated, non-violent offenders; and

9 “(VI) individuals in need of up-
10 dated training related to the energy
11 efficiency and renewable energy indus-
12 tries; and

13 “(ii) energy efficiency and renewable
14 energy industries eligible for such assist-
15 ance and services shall include—

16 “(I) the energy-efficient building,
17 construction, and retrofits industries;

18 “(II) the renewable electric power
19 industry;

20 “(III) the energy efficient and
21 advanced drive train vehicle industry;

22 “(IV) the bio-fuels industry; and

23 “(V) the deconstruction and ma-
24 terials use industries.

25 “(3) ACTIVITIES.—

1 “(A) NATIONAL RESEARCH PROGRAM.—
2 Under the program established under para-
3 graph (2), the Secretary, acting through the
4 Bureau of Labor Statistics, shall provide assist-
5 ance to support national research to develop
6 labor market data and to track future work-
7 force trends resulting from energy-related ini-
8 tiatives carried out under this section. Activities
9 carried out under this paragraph shall in-
10 clude—

11 “(i) linking research and development
12 in renewable energy and energy efficiency
13 technology with the development of stand-
14 ards and curricula for current and future
15 jobs;

16 “(ii) the tracking and documentation
17 of academic and occupational competencies
18 as well as future skill needs with respect to
19 renewable energy and energy efficiency
20 technology;

21 “(iii) tracking and documentation of
22 occupational information and workforce
23 training data with respect to renewable en-
24 ergy and energy efficiency technology;

1 “(iv) assessing new employment and
2 work practices including career ladder and
3 upgrade training as well as high perform-
4 ance work systems; and

5 “(v) collaborating with State agencies,
6 industry, organized labor, and community
7 and nonprofit organizations to disseminate
8 successful innovations for labor market
9 services and worker training with respect
10 to renewable energy and energy efficiency
11 technology.

12 “(B) NATIONAL ENERGY TRAINING PART-
13 NERSHIP GRANTS.—

14 “(i) IN GENERAL.—Under the pro-
15 gram established under paragraph (2), the
16 Secretary shall award National Energy
17 Training Partnerships Grants on a com-
18 petitive basis to eligible entities to enable
19 such entities to carry out national training
20 that leads to economic self-sufficiency and
21 to develop an energy efficiency and renew-
22 able energy industries workforce. Grants
23 shall be awarded under this subparagraph
24 so as to ensure geographic diversity with at
25 least 2 grants awarded to entities located

1 in each of the 4 Petroleum Administration
2 for Defense Districts with no subdistricts
3 and at least 1 grant awarded to an entity
4 located in each of the subdistricts of the
5 Petroleum Administration for Defense Dis-
6 trict with subdistricts.

7 “(ii) ELIGIBILITY.—To be eligible to
8 receive a grant under clause (i), an entity
9 shall be a non-profit partnership that—

10 “(I) includes the equal participa-
11 tion of industry, including public or
12 private employers, and labor organiza-
13 tions, including joint labor-manage-
14 ment training programs, and may in-
15 clude community-based organizations,
16 educational institutions, small busi-
17 nesses, cooperatives, State and local
18 veterans agencies, and veterans serv-
19 ice organizations; and

20 “(II) demonstrates—

21 “(aa) experience in imple-
22 menting and operating worker
23 skills training and education pro-
24 grams;

1 “(bb) the ability to identify
2 and involve in training programs
3 carried out under this grant, tar-
4 get populations of workers who
5 are, or will be engaged in, activi-
6 ties related to energy efficiency
7 and renewable energy industries;
8 and

9 “(cc) the ability to help
10 workers achieve economic self-
11 sufficiency.

12 “(iii) ACTIVITIES.—Activities to be
13 carried out under a grant under this sub-
14 paragraph may include—

15 “(I) the provision of occupational
16 skills training, including curriculum
17 development, on-the-job training, and
18 classroom training;

19 “(II) the provision of safety and
20 health training;

21 “(III) the provision of basic
22 skills, literacy, GED, English as a
23 second language, and job readiness
24 training;

1 “(IV) individual referral and tui-
2 tion assistance for a community col-
3 lege training program;

4 “(V) the provision of customized
5 training in conjunction with an exist-
6 ing registered apprenticeship program
7 or labor-management partnership;

8 “(VI) the provision of career lad-
9 der and upgrade training; and

10 “(VII) the implementation of
11 transitional jobs strategies.

12 “(C) STATE LABOR MARKET RESEARCH,
13 INFORMATION, AND LABOR EXCHANGE RE-
14 SEARCH PROGRAM.—

15 “(i) IN GENERAL.—Under the pro-
16 gram established under paragraph (2), the
17 Secretary shall award competitive grants to
18 States to enable such States to administer
19 labor market and labor exchange informa-
20 tional programs that include the implemen-
21 tation of the activities described in clause
22 (ii).

23 “(ii) ACTIVITIES.—A State shall use
24 amounts awarded under a grant under this
25 subparagraph to provide funding to the

1 State agency that administers the Wagner-
2 Peyser Act and State unemployment com-
3 pensation programs to carry out the fol-
4 lowing activities using State agency merit
5 staff:

6 “(I) The identification of job
7 openings in the renewable energy and
8 energy efficiency sector.

9 “(II) The administration of skill
10 and aptitude testing and assessment
11 for workers.

12 “(III) The counseling, case man-
13 agement, and referral of qualified job
14 seekers to openings and training pro-
15 grams, including energy efficiency and
16 renewable energy training programs.

17 “(D) STATE ENERGY TRAINING PARTNER-
18 SHIP PROGRAM.—

19 “(i) IN GENERAL.—Under the pro-
20 gram established under paragraph (2), the
21 Secretary shall award competitive grants to
22 States to enable such States to administer
23 renewable energy and energy efficiency
24 workforce development programs that in-

1 clude the implementation of the activities
2 described in clause (ii).

3 “(ii) ACTIVITIES.—

4 “(I) IN GENERAL.—A State shall
5 use amounts awarded under a grant
6 under this subparagraph to award
7 competitive grants to eligible State
8 Energy Sector Partnerships to enable
9 such Partnerships to coordinate with
10 existing apprenticeship and labor
11 management training programs and
12 implement training programs that
13 lead to the economic self-sufficiency of
14 trainees.

15 “(II) ELIGIBILITY.—To be eligi-
16 ble to receive a grant under this sub-
17 paragraph, a State Energy Sector
18 Partnership shall—

19 “(aa) consist of non-profit
20 organizations that include equal
21 participation from industry, in-
22 cluding public or private non-
23 profit employers, and labor orga-
24 nizations, including joint labor-
25 management training programs,

1 and may include representatives
2 from local governments, worker
3 investment agency one-stop ca-
4 reer centers, community based
5 organizations, community col-
6 leges, other post-secondary insti-
7 tutions, small businesses, co-
8 operatives, State and local vet-
9 erans agencies, and veterans
10 service organizations;

11 “(bb) demonstrate experi-
12 ence in implementing and oper-
13 ating worker skills training and
14 education programs; and

15 “(cc) demonstrate the ability
16 to identify and involve in training
17 programs, target populations of
18 workers who are, or will be en-
19 gaged in, activities related to en-
20 ergy efficiency and renewable en-
21 ergy industries.

22 “(iii) PRIORITY.—In awarding grants
23 under this subparagraph, the Secretary
24 shall give priority to States that dem-

1 onstrate linkages of activities under the
2 grant with—

3 “(I) meeting national energy poli-
4 cies associated with energy efficiency,
5 renewable energy, and the reduction
6 of emissions of greenhouse gases; and

7 “(II) meeting State energy poli-
8 cies associated with energy efficiency,
9 renewable energy, and the reduction
10 of emissions of greenhouse gases.

11 “(iv) COORDINATION.—A grantee
12 under this subparagraph shall coordinate
13 activities carried out under the grant with
14 existing apprenticeship and labor manage-
15 ment training programs and implement
16 training programs that lead to the eco-
17 nomic self-sufficiency of trainees, including
18 providing—

19 “(I) outreach and recruitment
20 services, in coordination with the ap-
21 propriate State agency;

22 “(II) occupational skills training,
23 including curriculum development, on-
24 the-job training, and classroom train-
25 ing;

1 “(III) safety and health training;

2 “(IV) basic skills, literacy, GED,
3 English as a second language, and job
4 readiness training;

5 “(V) individual referral and tui-
6 tion assistance for a community col-
7 lege training program;

8 “(VI) customized training in con-
9 junction with an existing registered
10 apprenticeship program or labor-man-
11 agement partnership;

12 “(VII) career ladder and upgrade
13 training; and

14 “(VIII) services under transi-
15 tional jobs strategies.

16 “(4) WORKER PROTECTIONS AND NON-
17 DISCRIMINATION REQUIREMENTS.—

18 “(A) APPLICATION OF WIA.—The provi-
19 sions of sections 181 and 188 of the Workforce
20 Investment Act of 1998 (29 U.S.C. 2931 and
21 2938) shall apply to all programs carried out
22 with assistance under this subsection.

23 “(B) CONSULTATION WITH LABOR ORGANI-
24 ZATIONS.—If a labor organization represents a
25 substantial number of workers who are engaged

1 in similar work or training in an area that is
2 the same as the area that is proposed to be
3 funded under this subsection, the labor organi-
4 zation shall be provided an opportunity to be
5 consulted and to submit comments in regard to
6 such a proposal.

7 “(5) AUTHORIZATION OF APPROPRIATIONS.—
8 There is authorized to be appropriated to carry out
9 this subsection, \$100,000,000 for each fiscal year, of
10 which—

11 “(A) not to exceed 20 percent of the
12 amount appropriated in each fiscal year shall be
13 made available for, and shall be equally divided
14 between, national labor market research and in-
15 formation under paragraph (3)(A) and State
16 labor market information and labor exchange
17 research under paragraph (3)(C); and

18 “(B) the remainder shall be divided equally
19 between National Energy Partnership Training
20 Grants under paragraph (3)(B) and State en-
21 ergy training partnership grants under para-
22 graph (3)(D).

23 “(6) DEFINITION.—In this subsection, the term
24 ‘renewable electric power’ has the meaning given the

1 term ‘renewable energy’ in section 203(b)(2) of the
2 Energy Policy Act of 2005 (Public Law 109–58).”.

3 **SEC. 278. ASSISTANCE TO STATES TO REDUCE SCHOOL BUS**
4 **IDLING.**

5 (a) STATEMENT OF POLICY.—Congress encourages
6 each local educational agency (as defined in section
7 9101(26) of the Elementary and Secondary Education Act
8 of 1965 (20 U.S.C. 7801(26))) that receives Federal funds
9 under the Elementary and Secondary Education Act of
10 1965 (20 U.S.C. 6301 et seq.) to develop a policy to re-
11 duce the incidence of school bus idling at schools while
12 picking up and unloading students.

13 (b) AUTHORIZATION OF APPROPRIATIONS.—There
14 are authorized to be appropriated to the Secretary, work-
15 ing in coordination with the Secretary of Education,
16 \$5,000,000 for each of fiscal years 2007 through 2012
17 for use in educating States and local education agencies
18 about—

- 19 (1) benefits of reducing school bus idling; and
20 (2) ways in which school bus idling may be re-
21 duced.

22 **SEC. 279. DEFINITION OF STATE.**

23 Section 412 of the Energy Conservation and Produc-
24 tion Act (42 U.S.C. 6862) is amended by striking para-
25 graph (8) and inserting the following:

1 “(8) STATE.—The term ‘State’ means—
2 “(A) a State;
3 “(B) the District of Columbia; and
4 “(C) the Commonwealth of Puerto Rico.”.

5 **SEC. 280. COORDINATION OF PLANNED REFINERY OUT-**
6 **AGES.**

7 (a) DEFINITIONS.—In this section:

8 (1) ADMINISTRATOR.—The term “Adminis-
9 trator” means the Administrator of the Energy In-
10 formation Administration.

11 (2) PLANNED REFINERY OUTAGE.—

12 (A) IN GENERAL.—The term “planned re-
13 finery outage” means a removal, scheduled be-
14 fore the date on which the removal occurs, of
15 a refinery, or any unit of a refinery, from serv-
16 ice for maintenance, repair, or modification.

17 (B) EXCLUSION.—The term “planned re-
18 finery outage” does not include any necessary
19 and unplanned removal of a refinery, or any
20 unit of a refinery, from service as a result of a
21 component failure, safety hazard, emergency, or
22 action reasonably anticipated to be necessary to
23 prevent such events.

24 (3) REFINED PETROLEUM PRODUCT.—The
25 term “refined petroleum product” means any gaso-

1 line, diesel fuel, fuel oil, lubricating oil, liquid petro-
2 leum gas, or other petroleum distillate that is pro-
3 duced through the refining or processing of crude oil
4 or an oil derived from tar sands, shale, or coal.

5 (4) REFINERY.—The term “refinery” means a
6 facility used in the production of a refined petroleum
7 product through distillation, cracking, or any other
8 process.

9 (5) SECRETARY.—The term “Secretary” means
10 the Secretary of Energy.

11 (b) REVIEW AND ANALYSIS OF AVAILABLE INFORMA-
12 TION.—The Administrator shall, on an ongoing basis—

13 (1) review information on planned refinery out-
14 ages that is available from commercial reporting
15 services;

16 (2) analyze that information to determine
17 whether the scheduling of a planned refinery outage
18 may nationally or regionally affect the price or sup-
19 ply of any refined petroleum product by—

20 (A) decreasing the production of the re-
21 fined petroleum product; and

22 (B) causing or contributing to a retail or
23 wholesale supply shortage or disruption;

24 (3) not less frequently than twice each year,
25 submit to the Secretary a report describing the re-

1 sults of the review and analysis under paragraphs
2 (1) and (2); and

3 (4) specifically alert the Secretary of any
4 planned refinery outage that the Administrator de-
5 termines may nationally or regionally affect the price
6 or supply of a refined petroleum product.

7 (c) ACTION BY SECRETARY.—On a determination by
8 the Secretary, based on a report or alert under paragraph
9 (3) or (4) of subsection (b), that a planned refinery outage
10 may affect the price or supply of a refined petroleum prod-
11 uct, the Secretary shall make available to refinery opera-
12 tors information on planned refinery outages to encourage
13 reductions of the quantity of refinery capacity that is out
14 of service at any time.

15 (d) LIMITATION.—Nothing in this section shall alter
16 any existing legal obligation or responsibility of a refinery
17 operator, or create any legal right of action, nor shall this
18 section authorize the Secretary—

19 (1) to prohibit a refinery operator from con-
20 ducting a planned refinery outage; or

21 (2) to require a refinery operator to continue to
22 operate a refinery.

1 **SEC. 281. TECHNICAL CRITERIA FOR CLEAN COAL POWER**
2 **INITIATIVE.**

3 Section 402(b)(1)(B)(ii) of the Energy Policy Act of
4 2005 (42 U.S.C. 15962(b)(1)(B)(ii)) is amended by strik-
5 ing subclause (I) and inserting the following:

6 “(I)(aa) to remove at least 99
7 percent of sulfur dioxide; or

8 “(bb) to emit not more than 0.04
9 pound SO₂ per million Btu, based on
10 a 30-day average;”.

11 **SEC. 282. ADMINISTRATION.**

12 Section 106 of the Alaska Natural Gas Pipeline Act
13 (15 U.S.C. 720d) is amended by adding at the end the
14 following:

15 “(h) ADMINISTRATION.—

16 “(1) PERSONNEL APPOINTMENTS.—

17 “(A) IN GENERAL.—The Federal Coordi-
18 nator may appoint and terminate such per-
19 sonnel as the Federal Coordinator determines
20 to be appropriate.

21 “(B) AUTHORITY OF FEDERAL COORDI-
22 NATOR.—Personnel appointed by the Federal
23 Coordinator under subparagraph (A) shall be
24 appointed without regard to the provisions of
25 title 5, United States Code, governing appoint-
26 ments in the competitive service.

1 “(2) COMPENSATION.—

2 “(A) IN GENERAL.—Subject to subpara-
3 graph (B), personnel appointed by the Federal
4 Coordinator under paragraph (1)(A) shall be
5 paid without regard to the provisions of chapter
6 51 and subchapter III of chapter 53 of title 5,
7 United States Code (relating to classification
8 and General Schedule pay rates).

9 “(B) MAXIMUM LEVEL OF COMPENSA-
10 TION.—The rate of pay for personnel appointed
11 by the Federal Coordinator under paragraph
12 (1)(A) shall not exceed the maximum level of
13 rate payable for level III of the Executive
14 Schedule.

15 “(C) APPLICABILITY OF SECTION 5941.—
16 Section 5941 of title 5, United States Code,
17 shall apply to personnel appointed by the Fed-
18 eral Coordinator under paragraph (1)(A).

19 “(3) TEMPORARY SERVICES.—

20 “(A) IN GENERAL.—The Federal Coordi-
21 nator may procure temporary and intermittent
22 services in accordance with section 3109(b) of
23 title 5, United States Code.

24 “(B) MAXIMUM LEVEL OF COMPENSA-
25 TION.—The level of compensation of an indi-

1 vidual employed on a temporary or intermittent
2 basis under subparagraph (A) shall not exceed
3 the maximum level of rate payable for level III
4 of the Executive Schedule.

5 “(4) FEES, CHARGES, AND COMMISSIONS.—

6 “(A) IN GENERAL.—The Federal Coordi-
7 nator shall have the authority to establish,
8 change, and abolish reasonable filing and serv-
9 ice fees, charges, and commissions, require de-
10 posits of payments, and provide refunds as pro-
11 vided to the Secretary of the Interior in section
12 304 of the Federal Land Policy and Manage-
13 ment Act of 1976 (43 U.S.C. 1734), except
14 that the authority shall be with respect to the
15 duties of the Federal Coordinator, as delineated
16 in the Alaska Natural Gas Pipeline Act (15
17 U.S.C. 720 et seq.), as amended.

18 “(B) AUTHORITY OF SECRETARY OF THE
19 INTERIOR.—Subparagraph (A) shall not affect
20 the authority of the Secretary of the Interior to
21 establish, change, and abolish reasonable filing
22 and service fees, charges, and commissions, re-
23 quire deposits of payments, and provide refunds
24 under section 304 of the Federal Land Policy

1 and Management Act of 1976 (43 U.S.C.
2 1734).

3 “(C) USE OF FUNDS.—The Federal Coor-
4 dinator is authorized to use, without further ap-
5 propriation, amounts collected under subpara-
6 graph (A) to carry out this section.”.

7 **SEC. 283. OFFSHORE RENEWABLE ENERGY.**

8 (a) LEASES, EASEMENTS, OR RIGHTS-OF-WAY FOR
9 ENERGY AND RELATED PURPOSES.—Section 8(p) of the
10 Outer Continental Shelf Lands Act (43 U.S.C. 1337(p))
11 is amended—

12 (1) by inserting after “Secretary of the Depart-
13 ment in which the Coast Guard is operating” the
14 following: “, the Secretary of Commerce,”;

15 (2) by striking paragraph (3) and inserting the
16 following:

17 “(3) COMPETITIVE OR NONCOMPETITIVE
18 BASIS.—Any lease, easement, or right-of-way under
19 paragraph (1) shall be issued on a competitive basis,
20 unless—

21 “(A) the lease, easement, or right-of-way
22 relates to a project that meets the criteria es-
23 tablished under section 388(d) of the Energy
24 Policy Act of 2005 (43 U.S.C. 1337 note; Pub-
25 lic Law 109–58);

1 “(B) the lease, easement, or right-of-way—

2 “(i) is for the placement and oper-
3 ation of a meteorological or marine data
4 collection facility; and

5 “(ii) has a term of not more than 5
6 years; or

7 “(C) the Secretary determines, after pro-
8 viding public notice of a proposed lease, ease-
9 ment, or right-of-way, that no competitive inter-
10 est exists.”; and

11 (3) by adding at the end the following:

12 “(11) CLARIFICATION.—

13 “(A) IN GENERAL.—Subject to subpara-
14 graph (B), the Federal Energy Regulatory
15 Commission shall not have authority to approve
16 or license a wave or current energy project on
17 the outer Continental Shelf under part I of the
18 Federal Power Act (16 U.S.C. 792 et seq.)

19 “(B) TRANSMISSION OF POWER.—Sub-
20 paragraph (A) shall not affect any authority of
21 the Commission with respect to the trans-
22 mission of power generated from a project de-
23 scribed in subparagraph (A).”.

24 (b) CONSIDERATION OF CERTAIN REQUESTS FOR
25 AUTHORIZATION.—In considering a request for authoriza-

1 tion of a project pending before the Commission on the
2 outer Continental Shelf as of the date of enactment of this
3 Act, the Secretary of the Interior shall rely, to the max-
4 imum extent practicable, on the materials submitted to the
5 Commission before that date.

6 (c) SAVINGS PROVISION.—Nothing in this section or
7 an amendment made by this section requires the resubmis-
8 sion of any document that was previously submitted, or
9 the reauthorization of any action that was previously au-
10 thorized, with respect to a project on the outer Continental
11 Shelf, for which a preliminary permit was issued by the
12 Commission before the date of enactment of this Act.

13 **Subtitle G—Marine and**
14 **Hydrokinetic Renewable Energy**
15 **Promotion**

16 **SEC. 291. DEFINITION OF MARINE AND HYDROKINETIC RE-**
17 **NEWABLE ENERGY.**

18 (a) IN GENERAL.—In this subtitle, the term “marine
19 and hydrokinetic renewable energy” means electrical en-
20 ergy from—

21 (1) waves, tides, and currents in oceans, estu-
22 aries, and tidal areas;

23 (2) free flowing water in rivers, lakes, and
24 streams;

1 (3) free flowing water in man-made channels,
2 including projects that utilize nonmechanical struc-
3 tures to accelerate the flow of water for electric
4 power production purposes; and

5 (4) differentials in ocean temperature (ocean
6 thermal energy conversion).

7 (b) EXCLUSION.—Except as provided in subsection
8 (a)(3), the term “marine and hydrokinetic renewable en-
9 ergy” does not include energy from any source that uses
10 a dam, diversionary structure, or impoundment for electric
11 power purposes.

12 **SEC. 292. RESEARCH AND DEVELOPMENT.**

13 (a) PROGRAM.—The Secretary, in consultation with
14 the Secretary of Commerce and the Secretary of the Inte-
15 rior, shall establish a program of marine and hydrokinetic
16 renewable energy research, including—

17 (1) developing and demonstrating marine and
18 hydrokinetic renewable energy technologies;

19 (2) reducing the manufacturing and operation
20 costs of marine and hydrokinetic renewable energy
21 technologies;

22 (3) increasing the reliability and survivability of
23 marine and hydrokinetic renewable energy facilities;

24 (4) integrating marine and hydrokinetic renew-
25 able energy into electric grids;

1 (5) identifying opportunities for cross fertiliza-
2 tion and development of economies of scale between
3 offshore wind and marine and hydrokinetic renew-
4 able energy sources;

5 (6) identifying, in conjunction with the Sec-
6 retary of Commerce and the Secretary of the Inte-
7 rior, the potential environmental impacts of marine
8 and hydrokinetic renewable energy technologies and
9 measures to minimize or prevent adverse impacts,
10 and technologies and other means available for mon-
11 itoring and determining environmental impacts;

12 (7) identifying, in conjunction with the Com-
13 mandant of the United States Coast Guard, the po-
14 tential navigational impacts of marine and
15 hydrokinetic renewable energy technologies and
16 measures to minimize or prevent adverse impacts;

17 (8) standards development, demonstration, and
18 technology transfer for advanced systems engineer-
19 ing and system integration methods to identify crit-
20 ical interfaces; and

21 (9) providing public information and oppor-
22 tunity for public comment concerning all tech-
23 nologies.

24 (b) REPORT.—Not later than 18 months after the
25 date of enactment of this Act, the Secretary, in consulta-

1 tion with the Secretary of Commerce and the Secretary
2 of the Interior, shall provide to the appropriate committees
3 of Congress a report that addresses—

4 (1) the potential environmental impacts of
5 hydrokinetic renewable energy technologies in free-
6 flowing water in rivers, lakes, and streams;

7 (2) the means by which to minimize or prevent
8 any adverse environmental impacts;

9 (3) the potential role of monitoring and adapt-
10 ive management in addressing any adverse environ-
11 mental impacts; and

12 (4) the necessary components of such an adapt-
13 ive management program.

14 (c) **AUTHORIZATION OF APPROPRIATIONS.**—There
15 are authorized to be appropriated to the Secretary to carry
16 out this section \$50,000,000 for each of the fiscal years
17 2008 through 2017.

18 **SEC. 293. NATIONAL OCEAN ENERGY RESEARCH CENTERS.**

19 (a) **IN GENERAL.**—Subject to the availability of ap-
20 propriations under subsection (e), the Secretary shall es-
21 tablish not less than 1, and not more than 6, national
22 ocean energy research centers at institutions of higher
23 education for the purpose of conducting research, develop-
24 ment, demonstration, and testing of ocean energy tech-
25 nologies and associated equipment.

1 (b) EVALUATIONS.—Each Center shall (in consulta-
2 tion with developers, utilities, and manufacturers) conduct
3 evaluations of technologies and equipment described in
4 subsection (a).

5 (c) LOCATION.—In establishing centers under this
6 section, the Secretary shall locate the centers in coastal
7 regions of the United State in a manner that, to the max-
8 imum extent practicable, is geographically dispersed.

9 (d) COORDINATION.—Prior to carrying out any activ-
10 ity under this section in waters subject to the jurisdiction
11 of the United States, the Secretary shall identify, in con-
12 junction with the Secretary of Commerce and the Sec-
13 retary of Interior, the potential environmental impacts of
14 such activity and measures to minimize or prevent adverse
15 impacts.

16 (e) AUTHORIZATION OF APPROPRIATIONS.—There
17 are authorized to be appropriate such sums as are nec-
18 essary to carry out this section.

19 **TITLE III—CARBON CAPTURE**
20 **AND STORAGE RESEARCH,**
21 **DEVELOPMENT, AND DEM-**
22 **ONSTRATION**

23 **SEC. 301. SHORT TITLE.**

24 This title may be cited as the “Carbon Capture and
25 Sequestration Act of 2007”.

1 **SEC. 302. CARBON CAPTURE AND STORAGE RESEARCH, DE-**
2 **VELOPMENT, AND DEMONSTRATION PRO-**
3 **GRAM.**

4 Section 963 of the Energy Policy Act of 2005 (42
5 U.S.C. 16293) is amended—

6 (1) in the section heading, by striking “**RE-**
7 **SEARCH AND DEVELOPMENT**” and inserting
8 **“AND STORAGE RESEARCH, DEVELOPMENT,**
9 **AND DEMONSTRATION”**;

10 (2) in subsection (a)—

11 (A) by striking “research and develop-
12 ment” and inserting “and storage research, de-
13 velopment, and demonstration”; and

14 (B) by striking “capture technologies on
15 combustion-based systems” and inserting “cap-
16 ture and storage technologies related to energy
17 systems”;

18 (3) in subsection (b)—

19 (A) in paragraph (3), by striking “and” at
20 the end;

21 (B) in paragraph (4), by striking the pe-
22 riod at the end and inserting “; and”; and

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

24 “(5) to expedite and carry out large-scale test-
25 ing of carbon sequestration systems in a range of ge-
26 ological formations that will provide information on

1 the cost and feasibility of deployment of sequestra-
2 tion technologies.”; and

3 (4) by striking subsection (c) and inserting the
4 following:

5 “(c) PROGRAMMATIC ACTIVITIES.—

6 “(1) ENERGY RESEARCH AND DEVELOPMENT
7 UNDERLYING CARBON CAPTURE AND STORAGE
8 TECHNOLOGIES AND CARBON USE ACTIVITIES.—

9 “(A) IN GENERAL.—The Secretary shall
10 carry out fundamental science and engineering
11 research (including laboratory-scale experi-
12 ments, numeric modeling, and simulations) to
13 develop and document the performance of new
14 approaches to capture and store, recycle, or
15 reuse carbon dioxide.

16 “(B) PROGRAM INTEGRATION.—The Sec-
17 retary shall ensure that fundamental research
18 carried out under this paragraph is appro-
19 priately applied to energy technology develop-
20 ment activities, the field testing of carbon se-
21 questration, and carbon use activities, includ-
22 ing—

23 “(i) development of new or improved
24 technologies for the capture and storage of
25 carbon dioxide;

1 “(ii) development of new or improved
2 technologies that reduce the cost and in-
3 crease the efficacy of advanced compres-
4 sion of carbon dioxide required for the
5 storage of carbon dioxide;

6 “(iii) modeling and simulation of geo-
7 logical sequestration field demonstrations;

8 “(iv) quantitative assessment of risks
9 relating to specific field sites for testing of
10 sequestration technologies;

11 “(v) research and development of new
12 and improved technologies for—

13 “(I) carbon use, including recy-
14 cling and reuse of carbon dioxide; and

15 “(II) the containment of carbon
16 dioxide in the form of solid materials
17 or products derived from a gasifi-
18 cation technology that does not in-
19 volve geologic containment or injec-
20 tion; and

21 “(vi) research and development of new
22 and improved technologies for oxygen sepa-
23 ration from air.

24 “(2) FIELD VALIDATION TESTING ACTIVI-
25 TIES.—

1 “(A) IN GENERAL.—The Secretary shall
2 promote, to the maximum extent practicable,
3 regional carbon sequestration partnerships to
4 conduct geologic sequestration tests involving
5 carbon dioxide injection and monitoring, mitiga-
6 tion, and verification operations in a variety of
7 candidate geological settings, including—

8 “(i) operating oil and gas fields;

9 “(ii) depleted oil and gas fields;

10 “(iii) unmineable coal seams;

11 “(iv) deep saline formations;

12 “(v) deep geological systems that may
13 be used as engineered reservoirs to extract
14 economical quantities of heat from geo-
15 thermal resources of low permeability or
16 porosity;

17 “(vi) deep geologic systems containing
18 basalt formations; and

19 “(vii) coal-bed methane recovery.

20 “(B) OBJECTIVES.—The objectives of tests
21 conducted under this paragraph shall be—

22 “(i) to develop and validate geo-
23 physical tools, analysis, and modeling to
24 monitor, predict, and verify carbon dioxide
25 containment;

1 “(ii) to validate modeling of geological
2 formations;

3 “(iii) to refine storage capacity esti-
4 mated for particular geological formations;

5 “(iv) to determine the fate of carbon
6 dioxide concurrent with and following in-
7 jection into geological formations;

8 “(v) to develop and implement best
9 practices for operations relating to, and
10 monitoring of, injection and storage of car-
11 bon dioxide in geologic formations;

12 “(vi) to assess and ensure the safety
13 of operations related to geological storage
14 of carbon dioxide; and

15 “(vii) to allow the Secretary to pro-
16 mulgate policies, procedures, requirements,
17 and guidance to ensure that the objectives
18 of this subparagraph are met in large-scale
19 testing and deployment activities for car-
20 bon capture and storage that are funded
21 by the Department of Energy.

22 “(3) LARGE-SCALE TESTING AND DEPLOY-
23 MENT.—

24 “(A) IN GENERAL.—The Secretary shall
25 conduct not less than 7 initial large-volume se-

1 questration tests involving at least 1,000,000
2 tons of carbon dioxide per year for geological
3 containment of carbon dioxide (at least 1 of
4 which shall be international in scope) to collect
5 and validate information on the cost and feasi-
6 bility of commercial deployment of technologies
7 for geological containment of carbon dioxide.

8 “(B) DIVERSITY OF FORMATIONS TO BE
9 STUDIED.—In selecting formations for study
10 under this paragraph, the Secretary shall con-
11 sider a variety of geological formations across
12 the United States, and require characterization
13 and modeling of candidate formations, as deter-
14 mined by the Secretary.

15 “(4) PREFERENCE IN PROJECT SELECTION
16 FROM MERITORIOUS PROPOSALS.—In making com-
17 petitive awards under this subsection, subject to the
18 requirements of section 989, the Secretary shall give
19 preference to proposals from partnerships among in-
20 dustrial, academic, and government entities.

21 “(5) COST SHARING.—Activities under this sub-
22 section shall be considered research and development
23 activities that are subject to the cost-sharing re-
24 quirements of section 988(b).

1 “(6) PROGRAM REVIEW AND REPORT.—During
2 fiscal year 2011, the Secretary shall—

3 “(A) conduct a review of programmatic ac-
4 tivities carried out under this subsection; and

5 “(B) make recommendations with respect
6 to continuation of the activities.

7 “(d) AUTHORIZATION OF APPROPRIATIONS.—There
8 are authorized to be appropriated to carry out this sec-
9 tion—

10 “(1) \$150,000,000 for fiscal year 2008;

11 “(2) \$200,000,000 for fiscal year 2009;

12 “(3) \$200,000,000 for fiscal year 2010;

13 “(4) \$180,000,000 for fiscal year 2011; and

14 “(5) \$165,000,000 for fiscal year 2012.”.

15 **SEC. 303. CARBON DIOXIDE STORAGE CAPACITY ASSESS-**
16 **MENT.**

17 (a) DEFINITIONS.—In this section

18 (1) ASSESSMENT.—The term “assessment”
19 means the national assessment of capacity for car-
20 bon dioxide completed under subsection (f).

21 (2) CAPACITY.—The term “capacity” means the
22 portion of a storage formation that can retain car-
23 bon dioxide in accordance with the requirements (in-
24 cluding physical, geological, and economic require-

1 ments) established under the methodology developed
2 under subsection (b).

3 (3) ENGINEERED HAZARD.—The term “engi-
4 neered hazard” includes the location and completion
5 history of any well that could affect potential stor-
6 age.

7 (4) RISK.—The term “risk” includes any risk
8 posed by geomechanical, geochemical,
9 hydrogeological, structural, and engineered hazards.

10 (5) SECRETARY.—The term “Secretary” means
11 the Secretary of the Interior, acting through the Di-
12 rector of the United States Geological Survey.

13 (6) STORAGE FORMATION.—The term “storage
14 formation” means a deep saline formation,
15 unmineable coal seam, or oil or gas reservoir that is
16 capable of accommodating a volume of industrial
17 carbon dioxide.

18 (b) METHODOLOGY.—Not later than 1 year after the
19 date of enactment of this Act, the Secretary shall develop
20 a methodology for conducting an assessment under sub-
21 section (f), taking into consideration—

22 (1) the geographical extent of all potential stor-
23 age formations in all States;

24 (2) the capacity of the potential storage forma-
25 tions;

1 (3) the injectivity of the potential storage for-
2 mations;

3 (4) an estimate of potential volumes of oil and
4 gas recoverable by injection and storage of industrial
5 carbon dioxide in potential storage formations;

6 (5) the risk associated with the potential stor-
7 age formations; and

8 (6) the work done to develop the Carbon Se-
9 questration Atlas of the United States and Canada
10 that was completed by the Department of Energy.

11 (c) COORDINATION.—

12 (1) FEDERAL COORDINATION.—

13 (A) CONSULTATION.—The Secretary shall
14 consult with the Secretary of Energy and the
15 Administrator of the Environmental Protection
16 Agency on issues of data sharing, format, devel-
17 opment of the methodology, and content of the
18 assessment required under this title to ensure
19 the maximum usefulness and success of the as-
20 sessment.

21 (B) COOPERATION.—The Secretary of En-
22 ergy and the Administrator shall cooperate with
23 the Secretary to ensure, to the maximum extent
24 practicable, the usefulness and success of the
25 assessment.

1 (2) STATE COORDINATION.—The Secretary
2 shall consult with State geological surveys and other
3 relevant entities to ensure, to the maximum extent
4 practicable, the usefulness and success of the assess-
5 ment.

6 (d) EXTERNAL REVIEW AND PUBLICATION.—On
7 completion of the methodology under subsection (b), the
8 Secretary shall—

9 (1) publish the methodology and solicit com-
10 ments from the public and the heads of affected
11 Federal and State agencies;

12 (2) establish a panel of individuals with exper-
13 tise in the matters described in paragraphs (1)
14 through (5) of subsection (b) composed, as appro-
15 priate, of representatives of Federal agencies, insti-
16 tutions of higher education, nongovernmental organi-
17 zations, State organizations, industry, and inter-
18 national geoscience organizations to review the
19 methodology and comments received under para-
20 graph (1); and

21 (3) on completion of the review under para-
22 graph (2), publish in the Federal Register the re-
23 vised final methodology.

24 (e) PERIODIC UPDATES.—The methodology devel-
25 oped under this section shall be updated periodically (in-

1 cluding at least once every 5 years) to incorporate new
2 data as the data becomes available.

3 (f) NATIONAL ASSESSMENT.—

4 (1) IN GENERAL.—Not later than 2 years after
5 the date of publication of the methodology under
6 subsection (d)(1), the Secretary, in consultation with
7 the Secretary of Energy and State geological sur-
8 veys, shall complete a national assessment of capac-
9 ity for carbon dioxide in accordance with the meth-
10 odology.

11 (2) GEOLOGICAL VERIFICATION.—As part of
12 the assessment under this subsection, the Secretary
13 shall carry out a drilling program to supplement the
14 geological data relevant to determining storage ca-
15 pacity of carbon dioxide in geological storage forma-
16 tions, including—

17 (A) well log data;

18 (B) core data; and

19 (C) fluid sample data.

20 (3) PARTNERSHIP WITH OTHER DRILLING PRO-
21 GRAMS.—As part of the drilling program under
22 paragraph (2), the Secretary shall enter, as appro-
23 priate, into partnerships with other entities to collect
24 and integrate data from other drilling programs rel-

1 evant to the storage of carbon dioxide in geologic
2 formations.

3 (4) INCORPORATION INTO NATCARB.—

4 (A) IN GENERAL.—On completion of the
5 assessment, the Secretary of Energy and the
6 Secretary of the Interior shall incorporate the
7 results of the assessment using—

8 (i) the NatCarb database, to the max-
9 imum extent practicable; or

10 (ii) a new database developed by the
11 Secretary of Energy, as the Secretary of
12 Energy determines to be necessary.

13 (B) RANKING.—The database shall include
14 the data necessary to rank potential storage
15 sites for capacity and risk, across the United
16 States, within each State, by formation, and
17 within each basin.

18 (5) REPORT.—Not later than 180 days after
19 the date on which the assessment is completed, the
20 Secretary shall submit to the Committee on Energy
21 and Natural Resources of the Senate and the Com-
22 mittee on Science and Technology of the House of
23 Representatives a report describing the findings
24 under the assessment.

1 (6) PERIODIC UPDATES.—The national assess-
2 ment developed under this section shall be updated
3 periodically (including at least once every 5 years) to
4 support public and private sector decisionmaking.

5 (g) AUTHORIZATION OF APPROPRIATIONS.—There is
6 authorized to be appropriated to carry out this section
7 \$30,000,000 for the period of fiscal years 2008 through
8 2012.

9 **SEC. 304. CARBON CAPTURE AND STORAGE INITIATIVE.**

10 (a) DEFINITIONS.—In this section:

11 (1) INDUSTRIAL SOURCES OF CARBON DIOX-
12 IDE.—The term “industrial sources of carbon diox-
13 ide” means one or more facilities to—

14 (A) generate electric energy from fossil
15 fuels;

16 (B) refine petroleum;

17 (C) manufacture iron or steel;

18 (D) manufacture cement or cement clinker;

19 (E) manufacture commodity chemicals (in-
20 cluding from coal gasification);

21 (F) manufacture transportation fuels from
22 coal; or

23 (G) manufacture biofuels.

24 (2) SECRETARY.—The term “Secretary” means
25 the Secretary of Energy.

1 (b) PROGRAM ESTABLISHMENT.—

2 (1) IN GENERAL.—The Secretary shall carry
3 out a program to demonstrate technologies for the
4 large-scale capture of carbon dioxide from industrial
5 sources of carbon dioxide.

6 (2) SCOPE OF AWARD.—An award under this
7 section shall be only for the portion of the project
8 that—

9 (A) carries out the large-scale capture (in-
10 cluding purification and compression) of carbon
11 dioxide;

12 (B) provides for the cost of transportation
13 and injection of carbon dioxide; and

14 (C) incorporates a comprehensive measure-
15 ment, monitoring, and validation program.

16 (3) QUALIFICATIONS FOR AWARD.—To be eligi-
17 ble for an award under this section, a project pro-
18 posal must include the following:

19 (A) CAPACITY.—The capture of not less
20 than eighty-five percent of the produced carbon
21 dioxide at the facility, and not less than
22 500,000 short tons of carbon dioxide per year.

23 (B) STORAGE AGREEMENT.—A binding
24 agreement for the storage of all of the captured
25 carbon dioxide in—

1 (i) a field testing validation activity
2 under section 963 of the Energy Policy Act
3 of 2005, as amended by this Act; or

4 (ii) other geological storage projects
5 approved by the Secretary.

6 (C) PURITY LEVEL.—A purity level of at
7 least 95 percent carbon dioxide by volume for
8 the captured carbon dioxide delivered for stor-
9 age.

10 (D) COMMITMENT TO CONTINUED OPER-
11 ATION OF SUCCESSFUL UNIT.—If the project
12 successfully demonstrates capture and storage
13 of carbon dioxide, a commitment to continued
14 capture and storage of carbon dioxide after the
15 conclusion of the demonstration.

16 (4) COST-SHARING.—The cost-sharing require-
17 ments of section 988 of the Energy Policy Act of
18 2005 shall apply to this section.

19 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
20 authorized to be appropriated to the Secretary to carry
21 out this section \$100,000,000 per year for fiscal years
22 2009 through 2013.

1 **SEC. 305. CAPITOL POWER PLANT CARBON DIOXIDE EMIS-**
2 **SIONS DEMONSTRATION PROGRAM.**

3 The first section of the Act of March 4, 1911 (2
4 U.S.C. 2162; 36 Stat. 1414, chapter 285), is amended in
5 the seventh undesignated paragraph (relating to the Cap-
6 itol power plant), under the heading “PUBLIC BUILD-
7 INGS”, under the heading “UNDER THE DEPARTMENT OF
8 THE INTERIOR”—

9 (1) by striking “ninety thousand dollars.” and
10 inserting “\$90,000.”; and

11 (2) by striking “*Provided*, That hereafter the”
12 and all that follows through the end of the proviso
13 and inserting the following:

14 “(a) DESIGNATION.—The heating, lighting, and
15 power plant constructed under the terms of the Act ap-
16 proved April 28, 1904 (33 Stat. 479, chapter 1762), shall
17 be known as the ‘Capitol power plant’, and all vacancies
18 occurring in the force operating that plant and the sub-
19 stations in connection with the plant shall be filled by the
20 Architect of the Capitol, with the approval of the commis-
21 sion in control of the House Office Building appointed
22 under the first section of the Act of March 4, 1907 (2
23 U.S.C. 2001).

24 “(b) CAPITOL POWER PLANT CARBON DIOXIDE
25 EMISSIONS DEMONSTRATION PROGRAM.—

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

1 “(A) ADMINISTRATOR.—The term ‘Admin-
2 istrator’ means the Administrator of the Envi-
3 ronmental Protection Agency.

4 “(B) CARBON DIOXIDE ENERGY EFFI-
5 CIENCY.—The term ‘carbon dioxide energy effi-
6 ciency’, with respect to a project, means the
7 quantity of electricity used to power equipment
8 for carbon dioxide capture and storage or use.

9 “(C) PROGRAM.—The term ‘program’
10 means the competitive grant demonstration pro-
11 gram established under paragraph (2)(B).

12 “(2) ESTABLISHMENT OF PROGRAM.—

13 “(A) FEASIBILITY STUDY.—Not later than
14 180 days after the date of enactment of this
15 section, the Architect of the Capitol, in coopera-
16 tion with the Administrator, shall complete a
17 feasibility study evaluating the available meth-
18 ods to proceed with the project and program es-
19 tablished under this section, taking into consid-
20 eration—

21 “(i) the availability of carbon capture
22 technologies;

23 “(ii) energy conservation and carbon
24 reduction strategies; and

1 “(iii) security of operations at the
2 Capitol power plant.

3 “(B) COMPETITIVE GRANT PROGRAM.—
4 The Architect of the Capitol, in cooperation
5 with the Administrator, shall establish a com-
6 petitive grant demonstration program under
7 which the Architect of the Capitol shall, subject
8 to the availability of appropriations, provide to
9 eligible entities, as determined by the Architect
10 of the Capitol, in cooperation with the Adminis-
11 trator, grants to carry out projects to dem-
12 onstrate, during the 2-year period beginning on
13 the date of enactment of this subsection, the
14 capture and storage or use of carbon dioxide
15 emitted from the Capitol power plant as a re-
16 sult of burning coal.

17 “(3) REQUIREMENTS.—

18 “(A) PROVISION OF GRANTS.—

19 “(i) IN GENERAL.—The Architect of
20 the Capitol, in cooperation with the Ad-
21 ministrators, shall provide the grants under
22 the program on a competitive basis.

23 “(ii) FACTORS FOR CONSIDER-
24 ATION.—In providing grants under the
25 program, the Architect of the Capitol, in

1 cooperation with the Administrator, shall
2 take into consideration—

3 “(I) the practicability of conver-
4 sion by the proposed project of carbon
5 dioxide into useful products, such as
6 transportation fuel;

7 “(II) the carbon dioxide energy
8 efficiency of the proposed project; and

9 “(III) whether the proposed
10 project is able to reduce more than 1
11 air pollutant regulated under this Act.

12 “(B) REQUIREMENTS FOR ENTITIES.—An
13 entity that receives a grant under the program
14 shall—

15 “(i) use to carry out the project of the
16 entity a technology designed to reduce or
17 eliminate emission of carbon dioxide that is
18 in existence on the date of enactment of
19 this subsection that has been used—

20 “(I) by not less than 3 other fa-
21 cilities (including a coal-fired power
22 plant); and

23 “(II) on a scale of not less than
24 5 times the size of the proposed

1 project of the entity at the Capitol
2 power plant; and

3 “(ii) carry out the project of the enti-
4 ty in consultation with, and with the con-
5 currence of, the Architect of the Capitol
6 and the Administrator.

7 “(C) CONSISTENCY WITH CAPITOL POWER
8 PLANT MODIFICATIONS.—The Architect of the
9 Capitol may require changes to a project under
10 the program that are necessary to carry out any
11 modifications to be made to the Capitol power
12 plant.

13 “(4) INCENTIVE.—In addition to the grant
14 under this subsection, the Architect of the Capitol
15 may provide to an entity that receives such a grant
16 an incentive award in an amount equal to not more
17 than \$50,000, of which—

18 “(A) \$15,000 shall be provided after the
19 project of the entity has sustained operation for
20 a period of 100 days, as determined by the Ar-
21 chitect of the Capitol;

22 “(B) \$15,000 shall be provided after the
23 project of the entity has sustained operation for
24 a period of 200 days, as determined by the Ar-
25 chitect of the Capitol; and

1 “(C) \$20,000 shall be provided after the
2 project of the entity has sustained operation for
3 a period of 300 days, as determined by the Ar-
4 chitect of the Capitol.

5 “(5) TERMINATION.—The program shall termi-
6 nate on the date that is 2 years after the date of en-
7 actment of this subsection.

8 “(6) AUTHORIZATION OF APPROPRIATIONS.—
9 There is authorized to be appropriated to carry out
10 the program \$3,000,000.”.

11 **SEC. 306. ASSESSMENT OF CARBON SEQUESTRATION AND**
12 **METHANE AND NITROUS OXIDE EMISSIONS**
13 **FROM TERRESTRIAL ECOSYSTEMS.**

14 (a) DEFINITIONS.—In this section:

15 (1) ADAPTATION STRATEGY.—The term “adap-
16 tation strategy” means a land use and management
17 strategy that can be used to increase the sequestra-
18 tion capabilities of any terrestrial ecosystem.

19 (2) ASSESSMENT.—The term “assessment”
20 means the national assessment authorized under
21 subsection (b).

22 (3) COVERED GREENHOUSE GAS.—The term
23 “covered greenhouse gas” means carbon dioxide, ni-
24 trous oxide, and methane gas.

1 (4) NATIVE PLANT SPECIES.—The term “native
2 plant species” means any noninvasive, naturally oc-
3 ccurring plant species within a terrestrial ecosystem.

4 (5) SECRETARY.—The term “Secretary” means
5 the Secretary of the Interior.

6 (6) FEDERAL LAND.—The term “Federal land”
7 means—

8 (A) land of the National Forest System (as
9 defined in section 11(a) of the Forest and
10 Rangeland Renewable Resources Planning Act
11 of 1974 (16 U.S.C. 1609(a))) administered by
12 the Secretary of Agriculture, acting through the
13 Chief of the Forest Service; and

14 (B) public lands (as defined in section 103
15 of the Federal Land Policy and Management
16 Act of 1976 (43 U.S.C. 1702)), the surface of
17 which is administered by the Secretary of the
18 Interior, acting through the Director of the Bu-
19 reau of Land Management.

20 (7) TERRESTRIAL ECOSYSTEM.—

21 (A) IN GENERAL.—The term “terrestrial
22 ecosystem” means any ecological and surficial
23 geological system on Federal land.

24 (B) INCLUSIONS.—The term “terrestrial
25 ecosystem” includes—

- 1 (i) forest land;
- 2 (ii) grassland; and
- 3 (iii) freshwater aquatic ecosystems.

4 (b) AUTHORIZATION OF ASSESSMENT.—Not later
5 than 2 years after the date on which the final methodology
6 is published under subsection (f)(3)(D), the Secretary
7 shall complete a national assessment of—

8 (1) the quantity of carbon stored in and re-
9 leased from terrestrial ecosystems; including from
10 man-caused and natural fires; and

11 (2) the annual flux of covered greenhouse gases
12 in and out of terrestrial ecosystems.

13 (c) COMPONENTS.—In conducting the assessment
14 under subsection (b), the Secretary shall—

15 (1) determine the processes that control the
16 flux of covered greenhouse gases in and out of each
17 terrestrial ecosystem;

18 (2) estimate the technical and economic poten-
19 tial for increasing carbon sequestration in natural
20 and managed terrestrial ecosystems through man-
21 agement activities or restoration activities in each
22 terrestrial ecosystem;

23 (3) develop near-term and long-term adaptation
24 strategies or mitigation strategies that can be em-
25 ployed—

1 (A) to enhance the sequestration of carbon
2 in each terrestrial ecosystem;

3 (B) to reduce emissions of covered green-
4 house gases; and

5 (C) to adapt to climate change; and

6 (4) estimate annual carbon sequestration capac-
7 ity of terrestrial ecosystems under a range of policies
8 in support of management activities to optimize se-
9 questration.

10 (d) USE OF NATIVE PLANT SPECIES.—In developing
11 restoration activities under subsection (c)(2) and manage-
12 ment strategies and adaptation strategies under sub-
13 section (c)(3), the Secretary shall emphasize the use of
14 native plant species (including mixtures of many native
15 plant species) for sequestering covered greenhouse gas in
16 each terrestrial ecosystem.

17 (e) CONSULTATION.—In conducting the assessment
18 under subsection (b) and developing the methodology
19 under subsection (f), the Secretary shall consult with—

20 (1) the Secretary of Energy;

21 (2) the Secretary of Agriculture;

22 (3) the Administrator of the Environmental
23 Protection Agency;

24 (4) the heads of other relevant agencies;

1 (5) consortia based at institutions of higher
2 education and with research corporations; and

3 (6) Federal forest and grassland managers.

4 (f) METHODOLOGY.—

5 (1) IN GENERAL.—Not later than 1 year after
6 the date of enactment of this Act, the Secretary
7 shall develop a methodology for conducting the as-
8 sessment.

9 (2) REQUIREMENTS.—The methodology devel-
10 oped under paragraph (1)—

11 (A) shall—

12 (i) determine the method for meas-
13 uring, monitoring, quantifying, and mone-
14 tizing covered greenhouse gas emissions
15 and reductions, including methods for allo-
16 cating and managing offsets or credits;
17 and

18 (ii) estimate the total capacity of each
19 terrestrial ecosystem to—

20 (I) sequester carbon; and

21 (II) reduce emissions of covered
22 greenhouse gases; and

23 (B) may employ economic and other sys-
24 tems models, analyses, and estimations, to be

1 developed in consultation with each of the indi-
2 viduals described in subsection (e).

3 (3) EXTERNAL REVIEW AND PUBLICATION.—

4 On completion of a proposed methodology, the Sec-
5 retary shall—

6 (A) publish the proposed methodology;

7 (B) at least 60 days before the date on
8 which the final methodology is published, solicit
9 comments from—

10 (i) the public; and

11 (ii) heads of affected Federal and
12 State agencies;

13 (C) establish a panel to review the pro-
14 posed methodology published under subpara-
15 graph (A) and any comments received under
16 subparagraph (B), to be composed of mem-
17 bers—

18 (i) with expertise in the matters de-
19 scribed in subsections (c) and (d); and

20 (ii) that are, as appropriate, rep-
21 resentatives of Federal agencies, institu-
22 tions of higher education, nongovernmental
23 organizations, State organizations, indus-
24 try, and international organizations; and

1 (D) on completion of the review under sub-
2 paragraph (C), publish in the Federal register
3 the revised final methodology.

4 (g) ESTIMATE; REVIEW.—The Secretary shall—

5 (1) based on the assessment, prescribe the data,
6 information, and analysis needed to establish a sci-
7 entifically sound estimate of—

8 (A) the carbon sequestration capacity of
9 relevant terrestrial ecosystems;

10 (B) a national inventory of covered green-
11 house gas sources that is consistent with the in-
12 ventory prepared by the Environmental Protec-
13 tion Agency entitled the “Inventory of U.S.
14 Greenhouse Gas Emissions and Sinks: 1990–
15 2005”; and

16 (C) the willingness of covered greenhouse
17 gas emitters to pay to sequester the covered
18 greenhouse gases emitted by the applicable
19 emitters in designated terrestrial ecosystems;
20 and

21 (2) not later than 180 days after the date on
22 which the assessment is completed, submit to the
23 heads of applicable Federal agencies and the appro-
24 priate committees of Congress a report that de-
25 scribes the results of the assessment.

1 (h) DATA AND REPORT AVAILABILITY.—On comple-
2 tion of the assessment, the Secretary shall incorporate the
3 results of the assessment into a web-accessible database
4 for public use.

5 **SEC. 307. ABRUPT CLIMATE CHANGE RESEARCH PROGRAM.**

6 (a) ESTABLISHMENT OF PROGRAM.—The Secretary
7 of Commerce shall establish within the Office of Oceanic
8 and Atmospheric Research of the National Oceanic and
9 Atmospheric Administration, and shall carry out, a pro-
10 gram of scientific research on abrupt climate change.

11 (b) PURPOSES OF PROGRAM.—The purposes of the
12 program are as follows:

13 (1) To develop a global array of terrestrial and
14 oceanographic indicators of paleoclimate in order to
15 sufficiently identify and describe past instances of
16 abrupt climate change.

17 (2) To improve understanding of thresholds and
18 nonlinearities in geophysical systems related to the
19 mechanisms of abrupt climate change.

20 (3) To incorporate such mechanisms into ad-
21 vanced geophysical models of climate change.

22 (4) To test the output of such models against
23 an improved global array of records of past abrupt
24 climate changes.

1 (c) ABRUPT CLIMATE CHANGE DEFINED.—In this
2 section, the term “abrupt climate change” means a change
3 in the climate that occurs so rapidly or unexpectedly that
4 human or natural systems have difficulty adapting to the
5 climate as changed.

6 (d) AUTHORIZATION OF APPROPRIATIONS.—Of such
7 sums previously authorized, there is authorized to be ap-
8 propriated to the Department of Commerce for each of
9 fiscal years 2009 through 2014, to remain available until
10 expended, such sums as are necessary, not to exceed
11 \$10,000,000, to carry out the research program required
12 under this section.

13 **TITLE IV—COST-EFFECTIVE AND**
14 **ENVIRONMENTALLY SUSTAIN-**
15 **ABLE PUBLIC BUILDINGS**
16 **Subtitle A—Public Buildings Cost**
17 **Reduction**

18 **SEC. 401. SHORT TITLE.**

19 This subtitle may be cited as the “Public Buildings
20 Cost Reduction Act of 2007”.

21 **SEC. 402. COST-EFFECTIVE AND GEOTHERMAL HEAT PUMP**
22 **TECHNOLOGY ACCELERATION PROGRAM.**

23 (a) DEFINITION OF ADMINISTRATOR.—In this sec-
24 tion, the term “Administrator” means the Administrator
25 of General Services.

1 (b) ESTABLISHMENT.—

2 (1) IN GENERAL.—The Administrator shall es-
3 tablish a program to accelerate the use of more cost-
4 effective technologies and practices and geothermal
5 heat pumps at GSA facilities.

6 (2) REQUIREMENTS.—The program established
7 under this subsection shall—

8 (A) ensure centralized responsibility for
9 the coordination of cost reduction-related and
10 geothermal heat pump-related recommenda-
11 tions, practices, and activities of all relevant
12 Federal agencies;

13 (B) provide technical assistance and oper-
14 ational guidance to applicable tenants to
15 achieve the goal identified in subsection
16 (c)(2)(B)(ii); and

17 (C) establish methods to track the success
18 of Federal departments and agencies with re-
19 spect to that goal.

20 (c) ACCELERATED USE OF TECHNOLOGIES.—

21 (1) REVIEW.—

22 (A) IN GENERAL.—As part of the program
23 under this section, not later than 90 days after
24 the date of enactment of this Act, the Adminis-
25 trator shall conduct a review of—

1 (i) current use of cost-effective light-
2 ing technologies and geothermal heat
3 pumps in GSA facilities; and

4 (ii) the availability to managers of
5 GSA facilities of cost-effective lighting
6 technologies and geothermal heat pumps.

7 (B) REQUIREMENTS.—The review under
8 subparagraph (A) shall—

9 (i) examine the use of cost-effective
10 lighting technologies, geothermal heat
11 pumps, and other cost-effective tech-
12 nologies and practices by Federal agencies
13 in GSA facilities; and

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

20 (2) REPLACEMENT.—

21 (A) IN GENERAL.—As part of the program
22 under this section, not later than 180 days
23 after the date of enactment of this Act, the Ad-
24 ministrator shall establish, using available ap-
25 propriations, a cost-effective lighting technology

1 and geothermal heat pump technology accelera-
2 tion program to achieve maximum feasible re-
3 placement of existing lighting, heating, cooling
4 technologies with cost-effective lighting tech-
5 nologies and geothermal heat pump technologies
6 in each GSA facility.

7 (B) ACCELERATION PLAN TIMETABLE.—

8 (i) IN GENERAL.—To implement the
9 program established under subparagraph
10 (A), not later than 1 year after the date of
11 enactment of this Act, the Administrator
12 shall establish a timetable, including mile-
13 stones for specific activities needed to re-
14 place existing lighting, heating, cooling
15 technologies with cost-effective lighting
16 technologies and geothermal heat pump
17 technologies, to the maximum extent fea-
18 sible (including at the maximum rate fea-
19 sible), at each GSA facility.

20 (ii) GOAL.—The goal of the timetable
21 under clause (i) shall be to complete, using
22 available appropriations, maximum feasible
23 replacement of existing lighting, heating,
24 and cooling technologies with cost-effective
25 lighting technologies and geothermal heat

1 pump technologies by not later than the
2 date that is 5 years after the date of enact-
3 ment of this Act.

4 (d) GSA FACILITY TECHNOLOGIES AND PRAC-
5 TICES.—Not later than 180 days after the date of enact-
6 ment of this Act, and annually thereafter, the Adminis-
7 trator shall—

8 (1) ensure that a manager responsible for accel-
9 erating the use of cost-effective technologies and
10 practices and geothermal heat pump technologies is
11 designated for each GSA facility; and

12 (2) submit to Congress a plan, to be imple-
13 mented to the maximum extent feasible (including at
14 the maximum rate feasible) using available appro-
15 priations, by not later than the date that is 5 years
16 after the date of enactment of this Act, that—

17 (A) with respect to cost-effective tech-
18 nologies and practices—

19 (i) identifies the specific activities
20 needed to achieve a 20-percent reduction in
21 operational costs through the application
22 of cost-effective technologies and practices
23 from 2003 levels at GSA facilities by not
24 later than 5 years after the date of enact-
25 ment of this Act;

1 (ii) describes activities required and
2 carried out to estimate the funds necessary
3 to achieve the reduction described in clause
4 (i);

5 (B) includes an estimate of the funds nec-
6 essary to carry out this section;

7 (C) describes the status of the implementa-
8 tion of cost-effective technologies and practices
9 and geothermal heat pump technologies and
10 practices at GSA facilities, including—

11 (i) the extent to which programs, in-
12 cluding the program established under sub-
13 section (b), are being carried out in ac-
14 cordance with this subtitle; and

15 (ii) the status of funding requests and
16 appropriations for those programs;

17 (D) identifies within the planning, budg-
18 eting, and construction processes, all types of
19 GSA facility-related procedures that inhibit new
20 and existing GSA facilities from implementing
21 cost-effective technologies or geothermal heat
22 pump technologies;

23 (E) recommends language for uniform
24 standards for use by Federal agencies in imple-
25 menting cost-effective technologies and prac-

1 tices and geothermal heat pump technologies
2 and practices;

3 (F) in coordination with the Office of Man-
4 agement and Budget, reviews the budget proc-
5 ess for capital programs with respect to alter-
6 natives for—

7 (i) permitting Federal agencies to re-
8 tain all identified savings accrued as a re-
9 sult of the use of cost-effective technologies
10 and geothermal heat pump technologies;
11 and

12 (ii) identifying short- and long-term
13 cost savings that accrue from the use of
14 cost-effective technologies and practices
15 and geothermal heat pump technologies
16 and practices;

17 (G)(i) with respect to geothermal heat
18 pump technologies, achieves substantial oper-
19 ational cost savings through the application of
20 the technologies; and

21 (ii) with respect to cost-effective tech-
22 nologies and practices, achieves cost savings
23 through the application of cost-effective tech-
24 nologies and practices sufficient to pay the in-
25 cremental additional costs of installing the cost-

1 effective technologies and practices by not later
2 than the date that is 5 years after the date of
3 installation; and

4 (H) includes recommendations to address
5 each of the matters, and a plan for implementa-
6 tion of each recommendation, described in sub-
7 paragraphs (A) through (G).

8 (e) AUTHORIZATION OF APPROPRIATIONS.—There
9 are authorized to be appropriated such sums as are nec-
10 essary to carry out this section, to remain available until
11 expended.

12 **SEC. 403. ENVIRONMENTAL PROTECTION AGENCY DEM-**
13 **ONSTRATION GRANT PROGRAM FOR LOCAL**
14 **GOVERNMENTS.**

15 (a) GRANT PROGRAM.—

16 (1) IN GENERAL.—The Administrator of the
17 Environmental Protection Agency (referred to in
18 this section as the “Administrator”) shall establish
19 a demonstration program under which the Adminis-
20 trator shall provide competitive grants to assist local
21 governments (such as municipalities and counties),
22 with respect to local government buildings—

23 (A) to deploy cost-effective technologies
24 and practices; and

1 (B) to achieve operational cost savings,
2 through the application of cost-effective tech-
3 nologies and practices, as verified by the Ad-
4 ministrator.

5 (2) COST SHARING.—

6 (A) IN GENERAL.—The Federal share of
7 the cost of an activity carried out using a grant
8 provided under this section shall be 40 percent.

9 (B) WAIVER OF NON-FEDERAL SHARE.—
10 The Administrator may waive up to 100 per-
11 cent of the local share of the cost of any grant
12 under this section should the Administrator de-
13 termine that the community is economically dis-
14 tressed, pursuant to objective economic criteria
15 established by the Administrator in published
16 guidelines.

17 (3) MAXIMUM AMOUNT.—The amount of a
18 grant provided under this subsection shall not exceed
19 \$1,000,000.

20 (b) GUIDELINES.—

21 (1) IN GENERAL.—Not later than 1 year after
22 the date of enactment of this Act, the Administrator
23 shall issue guidelines to implement the grant pro-
24 gram established under subsection (a).

1 (2) REQUIREMENTS.—The guidelines under
2 paragraph (1) shall establish—

3 (A) standards for monitoring and
4 verification of operational cost savings through
5 the application of cost-effective technologies and
6 practices reported by grantees under this sec-
7 tion;

8 (B) standards for grantees to implement
9 training programs, and to provide technical as-
10 sistance and education, relating to the retrofit
11 of buildings using cost-effective technologies
12 and practices; and

13 (C) a requirement that each local govern-
14 ment that receives a grant under this section
15 shall achieve facility-wide cost savings, through
16 renovation of existing local government build-
17 ings using cost-effective technologies and prac-
18 tices, of at least 40 percent as compared to the
19 baseline operational costs of the buildings be-
20 fore the renovation (as calculated assuming a 3-
21 year, weather-normalized average).

22 (c) COMPLIANCE WITH STATE AND LOCAL LAW.—

23 Nothing in this section or any program carried out using
24 a grant provided under this section supersedes or other-
25 wise affects any State or local law, to the extent that the

1 State or local law contains a requirement that is more
2 stringent than the relevant requirement of this section.

3 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
4 authorized to be appropriated to carry out this section
5 \$20,000,000 for each of fiscal years 2007 through 2012.

6 (e) REPORTS.—

7 (1) IN GENERAL.—The Administrator shall pro-
8 vide annual reports to Congress on cost savings
9 achieved and actions taken and recommendations
10 made under this section, and any recommendations
11 for further action.

12 (2) FINAL REPORT.—The Administrator shall
13 issue a final report at the conclusion of the program,
14 including findings, a summary of total cost savings
15 achieved, and recommendations for further action.

16 (f) TERMINATION.—The program under this section
17 shall terminate on September 30, 2012.

18 **SEC. 404. DEFINITIONS.**

19 In this subtitle:

20 (1) COST-EFFECTIVE LIGHTING TECH-
21 NOLOGY.—

22 (A) IN GENERAL.—The term “cost-effec-
23 tive lighting technology” means a lighting tech-
24 nology that—

1 (i) will result in substantial oper-
2 ational cost savings by ensuring an in-
3 stalled consumption of not more than 1
4 watt per square foot; or

5 (ii) is contained in a list under—

6 (I) section 553 of Public Law
7 95–619 (42 U.S.C. 8259b); and

8 (II) Federal acquisition regula-
9 tion 23–203.

10 (B) INCLUSIONS.—The term “cost-effec-
11 tive lighting technology” includes—

12 (i) lamps;

13 (ii) ballasts;

14 (iii) luminaires;

15 (iv) lighting controls;

16 (v) daylighting; and

17 (vi) early use of other highly cost-ef-
18 fective lighting technologies.

19 (2) COST-EFFECTIVE TECHNOLOGIES AND
20 PRACTICES.—The term “cost-effective technologies
21 and practices” means a technology or practice
22 that—

23 (A) will result in substantial operational
24 cost savings by reducing utility costs; and

1 (B) complies with the provisions of section
2 553 of Public Law 95–619 (42 U.S.C. 8259b)
3 and Federal acquisition regulation 23–203.

4 (3) OPERATIONAL COST SAVINGS.—

5 (A) IN GENERAL.—The term “operational
6 cost savings” means a reduction in end-use
7 operational costs through the application of
8 cost-effective technologies and practices or geo-
9 thermal heat pumps, including a reduction in
10 electricity consumption relative to consumption
11 by the same customer or at the same facility in
12 a given year, as defined in guidelines promul-
13 gated by the Administrator pursuant to section
14 403(b), that achieves cost savings sufficient to
15 pay the incremental additional costs of using
16 cost-effective technologies and practices or geo-
17 thermal heat pumps by not later than—

18 (i) for cost-effective technologies and
19 practices, the date that is 5 years after the
20 date of installation; and

21 (ii) for geothermal heat pumps, as
22 soon as practical after the date of installa-
23 tion of the applicable geothermal heat
24 pump.

1 (B) INCLUSIONS.—The term “operational
2 cost savings” includes savings achieved at a fa-
3 cility as a result of—

4 (i) the installation or use of cost-effec-
5 tive technologies and practices; or

6 (ii) the planting of vegetation that
7 shades the facility and reduces the heating,
8 cooling, or lighting needs of the facility.

9 (C) EXCLUSION.—The term “operational
10 cost savings” does not include savings from
11 measures that would likely be adopted in the
12 absence of cost-effective technology and prac-
13 tices programs, as determined by the Adminis-
14 trator.

15 (4) GEOTHERMAL HEAT PUMP.—The term
16 “geothermal heat pump” means any heating or air
17 conditioning technology that—

18 (A) uses the ground or ground water as a
19 thermal energy source to heat, or as a thermal
20 energy sink to cool, a building; and

21 (B) meets the requirements of the Energy
22 Star program of the Environmental Protection
23 Agency applicable to geothermal heat pumps on
24 the date of purchase of the technology.

25 (5) GSA FACILITY.—

1 (A) IN GENERAL.—The term “GSA facil-
2 ity” means any building, structure, or facility,
3 in whole or in part (including the associated
4 support systems of the building, structure, or
5 facility) that—

6 (i) is constructed (including facilities
7 constructed for lease), renovated, or pur-
8 chased, in whole or in part, by the Admin-
9 istrator for use by the Federal Govern-
10 ment; or

11 (ii) is leased, in whole or in part, by
12 the Administrator for use by the Federal
13 Government—

14 (I) except as provided in sub-
15 clause (II), for a term of not less than
16 5 years; or

17 (II) for a term of less than 5
18 years, if the Administrator determines
19 that use of cost-effective technologies
20 and practices would result in the pay-
21 back of expenses.

22 (B) INCLUSION.—The term “GSA facility”
23 includes any group of buildings, structures, or
24 facilities described in subparagraph (A) (includ-
25 ing the associated energy-consuming support

1 systems of the buildings, structures, and facili-
2 ties).

3 (C) EXEMPTION.—The Administrator may
4 exempt from the definition of “GSA facility”
5 under this paragraph a building, structure, or
6 facility that meets the requirements of section
7 543(c) of Public Law 95–619 (42 U.S.C.
8 8253(c)).

9 **Subtitle B—Installation of Photo-**
10 **voltaic System at Department of**
11 **Energy Headquarters Building**

12 **SEC. 411. INSTALLATION OF PHOTOVOLTAIC SYSTEM AT**
13 **DEPARTMENT OF ENERGY HEADQUARTERS**
14 **BUILDING.**

15 (a) IN GENERAL.—The Administrator of General
16 Services shall install a photovoltaic system, as set forth
17 in the Sun Wall Design Project, for the headquarters
18 building of the Department of Energy located at 1000
19 Independence Avenue, Southwest, Washington, DC, com-
20 monly known as the Forrestal Building.

21 (b) FUNDING.—There shall be available from the
22 Federal Buildings Fund established by section 592 of title
23 40, United States Code, \$30,000,000 to carry out this sec-
24 tion. Such sums shall be derived from the unobligated bal-
25 ance of amounts made available from the Fund for fiscal

1 year 2007, and prior fiscal years, for repairs and alter-
2 ations and other activities (excluding amounts made avail-
3 able for the energy program). Such sums shall remain
4 available until expended.

5 (c) OBLIGATION OF FUNDS.—None of the funds
6 made available pursuant to subsection (b) may be obli-
7 gated prior to September 30, 2007.

8 **Subtitle C—High-Performance**
9 **Green Buildings**

10 **SEC. 421. SHORT TITLE.**

11 This subtitle may be cited as the “High-Performance
12 Green Buildings Act of 2007”.

13 **SEC. 422. FINDINGS AND PURPOSES.**

14 (a) FINDINGS.—Congress finds that—

15 (1) high-performance green buildings—

16 (A) reduce energy, water, and material re-
17 source use and the generation of waste;

18 (B) improve indoor environmental quality,
19 and protect indoor air quality by, for example,
20 using materials that emit fewer or no toxic
21 chemicals into the indoor air;

22 (C) improve thermal comfort;

23 (D) improve lighting and the acoustic envi-
24 ronment;

1 (E) improve the health and productivity of
2 individuals who live and work in the buildings;

3 (F) improve indoor and outdoor impacts of
4 the buildings on human health and the environ-
5 ment;

6 (G) increase the use of environmentally
7 preferable products, including biobased, recy-
8 cled, and nontoxic products with lower lifecycle
9 impacts; and

10 (H) increase opportunities for reuse of ma-
11 terials and for recycling;

12 (2) during the planning, design, and construc-
13 tion of a high-performance green building, the envi-
14 ronmental and energy impacts of building location
15 and site design, the minimization of energy and ma-
16 terials use, and the environmental impacts of the
17 building are considered;

18 (3) according to the United States Green Build-
19 ing Council, certified green buildings, as compared
20 to conventional buildings—

21 (A) use an average of 36 percent less total
22 energy (and in some cases up to 50 to 70 per-
23 cent less total energy);

24 (B) use 30 percent less water; and

1 (C) reduce waste costs, often by 50 to 90
2 percent;

3 (4) the benefits of high-performance green
4 buildings are important, because in the United
5 States, buildings are responsible for approximately—

6 (A) 39 percent of primary energy use;

7 (B) 12 percent of potable water use;

8 (C) 136,000,000 tons of building-related
9 construction and demolition debris;

10 (D) 70 percent of United States resource
11 consumption; and

12 (E) 70 percent of electricity consumption;

13 (5) green building certification programs can be
14 highly beneficial by disseminating up-to-date infor-
15 mation and expertise regarding high-performance
16 green buildings, and by providing third-party
17 verification of green building design, practices, and
18 materials, and other aspects of buildings; and

19 (6) a July 2006 study completed for the Gen-
20 eral Services Administration, entitled “Sustainable
21 Building Rating Systems Summary,” concluded
22 that—

23 (A) green building standards are an impor-
24 tant means to encourage better practices;

1 (B) the Leadership in Energy and Envi-
2 ronmental Design (LEED) standard for green
3 building certification is “currently the dominant
4 system in the United States market and is
5 being adapted to multiple markets worldwide”;
6 and

7 (C) there are other useful green building
8 certification or rating programs in various
9 stages of development and adoption, including
10 the Green Globes program and other rating sys-
11 tems.

12 (b) PURPOSES.—The purposes of this subtitle are—

13 (1) to encourage the Federal Government to act
14 as an example for State and local governments, the
15 private sector, and individuals by building high-per-
16 formance green buildings that reduce energy use and
17 environmental impacts;

18 (2) to establish an Office within the General
19 Services Administration, and a Green Building Advi-
20 sory Committee, to advance the goals of conducting
21 research and development and public outreach, and
22 to move the Federal Government toward construc-
23 tion of high-performance green buildings;

24 (3) to encourage States, local governments, and
25 school systems to site, build, renovate, and operate

1 high-performance green schools through the adop-
2 tion of voluntary guidelines for those schools, the
3 dissemination of grants, and the adoption of envi-
4 ronmental health plans and programs;

5 (4) to strengthen Federal leadership on high-
6 performance green buildings through the adoption of
7 incentives for high-performance green buildings, and
8 improved green procurement by Federal agencies;
9 and

10 (5) to demonstrate that high-performance green
11 buildings can and do provide significant benefits, in
12 order to encourage wider adoption of green building
13 practices, through the adoption of demonstration
14 projects.

15 **SEC. 423. DEFINITIONS.**

16 In this subtitle:

17 (1) ADMINISTRATOR.—The term “Adminis-
18 trator” means the Administrator of General Serv-
19 ices.

20 (2) COMMITTEE.—The term “Committee”
21 means the Green Building Advisory Committee es-
22 tablished under section 433(a).

23 (3) DIRECTOR.—The term “Director” means
24 the individual appointed to the position established
25 under section 431(a).

1 (4) FEDERAL FACILITY.—

2 (A) IN GENERAL.—The term “Federal fa-
3 cility” means any building or facility the in-
4 tended use of which requires the building or fa-
5 cility to be—

6 (i) accessible to the public; and

7 (ii) constructed or altered by or on be-
8 half of the United States.

9 (B) EXCLUSIONS.—The term “Federal fa-
10 cility” does not include a privately-owned resi-
11 dential or commercial structure that is not
12 leased by the Federal Government.

13 (5) HIGH-PERFORMANCE GREEN BUILDING.—

14 The term “high-performance green building” means
15 a building—

16 (A) that, during its life-cycle—

17 (i) reduces energy, water, and mate-
18 rial resource use and the generation of
19 waste;

20 (ii) improves indoor environmental
21 quality, including protecting indoor air
22 quality during construction, using low-
23 emitting materials, improving thermal
24 comfort, and improving lighting and acous-

1 tie environments that affect occupant
2 health and productivity;

3 (iii) improves indoor and outdoor im-
4 pacts of the building on human health and
5 the environment;

6 (iv) increases the use of environ-
7 mentally preferable products, including
8 biobased, recycled content, and nontoxic
9 products with lower life-cycle impacts;

10 (v) increases reuse and recycling op-
11 portunities; and

12 (vi) integrates systems in the building;

13 and

14 (B) for which, during its planning, design,
15 and construction, the environmental and energy
16 impacts of building location and site design are
17 considered.

18 (6) LIFE CYCLE.—The term “life cycle”, with
19 respect to a high-performance green building, means
20 all stages of the useful life of the building (including
21 components, equipment, systems, and controls of the
22 building) beginning at conception of a green building
23 project and continuing through site selection, design,
24 construction, landscaping, commissioning, operation,

1 maintenance, renovation, deconstruction or demoli-
2 tion, removal, and recycling of the green building.

3 (7) LIFE-CYCLE ASSESSMENT.—The term “life-
4 cycle assessment” means a comprehensive system
5 approach for measuring the environmental perform-
6 ance of a product or service over the life of the prod-
7 uct or service, beginning at raw materials acquisition
8 and continuing through manufacturing, transpor-
9 tation, installation, use, reuse, and end-of-life waste
10 management.

11 (8) LIFE-CYCLE COSTING.—The term “life-cycle
12 costing”, with respect to a high-performance green
13 building, means a technique of economic evaluation
14 that—

15 (A) sums, over a given study period, the
16 costs of initial investment (less resale value), re-
17 placements, operations (including energy use),
18 and maintenance and repair of an investment
19 decision; and

20 (B) is expressed—

21 (i) in present value terms, in the case
22 of a study period equivalent to the longest
23 useful life of the building, determined by
24 taking into consideration the typical life of

1 such a building in the area in which the
2 building is to be located; or

3 (ii) in annual value terms, in the case
4 of any other study period.

5 (9) OFFICE.—The term “Office” means the Of-
6 fice of High-Performance Green Buildings estab-
7 lished under section 432(a).

8 **PART I—OFFICE OF HIGH-PERFORMANCE GREEN**
9 **BUILDINGS**

10 **SEC. 431. OVERSIGHT.**

11 (a) IN GENERAL.—The Administrator shall establish
12 within the General Services Administration, and appoint
13 an individual to serve as Director in, a position in the ca-
14 reer-reserved Senior Executive service, to—

15 (1) establish and manage the Office in accord-
16 ance with section 432; and

17 (2) carry out other duties as required under
18 this subtitle.

19 (b) COMPENSATION.—The compensation of the Di-
20 rector shall not exceed the maximum rate of basic pay for
21 the Senior Executive Service under section 5382 of title
22 5, United States Code, including any applicable locality-
23 based comparability payment that may be authorized
24 under section 5304(h)(2)(C) of that title.

1 **SEC. 432. OFFICE OF HIGH-PERFORMANCE GREEN BUILD-**
2 **INGS.**

3 (a) **ESTABLISHMENT.**—The Director shall establish
4 within the General Services Administration an Office of
5 High-Performance Green Buildings.

6 (b) **DUTIES.**—The Director shall—

7 (1) ensure full coordination of high-performance
8 green building information and activities within the
9 General Services Administration and all relevant
10 Federal agencies, including, at a minimum—

11 (A) the Environmental Protection Agency;

12 (B) the Office of the Federal Environ-
13 mental Executive;

14 (C) the Office of Federal Procurement Pol-
15 icy;

16 (D) the Department of Energy;

17 (E) the Department of Health and Human
18 Services;

19 (F) the Department of Defense; and

20 (G) such other Federal agencies as the Di-
21 rector considers to be appropriate;

22 (2) establish a senior-level green building advi-
23 sory committee, which shall provide advice and rec-
24 ommendations in accordance with section 433;

1 (3) identify and biennially reassess improved or
2 higher rating standards recommended by the Com-
3 mittee;

4 (4) establish a national high-performance green
5 building clearinghouse in accordance with section
6 434, which shall provide green building information
7 through—

8 (A) outreach;

9 (B) education; and

10 (C) the provision of technical assistance;

11 (5) ensure full coordination of research and de-
12 velopment information relating to high-performance
13 green building initiatives under section 435;

14 (6) identify and develop green building stand-
15 ards that could be used for all types of Federal fa-
16 cilities in accordance with section 435;

17 (7) establish green practices that can be used
18 throughout the life of a Federal facility;

19 (8) review and analyze current Federal budget
20 practices and life-cycle costing issues, and make rec-
21 ommendations to Congress, in accordance with sec-
22 tion 436; and

23 (9) complete and submit the report described in
24 subsection (c).

1 (c) REPORT.—Not later than 2 years after the date
2 of enactment of this Act, and biennially thereafter, the Di-
3 rector shall submit to Congress a report that—

4 (1) describes the status of the green building
5 initiatives under this subtitle and other Federal pro-
6 grams in effect as of the date of the report, includ-
7 ing—

8 (A) the extent to which the programs are
9 being carried out in accordance with this sub-
10 title; and

11 (B) the status of funding requests and ap-
12 propriations for those programs;

13 (2) identifies within the planning, budgeting,
14 and construction process all types of Federal facility
15 procedures that inhibit new and existing Federal fa-
16 cilities from becoming high-performance green build-
17 ings, as measured by the standard for high-perform-
18 ance green buildings identified in accordance with
19 subsection (d);

20 (3) identifies inconsistencies, as reported to the
21 Committee, in Federal law with respect to product
22 acquisition guidelines and high-performance product
23 guidelines;

1 (4) recommends language for uniform stand-
2 ards for use by Federal agencies in environmentally
3 responsible acquisition;

4 (5) in coordination with the Office of Manage-
5 ment and Budget, reviews the budget process for
6 capital programs with respect to alternatives for—

7 (A) restructuring of budgets to require the
8 use of complete energy- and environmental-cost
9 accounting;

10 (B) using operations expenditures in budg-
11 et-related decisions while simultaneously incor-
12 porating productivity and health measures (as
13 those measures can be quantified by the Office,
14 with the assistance of universities and national
15 laboratories);

16 (C) permitting Federal agencies to retain
17 all identified savings accrued as a result of the
18 use of life cycle costing; and

19 (D) identifying short- and long-term cost
20 savings that accrue from high-performance
21 green buildings, including those relating to
22 health and productivity;

23 (6) identifies green, self-sustaining technologies
24 to address the operational needs of Federal facilities

1 in times of national security emergencies, natural
2 disasters, or other dire emergencies;

3 (7) summarizes and highlights development, at
4 the State and local level, of green building initia-
5 tives, including Executive orders, policies, or laws
6 adopted promoting green building (including the sta-
7 tus of implementation of those initiatives); and

8 (8) includes, for the 2-year period covered by
9 the report, recommendations to address each of the
10 matters, and a plan for implementation of each rec-
11 ommendation, described in paragraphs (1) through
12 (6).

13 (d) IDENTIFICATION OF STANDARD.—

14 (1) IN GENERAL.—For the purpose of sub-
15 section (c)(2), not later than 60 days after the date
16 of enactment of this Act, the Director shall identify
17 a standard that the Director determines to be the
18 most likely to encourage a comprehensive and envi-
19 ronmentally-sound approach to certification of green
20 buildings.

21 (2) BASIS.—The standard identified under
22 paragraph (1) shall be based on—

23 (A) a biennial study, which shall be carried
24 out by the Director to compare and evaluate
25 standards;

1 (B) the ability and availability of assessors
2 and auditors to independently verify the criteria
3 and measurement of metrics at the scale nec-
4 essary to implement this subtitle;

5 (C) the ability of the applicable standard-
6 setting organization to collect and reflect public
7 comment;

8 (D) the ability of the standard to be devel-
9 oped and revised through a consensus-based
10 process;

11 (E) an evaluation of the adequacy of the
12 standard, which shall give credit for—

13 (i) efficient and sustainable use of
14 water, energy, and other natural resources;

15 (ii) use of renewable energy sources;

16 (iii) improved indoor environmental
17 quality through enhanced indoor air qual-
18 ity, thermal comfort, acoustics, day light-
19 ing, pollutant source control, and use of
20 low-emission materials and building system
21 controls; and

22 (iv) such other criteria as the Director
23 determines to be appropriate; and

24 (F) national recognition within the build-
25 ing industry.

1 (3) BIENNIAL REVIEW.—The Director shall—

2 (A) conduct a biennial review of the stand-
3 ard identified under paragraph (1); and

4 (B) include the results of each biennial re-
5 view in the report required to be submitted
6 under subsection (c).

7 (e) IMPLEMENTATION.—The Office shall carry out
8 each plan for implementation of recommendations under
9 subsection (c)(7).

10 **SEC. 433. GREEN BUILDING ADVISORY COMMITTEE.**

11 (a) ESTABLISHMENT.—Not later than 180 days after
12 the date of enactment of this Act, the Director shall estab-
13 lish an advisory committee, to be known as the “Green
14 Building Advisory Committee”.

15 (b) MEMBERSHIP.—

16 (1) IN GENERAL.—The Committee shall be
17 composed of representatives of, at a minimum—

18 (A) each agency referred to in section
19 432(b)(1); and

20 (B) other relevant agencies and entities, as
21 determined by the Director, including at least 1
22 representative of each of—

23 (i) State and local governmental green
24 building programs;

1 (ii) independent green building asso-
2 ciations or councils;

3 (iii) building experts, including archi-
4 tects, material suppliers, and construction
5 contractors;

6 (iv) security advisors focusing on na-
7 tional security needs, natural disasters,
8 and other dire emergency situations; and

9 (v) environmental health experts, in-
10 cluding those with experience in children's
11 health.

12 (2) NON-FEDERAL MEMBERS.—The total num-
13 ber of non-Federal members on the Committee at
14 any time shall not exceed 15.

15 (c) MEETINGS.—The Director shall establish a reg-
16 ular schedule of meetings for the Committee.

17 (d) DUTIES.—The Committee shall provide advice
18 and expertise for use by the Director in carrying out the
19 duties under this subtitle, including such recommenda-
20 tions relating to Federal activities carried out under sec-
21 tions 434 through 436 as are agreed to by a majority of
22 the members of the Committee.

23 (e) FACA EXEMPTION.—The Committee shall not be
24 subject to section 14 of the Federal Advisory Committee
25 Act (5 U.S.C. App.).

1 **SEC. 434. PUBLIC OUTREACH.**

2 The Director, in coordination with the Committee,
3 shall carry out public outreach to inform individuals and
4 entities of the information and services available Govern-
5 ment-wide by—

6 (1) establishing and maintaining a national
7 high-performance green building clearinghouse, in-
8 cluding on the Internet, that—

9 (A) identifies existing similar efforts and
10 coordinates activities of common interest; and

11 (B) provides information relating to high-
12 performance green buildings, including
13 hyperlinks to Internet sites that describe related
14 activities, information, and resources of—

15 (i) the Federal Government;

16 (ii) State and local governments;

17 (iii) the private sector (including non-
18 governmental and nonprofit entities and
19 organizations); and

20 (iv) other relevant organizations, in-
21 cluding those from other countries;

22 (2) identifying and recommending educational
23 resources for implementing high-performance green
24 building practices, including security and emergency
25 benefits and practices;

1 (3) providing access to technical assistance on
2 using tools and resources to make more cost-effec-
3 tive, energy-efficient, health-protective, and environ-
4 mentally beneficial decisions for constructing high-
5 performance green buildings, including tools avail-
6 able to conduct life-cycle costing and life-cycle as-
7 sessment;

8 (4) providing information on application proc-
9 esses for certifying a high-performance green build-
10 ing, including certification and commissioning;

11 (5) providing technical information, market re-
12 search, or other forms of assistance or advice that
13 would be useful in planning and constructing high-
14 performance green buildings; and

15 (6) using such other methods as are determined
16 by the Director to be appropriate.

17 **SEC. 435. RESEARCH AND DEVELOPMENT.**

18 (a) **ESTABLISHMENT.**—The Director, in coordination
19 with the Committee, shall—

20 (1)(A) survey existing research and studies re-
21 lating to high-performance green buildings; and

22 (B) coordinate activities of common interest;

23 (2) develop and recommend a high-performance
24 green building research plan that—

1 (A) identifies information and research
2 needs, including the relationships between
3 human health, occupant productivity, and each
4 of—

5 (i) emissions from materials and prod-
6 ucts in the building;

7 (ii) natural day lighting;

8 (iii) ventilation choices and tech-
9 nologies;

10 (iv) heating, cooling, and system con-
11 trol choices and technologies;

12 (v) moisture control and mold;

13 (vi) maintenance, cleaning, and pest
14 control activities;

15 (vii) acoustics; and

16 (viii) other issues relating to the
17 health, comfort, productivity, and perform-
18 ance of occupants of the building; and

19 (B) promotes the development and dissemi-
20 nation of high-performance green building
21 measurement tools that, at a minimum, may be
22 used—

23 (i) to monitor and assess the life-cycle
24 performance of facilities (including dem-

1 onstration projects) built as high-perform-
2 ance green buildings; and

3 (ii) to perform life-cycle assessments;

4 (3) assist the budget and life-cycle costing func-
5 tions of the Office under section 436;

6 (4) study and identify potential benefits of
7 green buildings relating to security, natural disaster,
8 and emergency needs of the Federal Government;
9 and

10 (5) support other research initiatives deter-
11 mined by the Office.

12 (b) INDOOR AIR QUALITY.—The Director, in con-
13 sultation with the Committee, shall develop and carry out
14 a comprehensive indoor air quality program for all Federal
15 facilities to ensure the safety of Federal workers and facil-
16 ity occupants—

17 (1) during new construction and renovation of
18 facilities; and

19 (2) in existing facilities.

20 **SEC. 436. BUDGET AND LIFE-CYCLE COSTING AND CON-**
21 **TRACTING.**

22 (a) ESTABLISHMENT.—The Director, in coordination
23 with the Committee, shall—

24 (1) identify, review, and analyze current budget
25 and contracting practices that affect achievement of

1 high-performance green buildings, including the
2 identification of barriers to green building life-cycle
3 costing and budgetary issues;

4 (2) develop guidance and conduct training ses-
5 sions with budget specialists and contracting per-
6 sonnel from Federal agencies and budget examiners
7 to apply life-cycle cost criteria to actual projects;

8 (3) identify tools to aid life-cycle cost decision-
9 making; and

10 (4) explore the feasibility of incorporating the
11 benefits of green buildings, such as security benefits,
12 into a cost-budget analysis to aid in life-cycle costing
13 for budget and decision making processes.

14 **SEC. 437. AUTHORIZATION OF APPROPRIATIONS.**

15 There is authorized to be appropriated to carry out
16 this part \$4,000,000 for each of fiscal years 2008 through
17 2012, to remain available until expended.

18 **PART II—HEALTHY HIGH-PERFORMANCE**

19 **SCHOOLS**

20 **SEC. 441. DEFINITION OF HIGH-PERFORMANCE SCHOOL.**

21 In this part, the term “high-performance school” has
22 the meaning given the term “healthy, high-performance
23 school building” in section 5586 of the Elementary and
24 Secondary Education Act of 1965 (20 U.S.C. 7277e).

1 **SEC. 442. GRANTS FOR HEALTHY SCHOOL ENVIRONMENTS.**

2 The Administrator of the Environmental Protection
3 Agency, in consultation with the Secretary of Education,
4 may provide grants to qualified State agencies for use in—

5 (1) providing technical assistance for programs
6 of the Environmental Protection Agency (including
7 the Tools for Schools Program and the Healthy
8 School Environmental Assessment Tool) to schools
9 for use in addressing environmental issues; and

10 (2) development of State school environmental
11 quality plans that include—

12 (A) standards for school building design,
13 construction, and renovation; and

14 (B) identification of ongoing school build-
15 ing environmental problems in the State and
16 recommended solutions to address those prob-
17 lems, including assessment of information on
18 the exposure of children to environmental haz-
19 ards in school facilities.

20 **SEC. 443. MODEL GUIDELINES FOR SITING OF SCHOOL FA-**
21 **CILITIES.**

22 The Administrator of the Environmental Protection
23 Agency, in consultation with the Secretary of Education
24 and the Secretary of Health and Human Services, shall
25 develop voluntary school site selection guidelines that ac-
26 count for—

1 (1) the special vulnerability of children to haz-
2 ardous substances or pollution exposures in any case
3 in which the potential for contamination at a poten-
4 tial school site exists;

5 (2) modes of transportation available to stu-
6 dents and staff;

7 (3) the efficient use of energy; and

8 (4) the potential use of a school at the site as
9 an emergency shelter.

10 **SEC. 444. PUBLIC OUTREACH.**

11 (a) IN GENERAL.—The Administrator of the Envi-
12 ronmental Protection Agency shall provide to the Director
13 information relating to all activities carried out under this
14 part, which the Director shall include in the report de-
15 scribed in section 432(c).

16 (b) PUBLIC OUTREACH.—The Director shall ensure,
17 to the maximum extent practicable, that the public clear-
18 inghouse established under section 434 receives and makes
19 available information on the exposure of children to envi-
20 ronmental hazards in school facilities, as provided by the
21 Administrator of the Environmental Protection Agency.

22 **SEC. 445. ENVIRONMENTAL HEALTH PROGRAM.**

23 (a) IN GENERAL.—The Administrator of the Envi-
24 ronmental Protection Agency, in consultation with the
25 Secretary of Education, the Secretary of Health and

1 Human Services, and other relevant agencies, shall issue
2 voluntary guidelines for use by the State in developing and
3 implementing an environmental health program for
4 schools that—

5 (1) takes into account the status and findings
6 of Federal research initiatives established under this
7 subtitle and other relevant Federal law with respect
8 to school facilities, including relevant updates on
9 trends in the field, such as the impact of school fa-
10 cility environments on student and staff—

11 (A) health, safety, and productivity; and

12 (B) disabilities or special needs;

13 (2) provides research using relevant tools iden-
14 tified or developed in accordance with section 435(a)
15 to quantify the relationships between—

16 (A) human health, occupant productivity,
17 and student performance; and

18 (B) with respect to school facilities, each
19 of—

20 (i) pollutant emissions from materials
21 and products;

22 (ii) natural day lighting;

23 (iii) ventilation choices and tech-
24 nologies;

1 (iv) heating and cooling choices and
2 technologies;

3 (v) moisture control and mold;

4 (vi) maintenance, cleaning, and pest
5 control activities;

6 (vii) acoustics; and

7 (viii) other issues relating to the
8 health, comfort, productivity, and perform-
9 ance of occupants of the school facilities;

10 (3) provides technical assistance on siting, de-
11 sign, management, and operation of school facilities,
12 including facilities used by students with disabilities
13 or special needs;

14 (4) collaborates with federally funded pediatric
15 environmental health centers to assist in on-site
16 school environmental investigations;

17 (5) assists States and the public in better un-
18 derstanding and improving the environmental health
19 of children; and

20 (6) provides to the Office a biennial report of
21 all activities carried out under this part, which the
22 Director shall include in the report described in sec-
23 tion 432(c).

24 (b) PUBLIC OUTREACH.—The Director shall ensure,
25 to the maximum extent practicable, that the public clear-

1 inghouse established under section 434 receives and makes
2 available—

3 (1) information from the Administrator of the
4 Environmental Protection Agency that is contained
5 in the report described in subsection (a)(6); and

6 (2) information on the exposure of children to
7 environmental hazards in school facilities, as pro-
8 vided by the Administrator of the Environmental
9 Protection Agency.

10 **SEC. 446. AUTHORIZATION OF APPROPRIATIONS.**

11 There is authorized to be appropriated to carry out
12 this part \$10,000,000 for the period of fiscal years 2008
13 through 2012, to remain available until expended.

14 **PART III—STRENGTHENING FEDERAL**
15 **LEADERSHIP**

16 **SEC. 451. INCENTIVES.**

17 As soon as practicable after the date of enactment
18 of this Act, the Director shall identify incentives to encour-
19 age the use of green buildings and related technology in
20 the operations of the Federal Government, including
21 through—

22 (1) the provision of recognition awards; and

23 (2) the maximum feasible retention of financial
24 savings in the annual budgets of Federal agencies.

1 **SEC. 452. FEDERAL PROCUREMENT.**

2 (a) IN GENERAL.—Not later than 2 years after the
3 date of enactment of this Act, the Director of the Office
4 of Federal Procurement Policy, in consultation with the
5 Director and the Under Secretary of Defense for Acquisi-
6 tion, Technology, and Logistics, shall promulgate revisions
7 of the applicable acquisition regulations, to take effect as
8 of the date of promulgation of the revisions—

9 (1) to direct any Federal procurement execu-
10 tives involved in the acquisition, construction, or
11 major renovation (including contracting for the con-
12 struction or major renovation) of any facility, to the
13 maximum extent practicable—

14 (A) to employ integrated design principles;

15 (B) to optimize building and systems en-
16 ergy performance;

17 (C) to protect and conserve water;

18 (D) to enhance indoor environmental qual-
19 ity; and

20 (E) to reduce environmental impacts of
21 materials and waste flows; and

22 (2) to direct Federal procurement executives in-
23 volved in leasing buildings, to give preference to the
24 lease of facilities that, to the maximum extent prac-
25 ticable—

26 (A) are energy-efficient; and

1 (B) have applied contemporary high-per-
2 formance and sustainable design principles dur-
3 ing construction or renovation.

4 (b) GUIDANCE.—Not later than 90 days after the
5 date of promulgation of the revised regulations under sub-
6 section (a), the Director shall issue guidance to all Federal
7 procurement executives providing direction and the option
8 to renegotiate the design of proposed facilities, renovations
9 for existing facilities, and leased facilities to incorporate
10 improvements that are consistent with this section.

11 **SEC. 453. FEDERAL GREEN BUILDING PERFORMANCE.**

12 (a) IN GENERAL.—Not later than October 31 of each
13 of the 2 fiscal years following the fiscal year in which this
14 Act is enacted, and at such times thereafter as the Comp-
15 troller General of the United States determines to be ap-
16 propriate, the Comptroller General of the United States
17 shall, with respect to the fiscal years that have passed
18 since the preceding report—

19 (1) conduct an audit of the implementation of
20 this subtitle; and

21 (2) submit to the Office, the Committee, the
22 Administrator, and Congress a report describing the
23 results of the audit.

1 (b) CONTENTS.—An audit under subsection (a) shall
2 include a review, with respect to the period covered by the
3 report under subsection (a)(2), of—

4 (1) budget, life-cycle costing, and contracting
5 issues, using best practices identified by the Comp-
6 troller General of the United States and heads of
7 other agencies in accordance with section 436;

8 (2) the level of coordination among the Office,
9 the Office of Management and Budget, and relevant
10 agencies;

11 (3) the performance of the Office in carrying
12 out the implementation plan;

13 (4) the design stage of high-performance green
14 building measures;

15 (5) high-performance building data that were
16 collected and reported to the Office; and

17 (6) such other matters as the Comptroller Gen-
18 eral of the United States determines to be appro-
19 priate.

20 (c) ENVIRONMENTAL STEWARDSHIP SCORECARD.—

21 The Director shall consult with the Committee to enhance,
22 and assist in the implementation of, the Environmental
23 Stewardship Scorecard announced at the White House
24 summit on Federal sustainable buildings in January 2006,

1 to measure the implementation by each Federal agency of
2 sustainable design and green building initiatives.

3 **SEC. 454. STORM WATER RUNOFF REQUIREMENTS FOR**
4 **FEDERAL DEVELOPMENT PROJECTS.**

5 The sponsor of any development or redevelopment
6 project involving a Federal facility with a footprint that
7 exceeds 5,000 square feet shall use site planning, design,
8 construction, and maintenance strategies for the property
9 to maintain, to the maximum extent technically feasible,
10 the predevelopment hydrology of the property with regard
11 to the temperature, rate, volume, and duration of flow.

12 **PART IV—DEMONSTRATION PROJECT**

13 **SEC. 461. COORDINATION OF GOALS.**

14 (a) IN GENERAL.—The Director shall establish
15 guidelines to implement a demonstration project to con-
16 tribute to the research goals of the Office.

17 (b) PROJECTS.—

18 (1) IN GENERAL.—In accordance with guide-
19 lines established by the Director under subsection
20 (a) and the duties of the Director described in part
21 I, the Director shall carry out 3 demonstration
22 projects.

23 (2) LOCATION OF PROJECTS.—Each project
24 carried out under paragraph (1) shall be located in

1 a Federal building in a State recommended by the
2 Director in accordance with subsection (c).

3 (3) REQUIREMENTS.—Each project carried out
4 under paragraph (1) shall—

5 (A) provide for the evaluation of the infor-
6 mation obtained through the conduct of projects
7 and activities under this subtitle; and

8 (B) achieve the highest available rating
9 under the standard identified pursuant to sec-
10 tion 432(d).

11 (c) CRITERIA.—With respect to the existing or pro-
12 posed Federal facility at which a demonstration project
13 under this section is conducted, the Federal facility
14 shall—

15 (1) be an appropriate model for a project relat-
16 ing to—

17 (A) the effectiveness of high-performance
18 technologies;

19 (B) analysis of materials, components, and
20 systems, including the impact on the health of
21 building occupants;

22 (C) life-cycle costing and life-cycle assess-
23 ment of building materials and systems; and

1 (D) location and design that promote ac-
2 cess to the Federal facility through walking,
3 biking, and mass transit; and

4 (2) possess sufficient technological and organi-
5 zational adaptability.

6 (d) REPORT.—Not later than 1 year after the date
7 of enactment of this Act, and annually thereafter through
8 September 30, 2013, the Director shall submit to the Ad-
9 ministrator a report that describes the status of and find-
10 ings regarding the demonstration project.

11 **SEC. 462. AUTHORIZATION OF APPROPRIATIONS.**

12 There is authorized to be appropriated to carry out
13 the Federal demonstration project described in section
14 461(b) \$10,000,000 for the period of fiscal years 2008
15 through 2012, to remain available until expended.

16 **TITLE V—CORPORATE AVERAGE**
17 **FUEL ECONOMY STANDARDS**

18 **SEC. 501. SHORT TITLE.**

19 This title may be cited as the “Ten-in-Ten Fuel
20 Economy Act”.

21 **SEC. 502. AVERAGE FUEL ECONOMY STANDARDS FOR**
22 **AUTOMOBILES AND CERTAIN OTHER VEHI-**
23 **CLES.**

24 (a) INCREASED STANDARDS.—Section 32902 of title
25 49, United States Code, is amended—

1 (1) by striking “NON-PASSENGER AUTO-
2 MOBILES.—” in subsection (a) and inserting “PRE-
3 SCRIPTION OF STANDARDS BY REGULATION.—”;

4 (2) by striking “(except passenger auto-
5 mobiles)” in subsection (a); and

6 (3) by striking subsection (b) and inserting the
7 following:

8 “(b) STANDARDS FOR AUTOMOBILES AND CERTAIN
9 OTHER VEHICLES.—

10 “(1) IN GENERAL.—The Secretary of Transpor-
11 tation, after consultation with the Administrator of
12 the Environmental Protection Agency, shall pre-
13 scribe average fuel economy standards for—

14 “(A) automobiles manufactured by manu-
15 facturers in each model year beginning with
16 model year 2011 in accordance with subsection
17 (c); and

18 “(B) commercial medium-duty or heavy-
19 duty on-highway vehicles in accordance with
20 subsection (k).

21 “(2) FUEL ECONOMY TARGET FOR AUTO-
22 MOBILES.—

23 “(A) AUTOMOBILE FUEL ECONOMY AVER-
24 AGE FOR MODEL YEARS 2011 THROUGH 2020.—

25 The Secretary shall prescribe average fuel econ-

1 omy standards for automobiles in each model
2 year beginning with model year 2011 to achieve
3 a combined fuel economy average for model
4 year 2020 of at least 35 miles per gallon for the
5 fleet of automobiles manufactured or sold in the
6 United States. The average fuel economy stand-
7 ards prescribed by the Secretary shall be the
8 maximum feasible average fuel economy stand-
9 ards for model years 2011 through 2019.

10 “(B) AUTOMOBILE FUEL ECONOMY AVER-
11 AGE FOR MODEL YEARS 2021 THROUGH 2030.—
12 For model years 2021 through 2030, the aver-
13 age fuel economy required to be attained by the
14 fleet of automobiles manufactured or sold in the
15 United States shall be the maximum feasible
16 average fuel economy standard for the fleet.

17 “(C) PROGRESS TOWARD STANDARD RE-
18 QUIRED.—In prescribing average fuel economy
19 standards under subparagraph (A), the Sec-
20 retary shall prescribe annual fuel economy
21 standard increases that increase the applicable
22 average fuel economy standard ratably begin-
23 ning with model year 2011 and ending with
24 model year 2020.”.

1 (b) FUEL ECONOMY TARGET FOR COMMERCIAL ME-
2 DIUM-DUTY AND HEAVY-DUTY ON-HIGHWAY VEHI-
3 CLES.—Section 32902 of title 49, United States Code, is
4 amended by adding at the end thereof the following:

5 “(k) COMMERCIAL MEDIUM- AND HEAVY-DUTY ON-
6 HIGHWAY VEHICLES.—

7 “(1) STUDY.—No later than 18 months after
8 the date of enactment of the Ten-in-Ten Fuel Econ-
9 omy Act, the Secretary of Transportation, in con-
10 sultation with the Secretary of Energy and the Ad-
11 ministrator of the Environmental Protection Agency,
12 shall examine the fuel efficiency of commercial
13 medium- and heavy-duty on-highway vehicles and
14 determine—

15 “(A) the appropriate test procedures and
16 methodologies for measuring commercial
17 medium- and heavy-duty on-highway vehicle
18 fuel efficiency;

19 “(B) the appropriate metric for measuring
20 and expressing commercial medium- and heavy-
21 duty on-highway vehicle fuel efficiency perform-
22 ance, taking into consideration, among other
23 things, the work performed by such on-highway
24 vehicles and types of operations in which they
25 are used;

1 “(C) the range of factors, including, with-
2 out limitation, design, functionality, use, duty
3 cycle, infrastructure, and total overall energy
4 consumption and operating costs that effect
5 commercial medium- and heavy-duty on-high-
6 way vehicle fuel efficiency; and

7 “(D) such other factors and conditions
8 that could have an impact on a program to im-
9 prove commercial medium- and heavy-duty on-
10 highway vehicle fuel efficiency.

11 “(2) RULEMAKING.—No later than 24 months
12 after completion of the study required by paragraph
13 (1), the Secretary, in consultation with the Secretary
14 of Energy and the Administrator of the Environ-
15 mental Protection Agency, by regulation, shall deter-
16 mine in a rulemaking procedure how to implement
17 a commercial medium- and heavy-duty on-highway
18 vehicle fuel efficiency improvement program de-
19 signed to achieve the maximum feasible improve-
20 ment, and shall adopt appropriate test methods,
21 measurement metrics, fuel economy standards, and
22 compliance and enforcement protocols that are ap-
23 propriate, cost-effective, and technologically feasible
24 for commercial medium- and heavy-duty on-highway
25 vehicles.

1 “(3) LEAD-TIME; REGULATORY STABILITY.—
2 Any commercial medium- and heavy-duty on-high-
3 way vehicle fuel efficiency regulatory program adopt-
4 ed pursuant to this subsection shall provide no less
5 than 4 full model years of regulatory lead-time and
6 3 full model years of regulatory stability.

7 “(4) COMMERCIAL MEDIUM- AND HEAVY-DUTY
8 ON-HIGHWAY VEHICLE DEFINED.—In this sub-
9 section, the term ‘commercial medium- and heavy-
10 duty on-highway vehicle’ means an on-highway vehi-
11 cle with a gross vehicle weight rating of more than
12 8,500 pounds, and that, in the case of a vehicle with
13 a gross vehicle weight rating of less than 10,000
14 pounds, is not an automobile.”.

15 (c) AUTHORITY OF SECRETARY.—Section 32902 of
16 title 49, United States Code, as amended by subsection
17 (b), is further amended by adding at the end thereof the
18 following:

19 “(1) AUTHORITY OF THE SECRETARY.—

20 “(1) VEHICLE ATTRIBUTES; MODEL YEARS COV-
21 ERED.—The Secretary shall—

22 “(A) prescribe by regulation average fuel
23 economy standards for automobiles based on ve-
24 hicle attributes related to fuel economy and to

1 express the standards in the form of a mathe-
2 matical function; and

3 “(B) issue regulations under this title pre-
4 scribing average fuel economy standards for 1
5 or more model years.

6 “(2) PROHIBITION OF UNIFORM PERCENTAGE
7 INCREASE.—When the Secretary prescribes a stand-
8 ard, or prescribes an amendment under this section
9 that changes a standard, the standard may not be
10 expressed as a uniform percentage increase from the
11 fuel-economy performance of attribute classes or cat-
12 egories already achieved in a model year by a manu-
13 facturer.”.

14 **SEC. 503. AMENDING FUEL ECONOMY STANDARDS.**

15 (a) IN GENERAL.—Section 32902(c) of title 49,
16 United States Code, is amended to read as follows:

17 “(c) AMENDING FUEL ECONOMY STANDARDS.—Not-
18 withstanding subsections (a) and (b), the Secretary of
19 Transportation—

20 “(1) may prescribe a standard higher than that
21 required under subsection (b); or

22 “(2) may prescribe an average fuel economy
23 standard for automobiles that is the maximum fea-
24 sible level for the model year, despite being lower
25 than the standard required under subsection (b), if

1 the Secretary determines, based on clear and con-
2 vincing evidence, that the average fuel economy
3 standard prescribed in accordance with subsections
4 (a) and (b) for automobiles in that model year is
5 shown not to be cost-effective.”.

6 (b) FEASIBILITY CRITERIA.—Section 32902(f) of
7 title 49, United States Code, is amended to read as fol-
8 lows:

9 “(f) DECISIONS ON MAXIMUM FEASIBLE AVERAGE
10 FUEL ECONOMY.—

11 “(1) IN GENERAL.—When deciding maximum
12 feasible average fuel economy under this section, the
13 Secretary shall consider—

14 “(A) economic practicability;

15 “(B) the effect of other motor vehicle
16 standards of the Government on fuel economy;

17 “(C) environmental impacts; and

18 “(D) the need of the United States to con-
19 serve energy.

20 “(2) LIMITATIONS.—In setting any standard
21 under subsection (b), (c), or (d), the Secretary shall
22 ensure that each standard is the highest standard
23 that—

24 “(A) is technologically achievable;

1 “(B) can be achieved without materially
2 reducing the overall safety of automobiles man-
3 ufactured or sold in the United States;

4 “(C) is not less than the standard for that
5 class of vehicles from any prior year; and

6 “(D) is cost-effective.

7 “(3) COST-EFFECTIVE DEFINED.—In this sub-
8 section, the term ‘cost-effective’ means that the
9 value to the United States of reduced fuel use from
10 a proposed fuel economy standard is greater than or
11 equal to the cost to the United States of such stand-
12 ard. In determining cost-effectiveness, the Secretary
13 shall give priority to those technologies and packages
14 of technologies that offer the largest reduction in
15 fuel use relative to their costs.

16 “(4) FACTORS FOR CONSIDERATION BY SEC-
17 RETARY IN DETERMINING COST-EFFECTIVENESS.—
18 The Secretary shall consult with the Administrator
19 of the Environmental Protection Agency, and may
20 consult with such other departments and agencies as
21 the Secretary deems appropriate, and shall consider
22 in the analysis the following factors:

23 “(A) Economic security.

24 “(B) The impact of the oil or energy inten-
25 sity of the United States economy on the sensi-

1 tivity of the economy to oil and other fuel price
2 changes, including the magnitude of gross do-
3 mestic product losses in response to short term
4 price shocks or long term price increases.

5 “(C) National security, including the im-
6 pact of United States payments for oil and
7 other fuel imports on political, economic, and
8 military developments in unstable or unfriendly
9 oil-exporting countries.

10 “(D) The uninternalized costs of pipeline
11 and storage oil seepage, and for risk of oil spills
12 from production, handling, and transport, and
13 related landscape damage.

14 “(E) The emissions of pollutants including
15 greenhouse gases over the lifecycle of the fuel
16 and the resulting costs to human health, the
17 economy, and the environment.

18 “(F) Such additional factors as the Sec-
19 retary deems relevant.

20 “(5) MINIMUM VALUATION.—When considering
21 the value to consumers of a gallon of gasoline saved,
22 the Secretary of Transportation shall use as a min-
23 imum value the greater of—

24 “(A) the average value of gasoline prices
25 projected by the Energy Information Adminis-

1 tration over the period covered by the standard;
2 or

3 “(B) the average value of gasoline prices
4 for the 5-year period immediately preceding the
5 year in which the standard is established.”.

6 (c) CONSULTATION REQUIREMENT.—Section
7 32902(i) of title 49, United States Code, is amended by
8 inserting “and the Administrator of the Environmental
9 Protection Agency” after “Energy”.

10 (d) COMMENTS.—Section 32902(j) of title 49, United
11 States Code, is amended—

12 (1) by striking paragraph (1) and inserting
13 “(1) Before issuing a notice proposing to prescribe
14 or amend an average fuel economy standard under
15 subsection (b), (c), or (g) of this section, the Sec-
16 retary of Transportation shall give the Secretary of
17 Energy and Administrator of the Environmental
18 Protection Agency at least 30 days after the receipt
19 of the notice during which the Secretary of Energy
20 and Administrator may, if the Secretary of Energy
21 or Administrator concludes that the proposed stand-
22 ard would adversely affect the conservation goals of
23 the Secretary of Energy or environmental protection
24 goals of the Administrator, provide written com-
25 ments to the Secretary of Transportation about the

1 impact of the standard on those goals. To the extent
2 the Secretary of Transportation does not revise a
3 proposed standard to take into account comments of
4 the Secretary of Energy or Administrator on any ad-
5 verse impact of the standard, the Secretary of
6 Transportation shall include those comments in the
7 notice.”; and

8 (2) by inserting “and the Administrator” after
9 “Energy” each place it appears in paragraph (2).

10 (e) ALTERNATIVE FUEL ECONOMY STANDARDS FOR
11 LOW VOLUME MANUFACTURERS AND NEW ENTRANTS.—
12 Section 32902(d) of title 49, United States Code, is
13 amended to read as follows:

14 “(d) ALTERNATIVE AVERAGE FUEL ECONOMY
15 STANDARD.—

16 “(1) IN GENERAL.—Upon the application of an
17 eligible manufacturer, the Secretary of Transpor-
18 tation may prescribe an alternative average fuel
19 economy standard for automobiles manufactured by
20 that manufacturer if the Secretary determines
21 that—

22 “(A) the applicable standard prescribed
23 under subsection (a), (b), or (c) is more strin-
24 gent than the maximum feasible average fuel

1 economy level that manufacturer can achieve;
2 and

3 “(B) the alternative average fuel economy
4 standard prescribed under this subsection is the
5 maximum feasible average fuel economy level
6 that manufacturer can achieve.

7 “(2) APPLICATION OF ALTERNATIVE STAND-
8 ARD.—The Secretary may provide for the applica-
9 tion of an alternative average fuel economy standard
10 prescribed under paragraph (1) to—

11 “(A) the manufacturer that applied for the
12 alternative average fuel economy standard;

13 “(B) all automobiles to which this sub-
14 section applies; or

15 “(C) classes of automobiles manufactured
16 by eligible manufacturers.

17 “(3) IMPORTERS.—Notwithstanding paragraph
18 (1), an importer registered under section 30141(c)
19 may not be exempted as a manufacturer under para-
20 graph (1) for an automobile that the importer—

21 “(A) imports; or

22 “(B) brings into compliance with applica-
23 ble motor vehicle safety standards prescribed
24 under chapter 301 for an individual described
25 in section 30142.

1 “(4) APPLICATION.—The Secretary of Trans-
2 portation may prescribe the contents of an applica-
3 tion for an alternative average fuel economy stand-
4 ard.

5 “(5) ELIGIBLE MANUFACTURER DEFINED.—In
6 this section, the term ‘eligible manufacturer’ means
7 a manufacturer that—

8 “(A) is not owned in whole or in part by
9 another manufacturer that sold greater than
10 0.5 percent of the number of automobiles sold
11 in the United States in the model year prior to
12 the model year to which the application relates;

13 “(B) sold in the United States fewer than
14 0.4 percent of the number of automobiles sold
15 in the United States in the model year that is
16 2 years before the model year to which the ap-
17 plication relates; and

18 “(C) will sell in the United States fewer
19 than 0.4 percent of the automobiles sold in the
20 United States for the model year for which the
21 alternative average fuel economy standard will
22 apply.

23 “(6) LIMITATION.—For purposes of this sub-
24 section, notwithstanding section 32901(a)(4), the
25 term ‘automobile manufactured by a manufacturer’

1 includes every automobile manufactured by a per-
2 son that controls, is controlled by, or is under com-
3 mon control with the manufacturer.”

4 (f) TECHNICAL AND CONFORMING AMENDMENTS.—

5 (1) Section 32902(d) of title 49, United States
6 Code, is amended by striking “passenger” each place
7 it appears.

8 (2) Section 32902(g) of title 49, United States
9 Code, is amended—

10 (A) by striking “subsection (a) or (d)”
11 each place it appears in paragraph (1) and in-
12 serting “subsection (b), (c), or (d)”; and

13 (B) striking “(and submit the amendment
14 to Congress when required under subsection
15 (c)(2) of this section)” in paragraph (2).

16 **SEC. 504. DEFINITIONS.**

17 (a) IN GENERAL.—Section 32901(a) of title 49,
18 United States Code, is amended—

19 (1) by striking paragraph (3) and inserting the
20 following:

21 “(3) except as provided in section 32908 of this
22 title, ‘automobile’ means a 4-wheeled vehicle that is
23 propelled by fuel, or by alternative fuel, manufac-
24 tured primarily for use on public streets, roads, and

1 highways and rated at not more than 10,000 pounds
2 gross vehicle weight, except—

3 “(A) a vehicle operated only on a rail line;

4 “(B) a vehicle manufactured by 2 or more
5 manufacturers in different stages and less than
6 10,000 of which are manufactured per year; or

7 “(C) a work truck.”; and

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

9 “(17) ‘work truck’ means an automobile that
10 the Secretary determines by regulation—

11 “(A) is rated at between 8,500 and 10,000
12 pounds gross vehicle weight; and

13 “(B) is not a medium-duty passenger vehi-
14 cle (as defined in section 86.1803–01 of title
15 40, Code of Federal Regulations).”.

16 (b) DEADLINE FOR REGULATIONS.—The Secretary
17 of Transportation—

18 (1) shall issue proposed regulations imple-
19 menting the amendments made by subsection (a) not
20 later than 1 year after the date of enactment of this
21 Act; and

22 (2) shall issue final regulations implementing
23 the amendments not later than 18 months after the
24 date of the enactment of this Act.

1 (c) EFFECTIVE DATE.—Regulations prescribed
2 under subsection (b) shall apply beginning with model year
3 2010.

4 **SEC. 505. ENSURING SAFETY OF AUTOMOBILES.**

5 (a) IN GENERAL.—Subchapter II of chapter 301 of
6 title 49, United States Code, is amended by adding at the
7 end the following:

8 **“§ 30129. Vehicle compatibility standard**

9 “(a) STANDARDS.—The Secretary of Transportation
10 shall issue a motor vehicle safety standard to reduce auto-
11 mobile incompatibility. The standard shall address charac-
12 teristics necessary to ensure better management of crash
13 forces in multiple vehicle frontal and side impact crashes
14 between different types, sizes, and weights of automobiles
15 with a gross vehicle weight of 10,000 pounds or less in
16 order to decrease occupant deaths and injuries.

17 “(b) CONSUMER INFORMATION.—The Secretary shall
18 develop and implement a public information side and fron-
19 tal compatibility crash test program with vehicle ratings
20 based on risks to occupants, risks to other motorists, and
21 combined risks by vehicle make and model.”.

22 (b) RULEMAKING DEADLINES.—

23 (1) RULEMAKING.—The Secretary of Transpor-
24 tation shall issue—

1 (A) a notice of a proposed rulemaking
2 under section 30129 of title 49, United States
3 Code, not later than January 1, 2012; and

4 (B) a final rule under such section not
5 later than December 31, 2014.

6 (2) EFFECTIVE DATE OF REQUIREMENTS.—
7 Any requirement imposed under the final rule issued
8 under paragraph (1) shall become fully effective not
9 later than September 1, 2018.

10 (c) CONFORMING AMENDMENT.—The chapter anal-
11 ysis for chapter 301 is amended by inserting after the item
12 relating to section 30128 the following:

“30129. Vehicle compatibility standard.”.

13 **SEC. 506. CREDIT TRADING PROGRAM.**

14 Section 32903 of title 49, United States Code, is
15 amended—

16 (1) by striking “passenger” each place it ap-
17 pears;

18 (2) by striking “section 32902(b)–(d) of this
19 title” each place it appears and inserting “sub-
20 section (a), (c), or (d) of section 32902”;

21 (3) by striking “3 consecutive model years” in
22 subsection (a)(2) and inserting “5 consecutive model
23 years”;

1 (4) in subsection (a)(2), by striking “clause (1)
2 of this subsection,” and inserting “paragraph (1)”;
3 and

4 (5) by striking subsection (e) and inserting the
5 following:

6 “(e) CREDIT TRADING AMONG MANUFACTURERS.—
7 The Secretary of Transportation may establish, by regula-
8 tion, a corporate average fuel economy credit trading pro-
9 gram to allow manufacturers whose automobiles exceed
10 the average fuel economy standards prescribed under sec-
11 tion 32902 to earn credits to be sold to manufacturers
12 whose automobiles fail to achieve the prescribed standards
13 such that the total oil savings associated with manufactur-
14 ers that exceed the prescribed standards are preserved
15 when transferring credits to manufacturers that fail to
16 achieve the prescribed standards.”.

17 **SEC. 507. LABELS FOR FUEL ECONOMY AND GREENHOUSE**
18 **GAS EMISSIONS.**

19 Section 32908 of title 49, United States Code, is
20 amended—

21 (1) by redesignating subparagraph (F) of sub-
22 section (b)(1) as subparagraph (H) and inserting
23 after subparagraph (E) the following:

24 “(F) a label (or a logo imprinted on a label re-
25 quired by this paragraph) that—

1 “(i) reflects an automobile’s performance
2 on the basis of criteria developed by the Admin-
3 istrator to reflect the fuel economy and green-
4 house gas and other emissions consequences of
5 operating the automobile over its likely useful
6 life;

7 “(ii) permits consumers to compare per-
8 formance results under clause (i) among all
9 automobiles; and

10 “(iii) is designed to encourage the manu-
11 facture and sale of automobiles that meet or ex-
12 ceed applicable fuel economy standards under
13 section 32902.

14 “(G) a fuelstar under paragraph (5).”; and
15 (2) by adding at the end of subsection (b) the
16 following:

17 “(4) GREEN LABEL PROGRAM.—

18 “(A) MARKETING ANALYSIS.—Not later than 2
19 years after the date of the enactment of the Ten-in-
20 Ten Fuel Economy Act, the Administrator shall im-
21 plement a consumer education program and execute
22 marketing strategies to improve consumer under-
23 standing of automobile performance described in
24 paragraph (1)(F).

1 “(B) ELIGIBILITY.—Not later than 3 years
2 after the date described in subparagraph (A), the
3 Administrator shall issue requirements for the label
4 or logo required under paragraph (1)(F) to ensure
5 that an automobile is not eligible for the label or
6 logo unless it—

7 “(i) meets or exceeds the applicable fuel
8 economy standard; or

9 “(ii) will have the lowest greenhouse gas
10 emissions over the useful life of the vehicle of
11 all vehicles in the vehicle attribute class to
12 which it belongs in that model year.

13 “(5) FUELSTAR PROGRAM.—

14 “(A) IN GENERAL.—The Secretary shall estab-
15 lish a program, to be known as the ‘Fuelstar Pro-
16 gram’, under which stars shall be imprinted on or
17 attached to the label required by paragraph (1).

18 “(B) GREEN STARS.—Under the Fuelstar Pro-
19 gram, a manufacturer may include on the label
20 maintained on an automobile under paragraph (1)—

21 “(i) 1 green star for any automobile that
22 meets the average fuel economy standard for
23 the model year under section 32902; and

1 “(ii) 1 additional green star for each 2
2 miles per gallon by which the automobile ex-
3 ceeds such standard.

4 “(C) GOLD STARS.—Under the Fuelstar Pro-
5 gram, a manufacturer may include a gold star on
6 the label maintained on an automobile under para-
7 graph (1) if the automobile attains a fuel economy
8 of at least 50 miles per gallon.”.

9 **SEC. 508. CONTINUED APPLICABILITY OF EXISTING STAND-**
10 **ARDS.**

11 Nothing in this title, or the amendments made by this
12 title, shall be construed to affect the application of section
13 32902 of title 49, United States Code, to passenger auto-
14 mobiles or non-passenger automobiles manufactured be-
15 fore model year 2011.

16 **SEC. 509. NATIONAL ACADEMY OF SCIENCES STUDIES.**

17 (a) IN GENERAL.—As soon as practicable after the
18 date of enactment of this Act, the Secretary of Transpor-
19 tation shall execute an agreement with the National Acad-
20 emy of Sciences to develop a report evaluating vehicle fuel
21 economy standards, including—

22 (1) an assessment of automotive technologies
23 and costs to reflect developments since the Acad-
24 emy’s 2002 report evaluating the corporate average
25 fuel economy standards was conducted;

1 (2) an analysis of existing and potential tech-
2 nologies that may be used practically to improve
3 automobile and medium-duty and heavy-duty truck
4 fuel economy;

5 (3) an analysis of how such technologies may be
6 practically integrated into the automotive and me-
7 dium-duty and heavy-duty truck manufacturing
8 process; and

9 (4) an assessment of how such technologies may
10 be used to meet the new fuel economy standards
11 under chapter 329 of title 49, United States Code,
12 as amended by this title.

13 (b) **QUINQUENNIAL UPDATES.**—After submitting the
14 initial report, the Academy shall update the report at 5
15 year intervals thereafter through 2025.

16 (c) **REPORT.**—The Academy shall submit the report
17 to the Secretary, the Senate Committee on Commerce,
18 Science, and Transportation and the House of Represent-
19 atives Committee on Energy and Commerce, with its find-
20 ings and recommendations no later than 18 months after
21 the date on which the Secretary executes the agreement
22 with the Academy.

1 **SEC. 510. STANDARDS FOR EXECUTIVE AGENCY AUTO-**
2 **MOBILES.**

3 (a) IN GENERAL.—Section 32917 of title 49, United
4 States Code, is amended to read as follows:

5 **“§ 32917. Standards for Executive Agency auto-**
6 **mobiles**

7 “(a) FUEL EFFICIENCY.—The head of an Executive
8 agency shall ensure that each new automobile procured by
9 the Executive agency is as fuel efficient as practicable.

10 “(b) DEFINITIONS.—In this section:

11 “(1) EXECUTIVE AGENCY.—The term ‘Execu-
12 tive agency’ has the meaning given that term in sec-
13 tion 105 of title 5.

14 “(2) NEW AUTOMOBILE.—The term ‘new auto-
15 mobile’, with respect to the fleet of automobiles of
16 an executive agency, means an automobile that is
17 leased for at least 60 consecutive days or bought, by
18 or for the Executive agency, after September 30,
19 2008. The term does not include any vehicle de-
20 signed for combat-related missions, law enforcement
21 work, or emergency rescue work.”.

22 (b) REPORT.—The Administrator of the General
23 Services Administration shall develop a report describing
24 and evaluating the efforts of the heads of the Executive
25 agencies to comply with section 32917 of title 49, United
26 States Code, for fiscal year 2009. The Administrator shall

1 submit the report to Congress no later than December 31,
2 2009.

3 **SEC. 511. INCREASING CONSUMER AWARENESS OF FLEXI-**
4 **BLE FUEL AUTOMOBILES.**

5 Section 32908 of title 49, United States Code, is
6 amended by adding at the end the following:

7 “(g) INCREASING CONSUMER AWARENESS OF FLEXI-
8 BLE FUEL AUTOMOBILES.—(1) The Secretary of Energy,
9 in consultation with the Secretary of Transportation, shall
10 prescribe regulations that require the manufacturer of
11 automobiles distributed in interstate commerce for sale in
12 the United States—

13 “(A) to prominently display a permanent badge
14 or emblem on the quarter panel or tailgate of each
15 such automobile that indicates such vehicle is capa-
16 ble of operating on alternative fuel; and

17 “(B) to include information in the owner’s man-
18 ual of each such automobile information that de-
19 scribes—

20 “(i) the capability of the automobile to op-
21 erate using alternative fuel;

22 “(ii) the benefits of using alternative fuel,
23 including the renewable nature, and the envi-
24 ronmental benefits of using alternative fuel; and

1 “(C) to contain a fuel tank cap that is clearly
2 labeled to inform consumers that the automobile is
3 capable of operating on alternative fuel.

4 “(2) The Secretary of Transportation shall collabo-
5 rate with automobile retailers to develop voluntary meth-
6 ods for providing prospective purchasers of automobiles
7 with information regarding the benefits of using alter-
8 native fuel in automobiles, including—

9 “(A) the renewable nature of alternative fuel;
10 and

11 “(B) the environmental benefits of using alter-
12 native fuel.”.

13 **SEC. 512. PERIODIC REVIEW OF ACCURACY OF FUEL ECON-**
14 **OMY LABELING PROCEDURES.**

15 Beginning in December, 2009, and not less often
16 than every 5 years thereafter, the Administrator of the
17 Environmental Protection Agency, in consultation with
18 the Secretary of Transportation, shall—

19 (1) reevaluate the fuel economy labeling proce-
20 dures described in the final rule published in the
21 Federal Register on December 27, 2006 (71 Fed.
22 Reg. 77,872; 40 C.F.R. parts 86 and 600) to deter-
23 mine whether changes in the factors used to estab-
24 lish the labeling procedures warrant a revision of
25 that process; and

1 consumers in making more educated tire pur-
2 chasing decisions;

3 “(B) requirements for providing informa-
4 tion to consumers, including information at the
5 point of sale and other potential information
6 dissemination methods, including the Internet;

7 “(C) specifications for test methods for
8 manufacturers to use in assessing and rating
9 tires to avoid variation among test equipment
10 and manufacturers; and

11 “(D) a national tire maintenance consumer
12 education program including, information on
13 tire inflation pressure, alignment, rotation, and
14 tread wear to maximize fuel efficiency.

15 “(3) APPLICABILITY.—This section shall not
16 apply to tires excluded from coverage under section
17 575.104(e)(2) of title 49, Code of Federal Regula-
18 tions, as in effect on date of enactment of the Ten-
19 in-Ten Fuel Economy Act.

20 “(b) CONSULTATION.—The Secretary shall consult
21 with the Secretary of Energy and the Administrator of
22 the Environmental Protection Agency on the means of
23 conveying tire fuel efficiency consumer information.

24 “(c) REPORT TO CONGRESS.—The Secretary shall
25 conduct periodic assessments of the rules promulgated

1 under this section to determine the utility of such rules
2 to consumers, the level of cooperation by industry, and the
3 contribution to national goals pertaining to energy con-
4 sumption. The Secretary shall transmit periodic reports
5 detailing the findings of such assessments to the Senate
6 Committee on Commerce, Science, and Transportation
7 and the House of Representatives Committee on Energy
8 and Commerce.

9 “(d) TIRE MARKING.—The Secretary shall not re-
10 quire permanent labeling of any kind on a tire for the pur-
11 pose of tire fuel efficiency information.

12 “(e) PREEMPTION.—When a requirement under this
13 section is in effect, a State or political subdivision of a
14 State may adopt or enforce a law or regulation on tire
15 fuel efficiency consumer information only if the law or reg-
16 ulation is identical to that requirement. Nothing in this
17 section shall be construed to preempt a State or political
18 subdivision of a State from regulating the fuel efficiency
19 of tires not otherwise preempted under this chapter.”.

20 (b) ENFORCEMENT.—Section 30165(a) of title 49,
21 United States Code, is amended by adding at the end the
22 following:

23 “(4) SECTION 30123a.—Any person who fails
24 to comply with the national tire fuel efficiency con-
25 sumer information program under section 30123A is

1 liable to the United States Government for a civil
2 penalty of not more than \$50,000 for each viola-
3 tion.”.

4 (c) Conforming Amendment.—The chapter analysis
5 for chapter 301 of title 49, United States Code, is amend-
6 ed by inserting after the item relating to section 30123
7 the following:

 “30123A. Tire fuel efficiency consumer information.”.

8 **SEC. 514. ADVANCED BATTERY INITIATIVE.**

9 (a) IN GENERAL.—The Secretary of Energy, in con-
10 sultation with the Secretary of Transportation, shall es-
11 tablish and carry out an Advanced Battery Initiative in
12 accordance with this section to support research, develop-
13 ment, demonstration, and commercial application of bat-
14 tery technologies.

15 (b) INDUSTRY ALLIANCE.—Not later than 180 days
16 after the date of enactment of this Act, the Secretary shall
17 competitively select an Industry Alliance to represent par-
18 ticipants who are private, for-profit firms headquartered
19 in the United States, the primary business of which is the
20 manufacturing of batteries.

21 (c) RESEARCH.—

22 (1) GRANTS.—The Secretary shall carry out re-
23 search activities of the Initiative through competi-
24 tively-awarded grants to—

1 (A) researchers, including Industry Alli-
2 ance participants;

3 (B) small businesses;

4 (C) National Laboratories; and

5 (D) institutions of higher education.

6 (2) INDUSTRY ALLIANCE.—The Secretary shall
7 annually solicit from the Industry Alliance—

8 (A) comments to identify advanced battery
9 technology and battery systems needs relevant
10 to—

11 (i) electric drive technology; and

12 (ii) other applications the Secretary
13 deems appropriate;

14 (B) an assessment of the progress of re-
15 search activities of the Initiative; and

16 (C) assistance in annually updating ad-
17 vanced battery technology and battery systems
18 roadmaps.

19 (d) AVAILABILITY TO THE PUBLIC.—The informa-
20 tion and roadmaps developed under this section shall be
21 available to the public.

22 (e) PREFERENCE.—In making awards under this
23 subsection, the Secretary shall give preference to partici-
24 pants in the Industry Alliance.

1 (f) COST SHARING.—In carrying out this section, the
2 Secretary shall require cost sharing in accordance with
3 section 120(b) of title 23, United States Code.

4 (g) AUTHORIZATION OF APPROPRIATIONS.—There
5 are authorized to be appropriated to carry out this section
6 such sums as may be necessary for each of fiscal years
7 2008 through 2012.

8 **SEC. 515. BIODIESEL STANDARDS.**

9 (a) IN GENERAL.—Not later than 180 days after the
10 date of enactment of this Act, the Administrator of the
11 Environmental Protection Agency, in consultation with
12 the Secretary of Transportation and the Secretary of En-
13 ergy, shall promulgate regulations to ensure that all diesel-
14 equivalent fuels derived from renewable biomass that are
15 introduced into interstate commerce are tested and cer-
16 tified to comply with appropriate American Society for
17 Testing and Materials standards.

18 (b) DEFINITIONS.—In this section:

19 (1) BIODIESEL.—

20 (A) IN GENERAL.—The term “biodiesel”
21 means the monoalkyl esters of long chain fatty
22 acids derived from plant or animal matter that
23 meet—

24 (i) the registration requirements for
25 fuels and fuel additives established by the

1 Environmental Protection Agency under
2 section 211 of the Clean Air Act (42
3 U.S.C. 7545); and

4 (ii) the requirements of the American
5 Society of Testing and Materials D6751.

6 (B) INCLUSIONS.—The term “biodiesel”
7 includes esters described in subparagraph (A)
8 derived from—

9 (i) animal waste, including poultry
10 fat, poultry waste, and other waste mate-
11 rial; and

12 (ii) municipal solid waste, sludge, and
13 oil derived from wastewater or the treat-
14 ment of wastewater.

15 (2) BIODIESEL BLEND.—The term “biodiesel
16 blend” means a mixture of biodiesel and diesel fuel,
17 including—

18 (A) a blend of biodiesel and diesel fuel ap-
19 proximately 5 percent of the content of which
20 is biodiesel (commonly known as “B5”); and

21 (B) a blend of biodiesel and diesel fuel ap-
22 proximately 20 percent of the content of which
23 is biodiesel (commonly known as “B20”).

1 **SEC. 516. USE OF CIVIL PENALTIES FOR RESEARCH AND**
2 **DEVELOPMENT.**

3 Section 32912 of title 49, United States Code, is
4 amended by adding at the end thereof the following:

5 “(e) USE OF CIVIL PENALTIES.—For fiscal year
6 2008 and each fiscal year thereafter, from the total
7 amount deposited in the general fund of the Treasury dur-
8 ing the preceding fiscal year from fines, penalties, and
9 other funds obtained through enforcement actions con-
10 ducted pursuant to this section (including funds obtained
11 under consent decrees), the Secretary of the Treasury,
12 subject to the availability of appropriations, shall—

13 “(1) transfer 50 percent of such total amount
14 to the account providing appropriations to the Sec-
15 retary of Transportation for the administration of
16 this chapter, which shall be used by the Secretary to
17 carry out a program of research and development
18 into fuel saving automotive technologies and to sup-
19 port rulemaking under this chapter; and

20 “(2) transfer 50 percent of such total amount
21 to the Energy Security Fund established by section
22 517(a) of the Ten-in-Ten Fuel Economy Act.”.

23 **SEC. 517. ENERGY SECURITY FUND AND ALTERNATIVE**
24 **FUEL GRANT PROGRAM.**

25 (a) ESTABLISHMENT OF FUND.—

1 (1) IN GENERAL.—There is established in the
2 Treasury a fund, to be known as the “Energy Secu-
3 rity Fund” (referred to in this section as the
4 “Fund”), consisting of—

5 (A) amounts transferred to the Fund
6 under section 32912(e)(2) of title 49, United
7 States Code; and

8 (B) amounts credited to the Fund under
9 paragraph (2)(C).

10 (2) INVESTMENT OF AMOUNTS.—

11 (A) IN GENERAL.—The Secretary of the
12 Treasury shall invest in interest-bearing obliga-
13 tions of the United States such portion of the
14 Fund as is not, in the judgment of the Sec-
15 retary of the Treasury, required to meet cur-
16 rent withdrawals.

17 (B) SALE OF OBLIGATIONS.—Any obliga-
18 tion acquired by the Fund may be sold by the
19 Secretary of the Treasury at the market price.

20 (C) CREDITS TO FUND.—The interest on,
21 and the proceeds from the sale or redemption
22 of, any obligations held in the Fund shall be
23 credited to, and form a part of, the Fund in ac-
24 cordance with section 9602 of the Internal Rev-
25 enue Code of 1986.

1 (3) USE OF AMOUNTS IN FUND.—Amounts in
2 the Fund shall be made available to the Secretary of
3 Energy, subject to the availability of appropriations,
4 to carry out the grant program under subsection (b).

5 (b) ALTERNATIVE FUELS GRANT PROGRAM.—

6 (1) IN GENERAL.—Not later than 90 days after
7 the date of enactment of this Act, the Secretary of
8 Energy, acting through the Clean Cities Program of
9 the Department of Energy, shall establish and carry
10 out a program under which the Secretary shall pro-
11 vide grants to expand the availability to consumers
12 of alternative fuels (as defined in section 32901(a)
13 of title 49, United States Code).

14 (2) ELIGIBILITY.—

15 (A) IN GENERAL.—Except as provided in
16 subparagraph (B), any entity that is eligible to
17 receive assistance under the Clean Cities Pro-
18 gram shall be eligible to receive a grant under
19 this subsection.

20 (B) EXCEPTIONS.—

21 (i) CERTAIN OIL COMPANIES.—A
22 large, vertically-integrated oil company
23 shall not be eligible to receive a grant
24 under this subsection.

1 (ii) PROHIBITION OF DUAL BENE-
2 FITS.—An entity that receives any other
3 Federal funds for the construction or ex-
4 pansion of alternative refueling infrastruc-
5 ture shall not be eligible to receive a grant
6 under this subsection for the construction
7 or expansion of the same alternative refuel-
8 ing infrastructure.

9 (C) ENSURING COMPLIANCE.—Not later
10 than 30 days after the date of enactment of
11 this Act, the Secretary of Energy shall promul-
12 gate regulations to ensure that, before receiving
13 a grant under this subsection, an eligible entity
14 meets applicable standards relating to the in-
15 stallation, construction, and expansion of infra-
16 structure necessary to increase the availability
17 to consumers of alternative fuels (as defined in
18 section 32901(a) of title 49, United States
19 Code).

20 (3) MAXIMUM AMOUNT.—

21 (A) GRANTS.—The amount of a grant pro-
22 vided under this subsection shall not exceed
23 \$30,000.

24 (B) AMOUNT PER STATION.—An eligible
25 entity shall receive not more than \$90,000

1 under this subsection for any station of the eli-
2 gible entity during a fiscal year.

3 (4) USE OF FUNDS.—

4 (A) IN GENERAL.—A grant provided under
5 this subsection shall be used for the construc-
6 tion or expansion of alternative fueling infra-
7 structure.

8 (B) ADMINISTRATIVE EXPENSES.—Not
9 more than 3 percent of the amount of a grant
10 provided under this subsection shall be used for
11 administrative expenses.

12 **SEC. 518. AUTHORIZATION OF APPROPRIATIONS.**

13 There are authorized to be appropriated to the Sec-
14 retary of Transportation \$25,000,000 for each of fiscal
15 years 2009 through 2021 to carry out the provisions of
16 chapter 329 of title 49, United States Code.

17 **SEC. 519. APPLICATION WITH CLEAN AIR ACT.**

18 Nothing in this title shall be construed to conflict
19 with the authority provided by sections 202 and 209 of
20 the Clean Air Act (42 U.S.C. 7521 and 7543, respec-
21 tively).

22 **SEC. 520. ALTERNATIVE FUEL VEHICLE ACTION PLAN.**

23 (a) IN GENERAL.—The Secretary of Transportation
24 shall, establish and implement an action plan which takes
25 into consideration the availability and cost effectiveness of

1 alternative fuels, which will ensure that, beginning with
2 model year 2015, the percentage of new automobiles for
3 sale in the United States that are alternative fuel auto-
4 mobiles is not less than 50 percent.

5 (b) DEFINITIONS.—In this section:

6 (1) ALTERNATIVE FUEL AUTOMOBILE.—The
7 term “alternative fuel automobile” means the fol-
8 lowing but not limited to—

9 (A) a new advanced lean burn technology
10 motor vehicle (as defined in section 30B(e)(3)
11 of the Internal Revenue Code of 1986) that
12 achieves at least 125 percent of the model year
13 2002 city fuel economy;

14 (B) an alternative fueled automobile;

15 (C) a flexible fuel automobile;

16 (D) a new qualified fuel cell motor vehicle
17 (as defined in section 30B(e)(4) of such Code).

18 (E) a new qualified hybrid motor vehicle
19 (as defined in section 30B(d)(3) of such Code);

20 (F) a plug-in hybrid automobile;

21 (G) an electric automobile;

22 (H) a hydrogen internal combustion engine
23 automobile; and

24 (I) any other automobile that uses sub-
25 stantially new technology and achieves at least

1 175 percent of the model year 2002 city fuel
2 economy, as determined by the Secretary of
3 Transportation, by regulation.

4 (2) OTHER TERMS.—Any term used in this sec-
5 tion that is defined in section 32901 of title 49,
6 United States Code, has the meaning given that
7 term in that section.

8 **SEC. 521. STUDY OF THE ADEQUACY OF TRANSPORTATION**
9 **OF DOMESTICALLY-PRODUCED RENEWABLE**
10 **FUEL BY RAILROADS AND OTHER MODES OF**
11 **TRANSPORTATION.**

12 (a) STUDY.—

13 (1) IN GENERAL.—The Secretary of Transpor-
14 tation and the Secretary of Energy shall jointly con-
15 duct a study of the adequacy of transportation of
16 domestically-produced renewable fuels by railroad
17 and other modes of transportation as designated by
18 the Secretaries.

19 (2) COMPONENTS.—In conducting the study
20 under paragraph (1), the Secretaries shall—

21 (A) consider the adequacy of existing rail-
22 road and other transportation infrastructure,
23 equipment, service and capacity to move the
24 necessary quantities of domestically-produced

1 renewable fuel within the timeframes required
2 by section 111;

3 (B)(i) consider the projected costs of mov-
4 ing the domestically-produced renewable fuel by
5 railroad and other modes transportation; and

6 (ii) consider the impact of the projected
7 costs on the marketability of the domestically-
8 produced renewable fuel;

9 (C) identify current and potential impedi-
10 ments to the reliable transportation of adequate
11 supplies of domestically-produced renewable fuel
12 at reasonable prices, including practices cur-
13 rently utilized by domestic producers, shippers,
14 and receivers of renewable fuels;

15 (D) consider whether inadequate competi-
16 tion exists within and between modes of trans-
17 portation for the transportation of domestically-
18 produced renewable fuel and, if such inadequate
19 competition exists, whether such inadequate
20 competition leads to an unfair price for the
21 transportation of domestically-produced renew-
22 able fuel or unacceptable service for transpor-
23 tation of domestically-produced renewable fuel;

24 (E) consider whether Federal agencies
25 have adequate legal authority to address in-

1 stances of inadequate competition when inad-
2 equate competition is found to prevent domestic
3 producers for renewable fuels from obtaining a
4 fair and reasonable transportation price or ac-
5 ceptable service for the transportation of do-
6 mestically-produced renewable fuels;

7 (F) consider whether Federal agencies
8 have adequate legal authority to address rail-
9 road and transportation service problems that
10 may be resulting in inadequate supplies of do-
11 mestically-produced renewable fuel in any area
12 of the United States;

13 (G) consider what transportation infra-
14 structure capital expenditures may be necessary
15 to ensure the reliable transportation of ade-
16 quate supplies of domestically-produced renew-
17 able fuel at reasonable prices within the United
18 States and which public and private entities
19 should be responsible for making such expendi-
20 tures; and

21 (K) provide recommendations on ways to
22 facilitate the reliable transportation of adequate
23 supplies of domestically-produced renewable fuel
24 at reasonable prices.

1 (b) REPORT.—Not later than 180 days after the date
2 of enactment of this Act, the Secretaries shall jointly sub-
3 mit to the Committee on Commerce, Science and Trans-
4 portation, the Committee on Energy and Natural Re-
5 sources, and the Committee on Environment and Public
6 Works of the Senate and the Committee on Transpor-
7 tation and Infrastructure and the Committee on Energy
8 and Commerce of the House of Representatives a report
9 that describes the results of the study conducted under
10 subsection (a).

11 **TITLE VI—PRICE GOUGING**

12 **SEC. 601. SHORT TITLE.**

13 This title may be cited as the “Petroleum Consumer
14 Price Gouging Protection Act”.

15 **SEC. 602. DEFINITIONS.**

16 In this title:

17 (1) **AFFECTED AREA.**—The term “affected
18 area” means an area covered by a Presidential dec-
19 laration of energy emergency.

20 (2) **SUPPLIER.**—The term “supplier” means
21 any person engaged in the trade or business of sell-
22 ing or reselling, at retail or wholesale, or distributing
23 crude oil, gasoline, or petroleum distillates.

1 (3) PRICE GOUGING.—The term “price
2 gouging” means the charging of an unconscionably
3 excessive price by a supplier in an affected area.

4 (4) UNCONSCIONABLY EXCESSIVE PRICE.—The
5 term “unconscionably excessive price” means an av-
6 erage price charged during an energy emergency de-
7 clared by the President in an area and for a product
8 subject to the declaration, that—

9 (A)(i)(I) constitutes a gross disparity from
10 the average price at which it was offered for
11 sale in the usual course of the supplier’s busi-
12 ness during the 30 days prior to the President’s
13 declaration of an energy emergency; and

14 (II) grossly exceeds the prices at which the
15 same or similar crude oil gasoline or petroleum
16 distillate was readily obtainable by purchasers
17 from other suppliers in the same relevant geo-
18 graphic market within the affected area; or

19 (ii) represents an exercise of unfair lever-
20 age or unconscionable means on the part of the
21 supplier, during a period of declared energy
22 emergency; and

23 (B) is not attributable to increased whole-
24 sale or operational costs, including replacement
25 costs, outside the control of the supplier, in-

1 curred in connection with the sale of crude oil,
2 gasoline, or petroleum distillates; and is not at-
3 tributable to local, regional, national, or inter-
4 national market conditions.

5 (5) COMMISSION.—The term “Commission”
6 means the Federal Trade Commission.

7 **SEC. 603. PROHIBITION ON PRICE GOUGING DURING EN-**
8 **ERGY EMERGENCIES.**

9 (a) IN GENERAL.—During any energy emergency de-
10 clared by the President under section 606 of this Act, it
11 is unlawful for any supplier to sell, or offer to sell crude
12 oil, gasoline or petroleum distillates subject to that dec-
13 laration in, or for use in, the area to which that declara-
14 tion applies at an unconscionably excessive price.

15 (b) FACTORS CONSIDERED.—In determining whether
16 a violation of subsection (a) has occurred, there shall be
17 taken into account, among other factors, whether—

18 (1) the price charged was a price that would
19 reasonably exist in a competitive and freely func-
20 tioning market; and

21 (2) the amount of gasoline or other petroleum
22 distillate the seller produced, distributed, or sold
23 during the period the Proclamation was in effect in-
24 creased over the average amount during the pre-
25 ceding 30 days.

1 **SEC. 604. PROHIBITION ON MARKET MANIPULATION.**

2 It is unlawful for any person, directly or indirectly,
3 to use or employ, in connection with the purchase or sale
4 of crude oil gasoline or petroleum distillates at wholesale,
5 any manipulative or deceptive device or contrivance, in
6 contravention of such rules and regulations as the Com-
7 mission may prescribe as necessary or appropriate in the
8 public interest or for the protection of United States citi-
9 zens.

10 **SEC. 605. PROHIBITION ON FALSE INFORMATION.**

11 (a) IN GENERAL.—It is unlawful for any person to
12 report information related to the wholesale price of crude
13 oil gasoline or petroleum distillates to a Federal depart-
14 ment or agency if—

15 (1) that person knew, or reasonably should have
16 known, the information to be false or misleading;

17 (2) the information was required by law to be
18 reported; and

19 (3) the person intended the false or misleading
20 data to affect data compiled by the department or
21 agency for statistical or analytical purposes with re-
22 spect to the market for crude oil, gasoline, or petro-
23 leum distillates.

1 **SEC. 606. PRESIDENTIAL DECLARATION OF ENERGY EMER-**
2 **GENCY.**

3 (a) **IN GENERAL.**—If the President finds that the
4 health, safety, welfare, or economic well-being of the citi-
5 zens of the United States is at risk because of a shortage
6 or imminent shortage of adequate supplies of crude oil,
7 gasoline or petroleum distillates due to a disruption in the
8 national distribution system for crude oil, gasoline or pe-
9 troleum distillates (including such a shortage related to
10 a major disaster (as defined in section 102(2) of the Rob-
11 ert T. Stafford Disaster Relief and Emergency Assistance
12 Act (42 U.S.C. 5122(2))), or significant pricing anomalies
13 in national energy markets for crude oil, gasoline, or pe-
14 troleum distillates, the President may declare that a Fed-
15 eral energy emergency exists.

16 (b) **SCOPE AND DURATION.**—The emergency declara-
17 tion shall specify—

18 (1) the period, not to exceed 30 days, for which
19 the declaration applies;

20 (2) the circumstance or condition necessitating
21 the declaration; and

22 (3) the area or region to which it applies which
23 may not be limited to a single State; and

24 (4) the product or products to which it applies.

25 (c) **EXTENSIONS.**—The President may—

- 1 (1) extend a declaration under subsection (a)
2 for a period of not more than 30 days;
- 3 (2) extend such a declaration more than once;
4 and
- 5 (3) discontinue such a declaration before its ex-
6 piration.

7 **SEC. 607. ENFORCEMENT BY THE FEDERAL TRADE COM-**
8 **MISSION.**

9 (a) ENFORCEMENT.—This title shall be enforced by
10 the Federal Trade Commission in the same manner, by
11 the same means, and with the same jurisdiction as though
12 all applicable terms of the Federal Trade Commission Act
13 were incorporated into and made a part of this title. In
14 enforcing section 603 of this Act, the Commission shall
15 give priority to enforcement actions concerning companies
16 with total United States wholesale or retail sales of crude
17 oil, gasoline, and petroleum distillates in excess of
18 \$500,000,000 per year but shall not exclude enforcement
19 actions against companies with total United States whole-
20 sale sales of \$500,000,000 or less per year.

21 (b) VIOLATION IS TREATED AS UNFAIR OR DECEP-
22 TIVE ACT OR PRACTICE.—The violation of any provision
23 of this title shall be treated as an unfair or deceptive act
24 or practice proscribed under a rule issued under section

1 18(a)(1)(B) of the Federal Trade Commission Act (15
2 U.S.C. 57a(a)(1)(B)).

3 (c) COMMISSION ACTIONS.—Following the declara-
4 tion of an energy emergency by the President under sec-
5 tion 606 of this Act, the Commission shall—

6 (1) maintain within the Commission—

7 (A) a toll-free hotline that a consumer may
8 call to report an incident of price gouging in the
9 affected area; and

10 (B) a program to develop and distribute to
11 the public informational materials to assist resi-
12 dents of the affected area in detecting, avoid-
13 ing, and reporting price gouging;

14 (2) consult with the Attorney General, the
15 United States Attorney for the districts in which a
16 disaster occurred (if the declaration is related to a
17 major disaster), and State and local law enforcement
18 officials to determine whether any supplier in the af-
19 fected area is charging or has charged an uncon-
20 scionably excessive price for crude oil, gasoline, or
21 petroleum distillates in the affected area; and

22 (3) conduct investigations as appropriate to de-
23 termine whether any supplier in the affected area
24 has violated section 603 of this Act, and upon such

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

3 **SEC. 608. ENFORCEMENT BY STATE ATTORNEYS GENERAL.**

4 (a) IN GENERAL.—A State, as *parens patriae*, may
5 bring a civil action on behalf of its residents in an appro-
6 priate district court of the United States to enforce the
7 provisions of section 603 of this Act, or to impose the civil
8 penalties authorized by section 609 for violations of sec-
9 tion 603, whenever the attorney general of the State has
10 reason to believe that the interests of the residents of the
11 State have been or are being threatened or adversely af-
12 fected by a supplier engaged in the sale or resale, at retail
13 or wholesale, or distribution of crude oil, gasoline or petro-
14 leum distillates in violation of section 603 of this Act.

15 (b) NOTICE.—The State shall serve written notice to
16 the Commission of any civil action under subsection (a)
17 prior to initiating the action. The notice shall include a
18 copy of the complaint to be filed to initiate the civil action,
19 except that if it is not feasible for the State to provide
20 such prior notice, the State shall provide such notice im-
21 mediately upon instituting the civil action.

22 (c) AUTHORITY TO INTERVENE.—Upon receiving the
23 notice required by subsection (b), the Commission may in-
24 tervene in the civil action and, upon intervening—

1 (1) may be heard on all matters arising in such
2 civil action; and

3 (2) may file petitions for appeal of a decision in
4 such civil action.

5 (d) CONSTRUCTION.—For purposes of bringing any
6 civil action under subsection (a), nothing in this section
7 shall prevent the attorney general of a State from exer-
8 cising the powers conferred on the Attorney General by
9 the laws of such State to conduct investigations or to ad-
10 minister oaths or affirmations or to compel the attendance
11 of witnesses or the production of documentary and other
12 evidence.

13 (e) VENUE; SERVICE OF PROCESS.—In a civil action
14 brought under subsection (a)—

15 (1) the venue shall be a judicial district in
16 which—

17 (A) the defendant operates;

18 (B) the defendant was authorized to do
19 business; or

20 (C) where the defendant in the civil action
21 is found;

22 (2) process may be served without regard to the
23 territorial limits of the district or of the State in
24 which the civil action is instituted; and

1 (3) a person who participated with the defend-
2 ant in an alleged violation that is being litigated in
3 the civil action may be joined in the civil action with-
4 out regard to the residence of the person.

5 (f) **LIMITATION ON STATE ACTION WHILE FEDERAL**
6 **ACTION IS PENDING.**—If the Commission has instituted
7 a civil action or an administrative action for violation of
8 this title, a State attorney general, or official or agency
9 of a State, may not bring an action under this section
10 during the pendency of that action against any defendant
11 named in the complaint of the Commission or the other
12 agency for any violation of this title alleged in the Com-
13 mission’s civil or administrative action.

14 (g) **NO PREEMPTION.**—Nothing contained in this
15 section shall prohibit an authorized State official from pro-
16 ceeding in State court to enforce a civil or criminal statute
17 of that State.

18 **SEC. 609. PENALTIES.**

19 (a) **CIVIL PENALTY.**—

20 (1) **IN GENERAL.**—In addition to any penalty
21 applicable under the Federal Trade Commission Act,
22 any supplier—

23 (A) that violates section 604 or section
24 605 of this Act is punishable by a civil penalty
25 of not more than \$1,000,000; and

1 (B) that violates section 603 of this Act is
2 punishable by a civil penalty of—

3 (i) not more than \$500,000, in the
4 case of an independent small business mar-
5 keter of gasoline (within the meaning of
6 section 324(c) of the Clean Air Act (42
7 U.S.C. 7625(c))); and

8 (ii) not more than \$5,000,000 in the
9 case of any other supplier.

10 (2) METHOD.—The penalties provided by para-
11 graph (1) shall be obtained in the same manner as
12 civil penalties imposed under section 5 of the Fed-
13 eral Trade Commission Act (15 U.S.C. 45).

14 (3) MULTIPLE OFFENSES; MITIGATING FAC-
15 TORS.—In assessing the penalty provided by sub-
16 section (a)—

17 (A) each day of a continuing violation shall
18 be considered a separate violation; and

19 (B) the court shall take into consideration,
20 among other factors, the seriousness of the vio-
21 lation and the efforts of the person committing
22 the violation to remedy the harm caused by the
23 violation in a timely manner.

24 (b) CRIMINAL PENALTY.—Violation of section 603 of
25 this Act is punishable by a fine of not more than

1 \$5,000,000, imprisonment for not more than 5 years, or
2 both.

3 **SEC. 610. EFFECT ON OTHER LAWS.**

4 (a) OTHER AUTHORITY OF THE COMMISSION.—
5 Nothing in this title shall be construed to limit or affect
6 in any way the Commission’s authority to bring enforce-
7 ment actions or take any other measure under the Federal
8 Trade Commission Act (15 U.S.C. 41 et seq.) or any other
9 provision of law.

10 (b) STATE LAW.—Nothing in this title preempts any
11 State law.

12 **TITLE VII—ENERGY DIPLOMACY**
13 **AND SECURITY**

14 **SEC. 701. SHORT TITLE.**

15 This title may be cited as the “Energy Diplomacy and
16 Security Act of 2007”.

17 **SEC. 702. DEFINITIONS.**

18 In this title:

19 (1) MAJOR ENERGY PRODUCER.—The term
20 “major energy producer” means a country that—

21 (A) had crude oil, oil sands, or natural gas
22 to liquids production of 1,000,000 barrels per
23 day or greater average in the previous year;

1 (B) has crude oil, shale oil, or oil sands re-
2 serves of 6,000,000,000 barrels or greater, as
3 recognized by the Department of Energy;

4 (C) had natural gas production of
5 30,000,000,000 cubic meters or greater in the
6 previous year;

7 (D) has natural gas reserves of
8 1,250,000,000,000 cubic meters or greater, as
9 recognized by the Department of Energy; or

10 (E) is a direct supplier of natural gas or
11 liquefied natural gas to the United States.

12 (2) MAJOR ENERGY CONSUMER.—The term
13 “major energy consumer” means a country that—

14 (A) had an oil consumption average of
15 1,000,000 barrels per day or greater in the pre-
16 vious year;

17 (B) had an oil consumption growth rate of
18 8 percent or greater in the previous year;

19 (C) had a natural gas consumption of
20 30,000,000,000 cubic meters or greater in the
21 previous year; or

22 (D) had a natural gas consumption growth
23 rate of 15 percent or greater in the previous
24 year.

1 **SEC. 703. SENSE OF CONGRESS ON ENERGY DIPLOMACY**
2 **AND SECURITY.**

3 (a) FINDINGS.—Congress makes the following find-
4 ings:

5 (1) It is imperative to the national security and
6 prosperity of the United States to have reliable, af-
7 fordable, clean, sufficient, and sustainable sources of
8 energy.

9 (2) United States dependence on oil imports
10 causes tremendous costs to the United States na-
11 tional security, economy, foreign policy, military, and
12 environmental sustainability.

13 (3) Energy security is a priority for the govern-
14 ments of many foreign countries and increasingly
15 plays a central role in the relations of the United
16 States Government with foreign governments. Global
17 reserves of oil and natural gas are concentrated in
18 a small number of countries. Access to these oil and
19 natural gas supplies depends on the political will of
20 these producing states. Competition between govern-
21 ments for access to oil and natural gas reserves can
22 lead to economic, political, and armed conflict. Oil
23 exporting states have received dramatically increased
24 revenues due to high global prices, enhancing the
25 ability of some of these states to act in a manner
26 threatening to global stability.

1 (4) Efforts to combat poverty and protect the
2 environment are hindered by the continued predomi-
3 nance of oil and natural gas in meeting global en-
4 ergy needs. Development of renewable energy
5 through sustainable practices will help lead to a re-
6 duction in greenhouse gas emissions and enhance
7 international development.

8 (5) Cooperation on energy issues between the
9 United States Government and the governments of
10 foreign countries is critical for securing the strategic
11 and economic interests of the United States and of
12 partner governments. In the current global energy
13 situation, the energy policies and activities of the
14 governments of foreign countries can have dramatic
15 impacts on United States energy security.

16 (b) SENSE OF CONGRESS.—It is the sense of Con-
17 gress that—

18 (1) United States national security requires
19 that the United States Government have an energy
20 policy that pursues the strategic goal of achieving
21 energy security through access to clean, affordable,
22 sufficient, reliable, and sustainable sources of en-
23 ergy;

24 (2) achieving energy security is a priority for
25 United States foreign policy and requires continued

1 and enhanced engagement with foreign governments
2 and entities in a variety of areas, including activities
3 relating to the promotion of alternative and renew-
4 able fuels, trade and investment in oil, coal, and nat-
5 ural gas, energy efficiency, climate and environ-
6 mental protection, data transparency, advanced sci-
7 entific research, public-private partnerships, and en-
8 ergy activities in international development;

9 (3) the President should ensure that the inter-
10 national energy activities of the United States Gov-
11 ernment are given clear focus to support the na-
12 tional security needs of the United States, and to
13 this end, there should be established a mechanism to
14 coordinate the implementation of United States
15 international energy policy among the Federal agen-
16 cies engaged in relevant agreements and activities;
17 and

18 (4) the Secretary of State should ensure that
19 energy security is integrated into the core mission of
20 the Department of State, and to this end, there
21 should be established within the Office of the Sec-
22 retary of State a Coordinator for International En-
23 ergy Affairs with responsibility for—

24 (A) developing United States international
25 energy policy in coordination with the Depart-

1 ment of Energy and other relevant Federal
2 agencies;

3 (B) working with appropriate United
4 States Government officials to develop and up-
5 date analyses of the national security implica-
6 tions of global energy developments;

7 (C) incorporating energy security priorities
8 into the activities of the Department;

9 (D) coordinating activities with relevant
10 Federal agencies; and

11 (E) coordinating energy security and other
12 relevant functions currently undertaken by of-
13 fices within the Bureau of Economic, Business,
14 and Agricultural Affairs, the Bureau of Democ-
15 racy and Global Affairs, and other offices with-
16 in the Department of State.

17 (5) the Department of Energy should be des-
18 ignated as the lead United States Government agen-
19 cy in charge of formulating and coordinating the na-
20 tional energy security policy of the United States,
21 and in furtherance of these goals, there should be
22 established within the Department of Energy an As-
23 sistant Secretary of Energy for Energy Security
24 whose responsibilities should include—

1 (A) directing the development of the na-
2 tional energy security strategy of the United
3 States;

4 (B) coordinating the national energy secu-
5 rity policy of the United States with the De-
6 partment of Defense, the Department of State,
7 and the National Security Council, as appro-
8 priate, to address the impact of, and integrate
9 national security and foreign policy on, the na-
10 tional energy security policy of the United
11 States;

12 (C) monitoring international and domestic
13 energy developments to gauge their impact on
14 the national energy security policy of the
15 United States and implementing changes in
16 such policy as necessary to maintain the na-
17 tional security and energy security of the
18 United States;

19 (D) identifying foreign sources of energy
20 critical to the national energy security of the
21 United States and developing strategies in con-
22 junction with the Department of State for en-
23 suring United States access to critical foreign
24 energy resources;

1 (E) developing strategies for reducing
2 United States dependence on foreign sources of
3 energy, including demand reduction, efficiency
4 improvement, and development of alternative
5 and new sources of domestic energy; and

6 (F) developing strategies in conjunction
7 with the Department of State for working with
8 major international producers and consumers,
9 including China, Russia, the European Union,
10 and Africa, to minimize politicization of global
11 energy resources while ensuring access through
12 global energy markets.

13 **SEC. 704. STRATEGIC ENERGY PARTNERSHIPS.**

14 (a) FINDINGS.—Congress makes the following find-
15 ings:

16 (1) United States Government partnership with
17 foreign governments and entities, including partner-
18 ship with the private sector, for securing reliable and
19 sustainable energy is imperative to ensuring United
20 States security and economic interests, promoting
21 international peace and security, expanding inter-
22 national development, supporting democratic reform,
23 fostering economic growth, and safeguarding the en-
24 vironment.

1 (2) Democracy and freedom should be promoted
2 globally by partnership with foreign governments, in-
3 cluding in particular governments of emerging de-
4 mocracies such as those of Ukraine and Georgia, in
5 their efforts to reduce their dependency on oil and
6 natural gas imports.

7 (3) The United States Government and the gov-
8 ernments of foreign countries have common needs
9 for adequate, reliable, affordable, clean, and sustain-
10 able energy in order to ensure national security, eco-
11 nomic growth, and high standards of living in their
12 countries. Cooperation by the United States Govern-
13 ment with foreign governments on meeting energy
14 security needs is mutually beneficial. United States
15 Government partnership with foreign governments
16 should include cooperation with major energy con-
17 suming countries, major energy producing countries,
18 and other governments seeking to advance global en-
19 ergy security through reliable and sustainable
20 means.

21 (4) The United States Government participates
22 in hundreds of bilateral and multilateral energy
23 agreements and activities with foreign governments
24 and entities. These agreements and activities should
25 reflect the strategic need for energy security.

1 (b) STATEMENT OF POLICY.—It is the policy of the
2 United States—

3 (1) to advance global energy security through
4 cooperation with foreign governments and entities;

5 (2) to promote reliable, diverse, and sustainable
6 sources of all types of energy;

7 (3) to increase global availability of renewable
8 and clean sources of energy;

9 (4) to decrease global dependence on oil and
10 natural gas energy sources; and

11 (5) to engage in energy cooperation to strength-
12 en strategic partnerships that advance peace, secu-
13 rity, and democratic prosperity.

14 (c) AUTHORITY.—The Secretary of State, in coordi-
15 nation with the Secretary of Energy, should immediately
16 seek to establish and expand strategic energy partnerships
17 with the governments of major energy producers and
18 major energy consumers, and with governments of other
19 countries (but excluding any countries that are ineligible
20 to receive United States economic or military assistance).

21 (d) PURPOSES.—The purposes of the strategic energy
22 partnerships established pursuant to subsection (c) are—

23 (1) to strengthen global relationships to pro-
24 mote international peace and security through fos-
25 tering cooperation in the energy sector on a mutu-

1 ally beneficial basis in accordance with respective na-
2 tional energy policies;

3 (2) to promote the policy set forth in subsection
4 (b), including activities to advance—

5 (A) the mutual understanding of each
6 country's energy needs, priorities, and policies,
7 including interparliamentary understanding;

8 (B) measures to respond to acute energy
9 supply disruptions, particularly in regard to pe-
10 troleum and natural gas resources;

11 (C) long-term reliability and sustainability
12 in energy supply;

13 (D) the safeguarding and safe handling of
14 nuclear fuel;

15 (E) human and environmental protection;

16 (F) renewable energy production;

17 (G) access to reliable and affordable en-
18 ergy for underdeveloped areas, in particular en-
19 ergy access for the poor;

20 (H) appropriate commercial cooperation;

21 (I) information reliability and trans-
22 parency; and

23 (J) research and training collaboration;

24 (3) to advance the national security priority of
25 developing sustainable and clean energy sources, in-

1 including through research and development related
2 to, and deployment of—

3 (A) renewable electrical energy sources, in-
4 cluding biomass, wind, and solar;

5 (B) renewable transportation fuels, includ-
6 ing biofuels;

7 (C) clean coal technologies;

8 (D) carbon sequestration, including in con-
9 junction with power generation, agriculture, and
10 forestry; and

11 (E) energy and fuel efficiency, including
12 hybrids and plug-in hybrids, flexible fuel, ad-
13 vanced composites, hydrogen, and other trans-
14 portation technologies; and

15 (4) to provide strategic focus for current and
16 future United States Government activities in energy
17 cooperation to meet the global need for energy secu-
18 rity.

19 (e) DETERMINATION OF AGENDAS.—In general, the
20 specific agenda with respect to a particular strategic en-
21 ergy partnership, and the Federal agencies designated to
22 implement related activities, shall be determined by the
23 Secretary of State and the Secretary of Energy.

24 (f) USE OF CURRENT AGREEMENTS TO ESTABLISH
25 PARTNERSHIPS.—Some or all of the purposes of the stra-

1 tegic energy partnerships established under subsection (c)
2 may be pursued through existing bilateral or multilateral
3 agreements and activities. Such agreements and activities
4 shall be subject to the reporting requirements in sub-
5 section (g).

6 (g) REPORTS REQUIRED.—

7 (1) INITIAL PROGRESS REPORT.—Not later
8 than 180 days after the date of the enactment of
9 this Act, the Secretary of State shall submit to the
10 appropriate congressional committees a report on
11 progress made in developing the strategic energy
12 partnerships authorized under this section.

13 (2) ANNUAL PROGRESS REPORTS.—

14 (A) IN GENERAL.—Not later than one year
15 after the date of the enactment of this Act, and
16 annually thereafter for 20 years, the Secretary
17 of State shall submit to the appropriate con-
18 gressional committees an annual report on
19 agreements entered into and activities under-
20 taken pursuant to this section, including inter-
21 national environment activities.

22 (B) CONTENT.—Each report submitted
23 under this paragraph shall include details on—

24 (i) agreements and activities pursued
25 by the United States Government with for-

1 eign governments and entities, the imple-
2 mentation plans for such agreements and
3 progress measurement benchmarks, United
4 States Government resources used in pur-
5 suit of such agreements and activities, and
6 legislative changes recommended for im-
7 proved partnership; and

8 (ii) polices and actions in the energy
9 sector of partnership countries pertinent to
10 United States economic, security, and envi-
11 ronmental interests.

12 **SEC. 705. INTERNATIONAL ENERGY CRISIS RESPONSE**
13 **MECHANISMS.**

14 (a) FINDINGS.—Congress makes the following find-
15 ings:

16 (1) Cooperation between the United States Gov-
17 ernment and governments of other countries during
18 energy crises promotes the national security of the
19 United States.

20 (2) The participation of the United States in
21 the International Energy Program established under
22 the Agreement on an International Energy Program,
23 done at Paris November 18, 1974 (27 UST 1685),
24 including in the coordination of national strategic

1 petroleum reserves, is a national security asset
2 that—

3 (A) protects the consumers and the econ-
4 omy of the United States in the event of a
5 major disruption in petroleum supply;

6 (B) maximizes the effectiveness of the
7 United States strategic petroleum reserve
8 through cooperation in accessing global reserves
9 of various petroleum products;

10 (C) provides market reassurance in coun-
11 tries that are members of the International En-
12 ergy Program; and

13 (D) strengthens United States Government
14 relationships with members of the International
15 Energy Program.

16 (3) The International Energy Agency projects
17 that the largest growth in demand for petroleum
18 products, other than demand from the United
19 States, will come from China and India, which are
20 not members of the International Energy Program.
21 The Governments of China and India vigorously
22 pursue access to global oil reserves and are attempt-
23 ing to develop national petroleum reserves. Partici-
24 pation of the Governments of China and India in an
25 international petroleum reserve mechanism would

1 promote global energy security, but such participa-
2 tion should be conditional on the Governments of
3 China and India abiding by customary petroleum re-
4 serve management practices.

5 (4) In the Western Hemisphere, only the
6 United States and Canada are members of the
7 International Energy Program. The vulnerability of
8 most Western Hemisphere countries to supply dis-
9 ruptions from political, natural, or terrorism causes
10 may introduce instability in the hemisphere and can
11 be a source of conflict, despite the existence of major
12 oil reserves in the hemisphere.

13 (5) Countries that are not members of the
14 International Energy Program and are unable to
15 maintain their own national strategic reserves are
16 vulnerable to petroleum supply disruption. Disrup-
17 tion in petroleum supply and spikes in petroleum
18 costs could devastate the economies of developing
19 countries and could cause internal or interstate con-
20 flict.

21 (6) The involvement of the United States Gov-
22 ernment in the extension of international mecha-
23 nisms to coordinate strategic petroleum reserves and
24 the extension of other emergency preparedness

1 measures should strengthen the current Inter-
2 national Energy Program.

3 (b) ENERGY CRISIS RESPONSE MECHANISMS WITH
4 INDIA AND CHINA.—

5 (1) AUTHORITY.—The Secretary of State, in
6 coordination with the Secretary of Energy, should
7 immediately seek to establish a petroleum crisis re-
8 sponse mechanism or mechanisms with the Govern-
9 ments of China and India.

10 (2) SCOPE.—The mechanism or mechanisms es-
11 tablished under paragraph (1) should include—

12 (A) technical assistance in the development
13 and management of national strategic petro-
14 leum reserves;

15 (B) agreements for coordinating
16 drawdowns of strategic petroleum reserves with
17 the United States, conditional upon reserve
18 holdings and management conditions estab-
19 lished by the Secretary of Energy;

20 (C) emergency demand restraint measures;

21 (D) fuel switching preparedness and alter-
22 native fuel production capacity; and

23 (E) ongoing demand intensity reduction
24 programs.

1 (3) USE OF EXISTING AGREEMENTS TO ESTAB-
2 LISH MECHANISM.—The Secretary may, after con-
3 sultation with Congress and in accordance with ex-
4 isting international agreements, including the Inter-
5 national Energy Program, include China and India
6 in a petroleum crisis response mechanism through
7 existing or new agreements.

8 (c) ENERGY CRISIS RESPONSE MECHANISM FOR THE
9 WESTERN HEMISPHERE.—

10 (1) AUTHORITY.—The Secretary of State, in
11 coordination with the Secretary of Energy, should
12 immediately seek to establish a Western Hemisphere
13 energy crisis response mechanism.

14 (2) SCOPE.—The mechanism established under
15 paragraph (1) should include—

16 (A) an information sharing and coordi-
17 nating mechanism in case of energy supply
18 emergencies;

19 (B) technical assistance in the development
20 and management of national strategic petro-
21 leum reserves within countries of the Western
22 Hemisphere;

23 (C) technical assistance in developing na-
24 tional programs to meet the requirements of
25 membership in a future international energy ap-

1 plication procedure as described in subsection
2 (d);

3 (D) emergency demand restraint measures;

4 (E) energy switching preparedness and al-
5 ternative energy production capacity; and

6 (F) ongoing demand intensity reduction
7 programs.

8 (3) MEMBERSHIP.—The Secretary should seek
9 to include in the Western Hemisphere energy crisis
10 response mechanism membership for each major en-
11 ergy producer and major energy consumer in the
12 Western Hemisphere and other members of the
13 Hemisphere Energy Cooperation Forum authorized
14 under section 706.

15 (d) INTERNATIONAL ENERGY PROGRAM APPLICA-
16 TION PROCEDURE.—

17 (1) AUTHORITY.—The President should place
18 on the agenda for discussion at the Governing Board
19 of the International Energy Agency, as soon as prac-
20 ticable, the merits of establishing an international
21 energy program application procedure.

22 (2) PURPOSE.—The purpose of such procedure
23 is to allow countries that are not members of the
24 International Energy Program to apply to the Gov-
25 erning Board of the International Energy Agency

1 for allocation of petroleum reserve stocks in times of
2 emergency on a grant or loan basis. Such countries
3 should also receive technical assistance for, and be
4 subject to, conditions requiring development and
5 management of national programs for energy emer-
6 gency preparedness, including demand restraint, fuel
7 switching preparedness, and development of alter-
8 native fuels production capacity.

9 (e) REPORTS REQUIRED.—

10 (1) PETROLEUM RESERVES.—Not later than
11 180 days after the date of the enactment of this Act,
12 the Secretary of Energy shall submit to the appro-
13 priate congressional committees a report that evalu-
14 ates the options for adapting the United States na-
15 tional strategic petroleum reserve and the inter-
16 national petroleum reserve coordinating mechanism
17 in order to carry out this section.

18 (2) CRISIS RESPONSE MECHANISMS.—Not later
19 than 180 days after the date of the enactment of
20 this Act, the Secretary of State, in coordination with
21 the Secretary of Energy, shall submit to the appro-
22 priate congressional committees a report on the sta-
23 tus of the establishment of the international petro-
24 leum crisis response mechanisms described in sub-
25 sections (b) and (c). The report shall include rec-

1 ommendations of the Secretary of State and the Sec-
2 retary of Energy for any legislation necessary to es-
3 tablish or carry out such mechanisms.

4 (3) EMERGENCY APPLICATION PROCEDURE.—

5 Not later than 60 days after a discussion by the
6 Governing Board of the International Energy Agen-
7 cy of the application procedure described under sub-
8 section (d), the President should submit to Congress
9 a report that describes—

10 (A) the actions the United States Govern-

11 ment has taken pursuant to such subsection;
12 and

13 (B) a summary of the debate on the mat-

14 ter before the Governing Board of the Inter-
15 national Energy Agency, including any decision
16 that has been reached by the Governing Board
17 with respect to the matter.

18 **SEC. 706. HEMISPHERE ENERGY COOPERATION FORUM.**

19 (a) FINDINGS.—Congress makes the following find-
20 ings:

21 (1) The engagement of the United States Gov-
22 ernment with governments of countries in the West-
23 ern Hemisphere is a strategic priority for reducing
24 the potential for tension over energy resources,
25 maintaining and expanding reliable energy supplies,

1 expanding use of renewable energy, and reducing the
2 detrimental effects of energy import dependence
3 within the hemisphere. Current energy dialogues
4 should be expanded and refocused as needed to meet
5 this challenge.

6 (2) Countries of the Western Hemisphere can
7 most effectively meet their common needs for energy
8 security and sustainability through partnership and
9 cooperation. Cooperation between governments on
10 energy issues will enhance bilateral relationships
11 among countries of the hemisphere. The Western
12 Hemisphere is rich in natural resources, including
13 biomass, oil, natural gas, coal, and has significant
14 opportunity for production of renewable hydro, solar,
15 wind, and other energies. Countries of the Western
16 Hemisphere can provide convenient and reliable
17 markets for trade in energy goods and services.

18 (3) Development of sustainable energy alter-
19 natives in the countries of the Western Hemisphere
20 can improve energy security, balance of trade, and
21 environmental quality and provide markets for en-
22 ergy technology and agricultural products. Brazil
23 and the United States have led the world in the pro-
24 duction of ethanol, and deeper cooperation on

1 biofuels with other countries of the hemisphere
2 would extend economic and security benefits.

3 (4) Private sector partnership and investment
4 in all sources of energy is critical to providing en-
5 ergy security in the Western Hemisphere.

6 (b) HEMISPHERE ENERGY COOPERATION FORUM.—

7 (1) ESTABLISHMENT.—The Secretary of State,
8 in coordination with the Secretary of Energy, should
9 immediately seek to establish a regional-based min-
10 isterial forum to be known as the Hemisphere En-
11 ergy Cooperation Forum.

12 (2) PURPOSES.—The Hemisphere Energy Co-
13 operation Forum should seek—

14 (A) to strengthen relationships between the
15 United States and other countries of the West-
16 ern Hemisphere through cooperation on energy
17 issues;

18 (B) to enhance cooperation between major
19 energy producers and major energy consumers
20 in the Western Hemisphere, particularly among
21 the governments of Brazil, Canada, Mexico, the
22 United States, and Venezuela;

23 (C) to ensure that energy contributes to
24 the economic, social, and environmental en-

1 hancement of the countries of the Western
2 Hemisphere;

3 (D) to provide an opportunity for open dia-
4 logue and joint commitments between member
5 governments and with private industry; and

6 (E) to provide participating countries the
7 flexibility necessary to cooperatively address
8 broad challenges posed to the energy supply of
9 the Western Hemisphere that are practical in
10 policy terms and politically acceptable.

11 (3) ACTIVITIES.—The Hemisphere Energy Co-
12 operation Forum should implement the following ac-
13 tivities:

14 (A) An Energy Crisis Initiative that will
15 establish measures to respond to temporary en-
16 ergy supply disruptions, including through—

17 (i) strengthening sea-lane and infra-
18 structure security;

19 (ii) implementing a real-time emer-
20 gency information sharing system;

21 (iii) encouraging members to have
22 emergency mechanisms and contingency
23 plans in place; and

1 (iv) establishing a Western Hemi-
2 sphere energy crisis response mechanism
3 as authorized under section 705(c).

4 (B) An Energy Sustainability Initiative to
5 facilitate long-term supply security through fos-
6 tering reliable supply sources of fuels, including
7 development, deployment, and commercializa-
8 tion of technologies for sustainable renewable
9 fuels within the region, including activities
10 that—

11 (i) promote production and trade in
12 sustainable energy, including energy from
13 biomass;

14 (ii) facilitate investment, trade, and
15 technology cooperation in energy infra-
16 structure, petroleum products, natural gas
17 (including liquefied natural gas), energy ef-
18 ficiency (including automotive efficiency),
19 clean fossil energy, renewable energy, and
20 carbon sequestration;

21 (iii) promote regional infrastructure
22 and market integration;

23 (iv) develop effective and stable regu-
24 latory frameworks;

1 (v) develop renewable fuels standards
2 and renewable portfolio standards;

3 (vi) establish educational training and
4 exchange programs between member coun-
5 tries; and

6 (vii) identify and remove barriers to
7 trade in technology, services, and commod-
8 ities.

9 (C) An Energy for Development Initiative
10 to promote energy access for underdeveloped
11 areas through energy policy and infrastructure
12 development, including activities that—

13 (i) increase access to energy services
14 for the poor;

15 (ii) improve energy sector market con-
16 ditions;

17 (iii) promote rural development
18 through biomass energy production and use;

19 (iv) increase transparency of, and par-
20 ticipation in, energy infrastructure
21 projects;

22 (v) promote development and deploy-
23 ment of technology for clean and sustain-
24 able energy development, including biofuel
25 and clean coal technologies; and

1 (vi) facilitate use of carbon sequestra-
2 tion methods in agriculture and forestry
3 and linking greenhouse gas emissions re-
4 duction programs to international carbon
5 markets.

6 (c) HEMISPHERE ENERGY INDUSTRY GROUP.—

7 (1) AUTHORITY.—The Secretary of State, in
8 coordination with the Secretary of Commerce and
9 the Secretary of Energy, should approach the gov-
10 ernments of other countries in the Western Hemi-
11 sphere to seek cooperation in establishing a Hemi-
12 sphere Energy Industry Group, to be coordinated by
13 the United States Government, involving industry
14 representatives and government representatives from
15 the Western Hemisphere.

16 (2) PURPOSE.—The purpose of the forum
17 should be to increase public-private partnerships,
18 foster private investment, and enable countries of
19 the Western Hemisphere to devise energy agendas
20 compatible with industry capacity and cognizant of
21 industry goals.

22 (3) TOPICS OF DIALOGUES.—Topics for the
23 forum should include—

24 (A) promotion of a secure investment cli-
25 mate;

1 (B) development and deployment of
2 biofuels and other alternative fuels and clean
3 electrical production facilities, including clean
4 coal and carbon sequestration;

5 (C) development and deployment of energy
6 efficient technologies and practices, including in
7 the industrial, residential, and transportation
8 sectors;

9 (D) investment in oil and natural gas pro-
10 duction and distribution;

11 (E) transparency of energy production and
12 reserves data;

13 (F) research promotion; and

14 (G) training and education exchange pro-
15 grams.

16 (d) ANNUAL REPORT.—The Secretary of State, in co-
17 ordination with the Secretary of Energy, shall submit to
18 the appropriate congressional committees an annual re-
19 port on the implementation of this section, including the
20 strategy and benchmarks for measurement of progress de-
21 veloped under this section.

22 **SEC. 707. NATIONAL SECURITY COUNCIL REORGANIZA-**
23 **TION.**

24 Section 101(a) of the National Security Act of 1947
25 (50 U.S.C. 402(a)) is amended—

1 (1) by redesignating paragraphs (5), (6), and
2 (7) as paragraphs (6), (7), and (8), respectively; and
3 (2) by inserting after paragraph (4) the fol-
4 lowing:
5 “(5) the Secretary of Energy;”.

6 **SEC. 708. ANNUAL NATIONAL ENERGY SECURITY STRATEGY**

7 **REPORT.**

8 (a) **REPORTS.—**

9 (1) **IN GENERAL.—**Subject to paragraph (2), on
10 the date on which the President submits to Congress
11 the budget for the following fiscal year under section
12 1105 of title 31, United States Code, the President
13 shall submit to Congress a comprehensive report on
14 the national energy security of the United States.

15 (2) **NEW PRESIDENTS.—**In addition to the re-
16 ports required under paragraph (1), the President
17 shall submit a comprehensive report on the national
18 energy security of the United States by not later
19 than 150 days after the date on which the President
20 assumes the office of President after a presidential
21 election.

22 (b) **CONTENTS.—**Each report under this section shall
23 describe the national energy security strategy of the
24 United States, including a comprehensive description of—

1 (1) the worldwide interests, goals, and objec-
2 tives of the United States that are vital to the na-
3 tional energy security of the United States;

4 (2) the foreign policy, worldwide commitments,
5 and national defense capabilities of the United
6 States necessary—

7 (A) to deter political manipulation of world
8 energy resources; and

9 (B) to implement the national energy secu-
10 rity strategy of the United States;

11 (3) the proposed short-term and long-term uses
12 of the political, economic, military, and other au-
13 thorities of the United States—

14 (A) to protect or promote energy security;

15 and

16 (B) to achieve the goals and objectives de-
17 scribed in paragraph (1);

18 (4) the adequacy of the capabilities of the
19 United States to protect the national energy security
20 of the United States, including an evaluation of the
21 balance among the capabilities of all elements of the
22 national authority of the United States to support
23 the implementation of the national energy security
24 strategy; and

1 (5) such other information as the President de-
2 termines to be necessary to inform Congress on mat-
3 ters relating to the national energy security of the
4 United States.

5 (c) **CLASSIFIED AND UNCLASSIFIED FORM.**—Each
6 national energy security strategy report shall be submitted
7 to Congress in—

8 (1) a classified form; and

9 (2) an unclassified form.

10 **SEC. 709. APPROPRIATE CONGRESSIONAL COMMITTEES**

11 **DEFINED.**

12 In this title, the term “appropriate congressional
13 committees” means the Committee on Foreign Relations
14 and the Committee on Energy and Natural Resources of
15 the Senate and the Committee on Foreign Affairs and the
16 Committee on Energy and Commerce of the House of
17 Representatives.

18 **SEC. 710. NO OIL PRODUCING AND EXPORTING CARTELS**

19 **ACT OF 2007.**

20 (a) **SHORT TITLE.**—This section may be cited as the
21 “No Oil Producing and Exporting Cartels Act of 2007”
22 or “NOPEC”.

23 (b) **SHERMAN ACT.**—The Sherman Act (15 U.S.C.
24 1 et seq.) is amended by adding after section 7 the fol-
25 lowing:

1 **“SEC. 7A. OIL PRODUCING CARTELS.**

2 “(a) IN GENERAL.—It shall be illegal and a violation
3 of this Act for any foreign state, or any instrumentality
4 or agent of any foreign state, to act collectively or in com-
5 bination with any other foreign state, any instrumentality
6 or agent of any other foreign state, or any other person,
7 whether by cartel or any other association or form of co-
8 operation or joint action—

9 “(1) to limit the production or distribution of
10 oil, natural gas, or any other petroleum product;

11 “(2) to set or maintain the price of oil, natural
12 gas, or any petroleum product; or

13 “(3) to otherwise take any action in restraint of
14 trade for oil, natural gas, or any petroleum product;
15 when such action, combination, or collective action has a
16 direct, substantial, and reasonably foreseeable effect on
17 the market, supply, price, or distribution of oil, natural
18 gas, or other petroleum product in the United States.

19 “(b) SOVEREIGN IMMUNITY.—A foreign state en-
20 gaged in conduct in violation of subsection (a) shall not
21 be immune under the doctrine of sovereign immunity from
22 the jurisdiction or judgments of the courts of the United
23 States in any action brought to enforce this section.

24 “(c) INAPPLICABILITY OF ACT OF STATE DOC-
25 TRINE.—No court of the United States shall decline,

1 based on the act of state doctrine, to make a determina-
2 tion on the merits in an action brought under this section.

3 “(d) ENFORCEMENT.—The Attorney General of the
4 United States may bring an action to enforce this section
5 in any district court of the United States as provided
6 under the antitrust laws.”.

7 (c) SOVEREIGN IMMUNITY.—Section 1605(a) of title
8 28, United States Code, is amended—

9 (1) in paragraph (6), by striking “or” after the
10 semicolon;

11 (2) in paragraph (7), by striking the period and
12 inserting “; or”; and

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

14 “(8) in which the action is brought under sec-
15 tion 7A of the Sherman Act.”.

16 **SEC. 711. CONVENTION ON SUPPLEMENTARY COMPENSA-**
17 **TION FOR NUCLEAR DAMAGE CONTINGENT**
18 **COST ALLOCATION.**

19 (a) FINDINGS AND PURPOSE.—

20 (1) FINDINGS.—Congress finds that—

21 (A) section 170 of the Atomic Energy Act
22 of 1954 (42 U.S.C. 2210) (commonly known as
23 the “Price-Anderson Act”)—

24 (i) provides a predictable legal frame-
25 work necessary for nuclear projects; and

1 (ii) ensures prompt and equitable
2 compensation in the event of a nuclear in-
3 cident in the United States;

4 (B) section 170 of that Act, in effect, pro-
5 vides operators of nuclear powerplants with in-
6 surance for damage arising out of a nuclear in-
7 cident and funds the insurance primarily
8 through the assessment of a retrospective pre-
9 mium from each operator after the occurrence
10 of a nuclear incident;

11 (C) the Convention on Supplementary
12 Compensation for Nuclear Damage, done at Vi-
13 enna on September 12, 1997, will establish a
14 global system—

15 (i) to provide a predictable legal
16 framework necessary for nuclear energy
17 projects; and

18 (ii) to ensure prompt and equitable
19 compensation in the event of a nuclear in-
20 cident;

21 (D) the Convention benefits United States
22 nuclear suppliers that face potentially unlimited
23 liability for a nuclear incidents outside the cov-
24 erage of section 170 of the Atomic Energy Act
25 of 1954 (42 U.S.C. 2210) by replacing a poten-

1 tially open-ended liability with a predictable li-
2 ability regime that, in effect, provides nuclear
3 suppliers with insurance for damage arising out
4 of such an incident;

5 (E) the Convention also benefits United
6 States nuclear facility operators that may be
7 publicly liable for a Price-Anderson incident by
8 providing an additional early source for a Price-
9 Anderson incident by providing an additional
10 early source of funds to compensate damage
11 arising out of the Price-Anderson incident;

12 (F) the combined operation of the Conven-
13 tion, section 170 of the Atomic Energy Act of
14 1954 (42 U.S.C. 2210), and this section will
15 augment the quantity of assured funds available
16 for victims in a wider variety of nuclear inci-
17 dents while reducing the potential liability of
18 United States suppliers without increasing po-
19 tential costs to United States operators;

20 (G) the cost of those benefits is the obliga-
21 tion of the United States to contribute to the
22 supplementary compensation fund established
23 by the Convention;

24 (H) any such contribution should be fund-
25 ed in a manner that neither upsets settled ex-

1 pectations based on the liability regime estab-
2 lished under section 170 of the Atomic Energy
3 Act of 1954 (42 U.S.C. 2210) nor shifts to
4 Federal taxpayers liability risks for nuclear in-
5 cidents at foreign installations;

6 (I) with respect to a Price-Anderson inci-
7 dent, funds already available under section 170
8 of the Atomic Energy Act of 1954 (42 U.S.C.
9 2210) should be used; and

10 (J) with respect to a nuclear incident out-
11 side the United States not covered by section
12 170 of the Atomic Energy Act of 1954 (42
13 U.S.C. 2210), a retrospective premium should
14 be prorated among nuclear suppliers relieved
15 from potential liability for which insurance is
16 not available.

17 (2) PURPOSE.—The purpose of this section is
18 to allocate the contingent costs associated with par-
19 ticipation by the United States in the international
20 nuclear liability compensation system established by
21 the Convention on Supplementary Compensation for
22 Nuclear Damage, done at Vienna on September 12,
23 1997—

24 (A) with respect to a Price-Anderson inci-
25 dent, by using funds made available under sec-

1 tion 170 of the Atomic Energy Act of 1954 (42
2 U.S.C. 2210) to cover the contingent costs in a
3 manner that neither increases the burdens nor
4 decreases the benefits under section 170 of that
5 Act; and

6 (B) with respect to a covered incident out-
7 side the United States that is not a Price-An-
8 derson incident, by allocating the contingent
9 costs equitably, on the basis of risk, among the
10 class of nuclear suppliers relieved by the Con-
11 vention from the risk of potential liability re-
12 sulting from any covered incident outside the
13 United States.

14 (b) DEFINITIONS.—In this section:

15 (1) COMMISSION.—The term “Commission”
16 means the Nuclear Regulatory Commission.

17 (2) CONTINGENT COST.—The term “contingent
18 cost” means the cost to the United States in the
19 event of a covered incident the amount of which is
20 equal to the amount of funds the United States is
21 obligated to make available under paragraph 1(b) of
22 Article III of the Convention.

23 (3) CONVENTION.—The term “Convention”
24 means the Convention on Supplementary Compensa-

1 tion for Nuclear Damage, done at Vienna on Sep-
2 tember 12, 1997.

3 (4) COVERED INCIDENT.—The term “covered
4 incident” means a nuclear incident the occurrence of
5 which results in a request for funds pursuant to Ar-
6 ticle VII of the Convention.

7 (5) COVERED INSTALLATION.—The term “cov-
8 ered installation” means a nuclear installation at
9 which the occurrence of a nuclear incident could re-
10 sult in a request for funds under Article VII of the
11 Convention.

12 (6) COVERED PERSON.—

13 (A) IN GENERAL.—The term “covered per-
14 son” means—

15 (i) a United States person; and

16 (ii) an individual or entity (including
17 an agency or instrumentality of a foreign
18 country) that—

19 (I) is located in the United
20 States; or

21 (II) carries out an activity in the
22 United States.

23 (B) EXCLUSIONS.—The term “covered per-
24 son” does not include—

25 (i) the United States; or

1 (ii) any agency or instrumentality of
2 the United States.

3 (7) NUCLEAR SUPPLIER.—The term “nuclear
4 supplier” means a covered person (or a successor in
5 interest of a covered person) that—

6 (A) supplies facilities, equipment, fuel,
7 services, or technology pertaining to the design,
8 construction, operation, or decommissioning of
9 a covered installation; or

10 (B) transports nuclear materials that could
11 result in a covered incident.

12 (8) PRICE-ANDERSON INCIDENT.—The term
13 “Price-Anderson incident” means a covered incident
14 for which section 170 of the Atomic Energy Act of
15 1954 (42 U.S.C. 2210) would make funds available
16 to compensate for public liability (as defined in sec-
17 tion 11 of that Act (42 U.S.C. 2014)).

18 (9) SECRETARY.—The term “Secretary” means
19 the Secretary of Energy.

20 (10) UNITED STATES.—

21 (A) IN GENERAL.—The term “United
22 States” has the meaning given the term in sec-
23 tion 11 of the Atomic Energy Act of 1954 (42
24 U.S.C. 2014).

1 (B) INCLUSIONS.—The term “United
2 States” includes—

3 (i) the Commonwealth of Puerto Rico;

4 (ii) any other territory or possession
5 of the United States;

6 (iii) the Canal Zone; and

7 (iv) the waters of the United States
8 territorial sea under Presidential Procla-
9 mation Number 5928, dated December 27,
10 1988 (43 U.S.C. 1331 note).

11 (11) UNITED STATES PERSON.—The term
12 “United States person” means—

13 (A) any individual who is a resident, na-
14 tional, or citizen of the United States (other
15 than an individual residing outside of the
16 United States and employed by a person who is
17 not a United States person); and

18 (B) any corporation, partnership, associa-
19 tion, joint stock company, business trust, unin-
20 corporated organization, or sole proprietorship
21 that is organized under the laws of the United
22 States.

23 (c) USE OF PRICE-ANDERSON FUNDS.—

24 (1) IN GENERAL.—Funds made available under
25 section 170 of the Atomic Energy Act of 1954 (42

1 U.S.C. 2210) shall be used to cover the contingent
2 cost resulting from any Price-Anderson incident.

3 (2) EFFECT.—The use of funds pursuant to
4 paragraph (1) shall not reduce the limitation on
5 public liability established under section 170 e. of
6 the Atomic Energy Act of 1954 (42 U.S.C.
7 2210(e)).

8 (d) EFFECT ON AMOUNT OF PUBLIC LIABILITY.—

9 (1) IN GENERAL.—Funds made available to the
10 United States under Article VII of the Convention
11 with respect to a Price-Anderson incident shall be
12 used to satisfy public liability resulting from the
13 Price-Anderson incident.

14 (2) AMOUNT.—The amount of public liability
15 allowable under section 170 of the Atomic Energy
16 Act of 1954 (42 U.S.C. 2210) relating to a Price-
17 Anderson incident under paragraph (1) shall be in-
18 creased by an amount equal to the difference be-
19 tween—

20 (A) the amount of funds made available
21 for the Price-Anderson incident under Article
22 VII of the Convention; and

23 (B) the amount of funds used under sub-
24 section (c) to cover the contingent cost resulting
25 from the Price-Anderson incident.

1 (e) RETROSPECTIVE RISK POOLING PROGRAM.—

2 (1) IN GENERAL.—Except as provided in para-
3 graph (2), each nuclear supplier shall participate in
4 a retrospective risk pooling program in accordance
5 with this section to cover the contingent cost result-
6 ing from a covered incident outside the United
7 States that is not a Price-Anderson incident.

8 (2) DEFERRED PAYMENT.—

9 (A) IN GENERAL.—The obligation of a nu-
10 clear supplier to participate in the retrospective
11 risk pooling program shall be deferred until the
12 United States is called on to provide funds pur-
13 suant to Article VII of the Convention with re-
14 spect to a covered incident that is not a Price-
15 Anderson incident.

16 (B) AMOUNT OF DEFERRED PAYMENT.—
17 The amount of a deferred payment of a nuclear
18 supplier under subparagraph (A) shall be based
19 on the risk-informed assessment formula deter-
20 mined under subparagraph (C).

21 (C) RISK-INFORMED ASSESSMENT FOR-
22 MULA.—

23 (i) IN GENERAL.—Not later than 3
24 years after the date of enactment of this
25 Act, and every 5 years thereafter, the Sec-

1 retary shall, by regulation, determine the
2 risk-informed assessment formula for the
3 allocation among nuclear suppliers of the
4 contingent cost resulting from a covered
5 incident that is not a Price-Anderson inci-
6 dent, taking into account risk factors such
7 as—

8 (I) the nature and intended pur-
9 pose of the goods and services sup-
10 plied by each nuclear supplier to each
11 covered installation outside the United
12 States;

13 (II) the quantity of the goods
14 and services supplied by each nuclear
15 supplier to each covered installation
16 outside the United States;

17 (III) the hazards associated with
18 the supplied goods and services if the
19 goods and services fail to achieve the
20 intended purposes;

21 (IV) the hazards associated with
22 the covered installation outside the
23 United States to which the goods and
24 services are supplied;

1 (V) the legal, regulatory, and fi-
2 nancial infrastructure associated with
3 the covered installation outside the
4 United States to which the goods and
5 services are supplied; and

6 (VI) the hazards associated with
7 particular forms of transportation.

8 (ii) FACTORS FOR CONSIDERATION.—

9 In determining the formula, the Secretary
10 may—

11 (I) exclude—

12 (aa) goods and services with
13 negligible risk;

14 (bb) classes of goods and
15 services not intended specifically
16 for use in a nuclear installation;

17 (cc) a nuclear supplier with
18 a de minimis share of the contin-
19 gent cost; and

20 (dd) a nuclear supplier no
21 longer in existence for which
22 there is no identifiable successor;
23 and

24 (II) establish the period on which
25 the risk assessment is based.

1 (iii) APPLICATION.—In applying the
2 formula, the Secretary shall not consider
3 any covered installation or transportation
4 for which funds would be available under
5 section 170 of the Atomic Energy Act of
6 1954 (42 U.S.C. 2210).

7 (iv) REPORT.—Not later than 5 years
8 after the date of enactment of this Act and
9 every 5 years thereafter, the Secretary
10 shall submit to the Committee on Environ-
11 ment and Public Works of the Senate and
12 the Committee on Energy and Commerce
13 of the House of Representatives a report
14 on whether there is a need for continuation
15 or amendment of this section, taking into
16 account the effects of the implementation
17 of the Convention on the United States nu-
18 clear industry and suppliers.

19 (f) REPORTING.—

20 (1) COLLECTION OF INFORMATION.—

21 (A) IN GENERAL.—The Secretary may col-
22 lect information necessary for developing and
23 implementing the formula for calculating the
24 deferred payment of a nuclear supplier under
25 subsection (e)(2).

1 (B) PROVISION OF INFORMATION.—Each
2 nuclear supplier and other appropriate persons
3 shall make available to the Secretary such in-
4 formation, reports, records, documents, and
5 other data as the Secretary determines, by reg-
6 ulation, to be necessary or appropriate to de-
7 velop and implement the formula under sub-
8 section (e)(2)(C).

9 (2) PRIVATE INSURANCE.—The Secretary shall
10 make available to nuclear suppliers, and insurers of
11 nuclear suppliers, information to support the vol-
12 untary establishment and maintenance of private in-
13 surance against any risk for which nuclear suppliers
14 may be required to pay deferred payments under
15 this section.

16 (g) EFFECT ON LIABILITY.—Nothing in any other
17 law (including regulations) limits liability for a covered in-
18 cident to an amount equal to less than the amount pre-
19 scribed in paragraph 1(a) of Article IV of the Convention,
20 unless the law—

21 (1) specifically refers to this section; and

22 (2) explicitly repeals, alters, amends, modifies,
23 impairs, displaces, or supersedes the effect of this
24 subsection.

25 (h) PAYMENTS TO AND BY THE UNITED STATES.—

1 (1) ACTION BY NUCLEAR SUPPLIERS.—

2 (A) NOTIFICATION.—In the case of a re-
3 quest for funds under Article VII of the Con-
4 vention resulting from a covered incident that is
5 not a Price-Anderson incident, the Secretary
6 shall notify each nuclear supplier of the amount
7 of the deferred payment required to be made by
8 the nuclear supplier.

9 (B) PAYMENTS.—

10 (i) IN GENERAL.—Except as provided
11 in clause (ii), not later than 60 days after
12 receipt of a notification under subpara-
13 graph (A), a nuclear supplier shall pay to
14 the general fund of the Treasury the de-
15 ferred payment of the nuclear supplier re-
16 quired under subparagraph (A).

17 (ii) ANNUAL PAYMENTS.—A nuclear
18 supplier may elect to prorate payment of
19 the deferred payment required under sub-
20 paragraph (A) in 5 equal annual payments
21 (including interest on the unpaid balance
22 at the prime rate prevailing at the time the
23 first payment is due).

24 (C) VOUCHERS.—A nuclear supplier shall
25 submit payment certification vouchers to the

1 Secretary of the Treasury in accordance with
2 section 3325 of title 31, United States Code.

3 (2) USE OF FUNDS.—

4 (A) IN GENERAL.—Amounts paid into the
5 Treasury under paragraph (1) shall be available
6 to the Secretary of the Treasury, without fur-
7 ther appropriation and without fiscal year limi-
8 tation, for the purpose of making the contribu-
9 tions of public funds required to be made by the
10 United States under the Convention.

11 (B) ACTION BY SECRETARY OF TREAS-
12 URY.—The Secretary of the Treasury shall pay
13 the contribution required under the Convention
14 to the court of competent jurisdiction under Ar-
15 ticle XIII of the Convention with respect to the
16 applicable covered incident.

17 (3) FAILURE TO PAY.—If a nuclear supplier
18 fails to make a payment required under this sub-
19 section, the Secretary may take appropriate action
20 to recover from the nuclear supplier—

21 (A) the amount of the payment due from
22 the nuclear supplier;

23 (B) any applicable interest on the pay-
24 ment; and

1 (C) a penalty of not more than twice the
2 amount of the deferred payment due from the
3 nuclear supplier.

4 (i) LIMITATION ON JUDICIAL REVIEW; CAUSE OF AC-
5 TION.—

6 (1) LIMITATION ON JUDICIAL REVIEW.—

7 (A) IN GENERAL.—In any civil action aris-
8 ing under the Convention over which Article
9 XIII of the Convention grants jurisdiction to
10 the courts of the United States, any appeal or
11 review by writ of mandamus or otherwise with
12 respect to a nuclear incident that is not a Price-
13 Anderson incident shall be in accordance with
14 chapter 83 of title 28, United States Code, ex-
15 cept that the appeal or review shall occur in the
16 United States Court of Appeals for the District
17 of Columbia Circuit.

18 (B) SUPREME COURT JURISDICTION.—
19 Nothing in this paragraph affects the jurisdic-
20 tion of the Supreme Court of the United States
21 under chapter 81 of title 28, United States
22 Code.

23 (2) CAUSE OF ACTION.—

24 (A) IN GENERAL.—Subject to subpara-
25 graph (B), in any civil action arising under the

1 Convention over which Article XIII of the Con-
2 vention grants jurisdiction to the courts of the
3 United States, in addition to any other cause of
4 action that may exist, an individual or entity
5 shall have a cause of action against the oper-
6 ator to recover for nuclear damage suffered by
7 the individual or entity.

8 (B) REQUIREMENT.—Subparagraph (A)
9 shall apply only if the individual or entity seeks
10 a remedy for nuclear damage (as defined in Ar-
11 ticle I of the Convention) that was caused by a
12 nuclear incident (as defined in Article I of the
13 Convention) that is not a Price-Anderson inci-
14 dent.

15 (C) EFFECT OF PARAGRAPH.—Nothing in
16 this paragraph limits, modifies, extinguishes, or
17 otherwise affects any cause of action that would
18 have existed in the absence of enactment of this
19 paragraph.

20 (j) RIGHT OF RECOURSE.—This section does not pro-
21 vide to an operator of a covered installation any right of
22 recourse under the Convention.

23 (k) PROTECTION OF SENSITIVE UNITED STATES IN-
24 FORMATION.—Nothing in the Convention or this section
25 requires the disclosure of—

1 (1) any data that, at any time, was Restricted
2 Data (as defined in section 11 of the Atomic Energy
3 Act of 1954 (42 U.S.C. 2014));

4 (2) information relating to intelligence sources
5 or methods protected by section 102A(i) of the Na-
6 tional Security Act of 1947 (50 U.S.C. 403–1(i)); or

7 (3) national security information classified
8 under Executive Order 12958 (50 U.S.C. 435 note;
9 relating to classified national security information)
10 (or a successor regulation).

11 (l) REGULATIONS.—

12 (1) IN GENERAL.—The Secretary or the Com-
13 mission, as appropriate, may prescribe regulations to
14 carry out section 170 of the Atomic Energy Act of
15 1954 (42 U.S.C. 2210) and this section.

16 (2) REQUIREMENT.—Rules prescribed under
17 this subsection shall ensure, to the maximum extent
18 practicable, that—

19 (A) the implementation of section 170 of
20 the Atomic Energy Act of 1954 (42 U.S.C.
21 2210) and this section is consistent and equi-
22 table; and

23 (B) the financial and operational burden
24 on a Commission licensee in complying with

1 section 170 of that Act is not greater as a re-
2 sult of the enactment of this section.

3 (3) **APPLICABILITY OF PROVISION.**—Section
4 553 of title 5, United States Code, shall apply with
5 respect to the promulgation of regulations under this
6 subsection.

7 (4) **EFFECT OF SUBSECTION.**—The authority
8 provided under this subsection is in addition to, and
9 does not impair or otherwise affect, any other au-
10 thority of the Secretary or the Commission to pre-
11 scribe regulations.

12 (m) **EFFECTIVE DATE.**—This section takes effect on
13 the date of enactment of this Act.

14 **TITLE VIII—MISCELLANEOUS**

15 **SEC. 801. STUDY OF THE EFFECT OF PRIVATE WIRE LAWS** 16 **ON THE DEVELOPMENT OF COMBINED HEAT** 17 **AND POWER FACILITIES.**

18 (a) **STUDY.**—

19 (1) **IN GENERAL.**—The Secretary, in consulta-
20 tion with the States and other appropriate entities,
21 shall conduct a study of the laws (including regula-
22 tions) affecting the siting of privately owned electric
23 distribution wires on and across public rights-of-way.

24 (2) **REQUIREMENTS.**—The study under para-
25 graph (1) shall include—

1 (A) an evaluation of—

2 (i) the purposes of the laws; and

3 (ii) the effect the laws have on the de-
4 velopment of combined heat and power fa-
5 cilities;

6 (B) a determination of whether a change
7 in the laws would have any operating, reli-
8 ability, cost, or other impacts on electric utili-
9 ties and the customers of the electric utilities;
10 and

11 (C) an assessment of—

12 (i) whether privately owned electric
13 distribution wires would result in duplica-
14 tive facilities; and

15 (ii) whether duplicative facilities are
16 necessary or desirable.

17 (b) REPORT.—Not later than 1 year after the date
18 of enactment of this Act, the Secretary shall submit to
19 Congress a report that describes the results of the study
20 conducted under subsection (a).

1 **TITLE IX—RENEWABLE**
 2 **PORTFOLIO STANDARD**

3 **SEC. 901. RENEWABLE PORTFOLIO STANDARD.**

4 (a) IN GENERAL.—Title VI of the Public Utility Reg-
 5 ulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.) is
 6 amended by adding at the end the following:

7 **“SEC. 610. FEDERAL RENEWABLE PORTFOLIO STANDARD.**

8 “(a) RENEWABLE ENERGY REQUIREMENT.—

9 “(1) IN GENERAL.—Each retail electric supplier
 10 that sells electricity to electric consumers shall ob-
 11 tain a percentage of the base amount of electricity
 12 it sells to electric consumers in any calendar year
 13 from new renewable energy or existing renewable en-
 14 ergy. The percentage obtained in a calendar year
 15 shall not be less than the amount specified in the
 16 following table:

“Calendar years	Minimum annual percentage
2010 through 2012	3.75
2013 through 2016	7.50
2017 through 2019	11.25
2020 through 2030	15.0

17 “(2) MEANS OF COMPLIANCE.—An electric util-
 18 ity shall meet the requirements of paragraph (1)
 19 by—

20 “(A) submitting to the Secretary renewable
 21 energy credits issued under subsection (b);

1 “(B) making alternative compliance pay-
2 ments to the Secretary at the rate of 2 cents
3 per kilowatt hour (as adjusted for inflation
4 under subsection (g)); or

5 “(C) a combination of activities described
6 in subparagraphs (A) and (B).

7 “(3) SPECIAL RULE.—Nothing in this section
8 authorizes or requires the Tennessee Valley Author-
9 ity to make any capital expenditure on new gener-
10 ating capacity, except to the extent that budget au-
11 thority for the expenditure is provided in advance in
12 an appropriations Act.

13 “(b) FEDERAL RENEWABLE ENERGY CREDIT TRAD-
14 ING PROGRAM.—

15 “(1) IN GENERAL.—Not later than July 1,
16 2009, the Secretary shall establish a Federal renew-
17 able energy credit trading program under which elec-
18 tric utilities shall submit to the Secretary renewable
19 energy credits to certify the compliance of the elec-
20 tric utilities with respect to obligations under sub-
21 section (a)(1).

22 “(2) ADMINISTRATION.—As part of the pro-
23 gram, the Secretary shall—

1 “(A) issue tradeable renewable energy
2 credits to generators of electric energy from
3 new renewable energy;

4 “(B) issue nontradeable renewable energy
5 credits to generators of electric energy from ex-
6 isting renewable energy;

7 “(C) issue renewable energy credits to elec-
8 tric utilities associated with State renewable
9 portfolio standard compliance mechanisms pur-
10 suant to subsection (h);

11 “(D) ensure that a kilowatt hour, including
12 the associated renewable energy credit, shall be
13 used only once for purposes of compliance with
14 this Act;

15 “(E) allow double credits for generation
16 from facilities on Indian land, and triple credits
17 for generation from small renewable distributed
18 generators (meaning those no larger than 1
19 megawatt); and

20 “(F) ensure that, with respect to a pur-
21 chaser that, as of the date of enactment of this
22 section, has a purchase agreement from a re-
23 newable energy facility placed in service before
24 that date, the credit associated with the genera-
25 tion of renewable energy under the contract is

1 issued to the purchaser of the electric energy to
2 the extent that the contract does not already
3 provide for the allocation of the Federal credit.

4 “(3) DURATION.—A credit described in sub-
5 paragraph (A), (B), or (C) of paragraph (2) may
6 only be used for compliance with this section during
7 the 3-year period beginning on the date of issuance
8 of the credit.

9 “(4) TRANSFERS.—An electric utility that holds
10 credits in excess of the quantity of credits needed to
11 comply with subsection (a) may transfer the credits
12 to another electric utility in the same utility holding
13 company system.

14 “(5) DELEGATION OF MARKET FUNCTION.—
15 The Secretary may delegate to an appropriate mar-
16 ket-making entity the administration of a national
17 tradeable renewable energy credit market for pur-
18 poses of creating a transparent national market for
19 the sale or trade of renewable energy credits.

20 “(c) ENFORCEMENT.—

21 “(1) CIVIL PENALTIES.—Any electric utility
22 that fails to meet the compliance requirements of
23 subsection (a) shall be subject to a civil penalty.

24 “(2) AMOUNT OF PENALTY.—The amount of
25 the civil penalty shall be determined by multiplying

1 the number of kilowatt-hours of electric energy sold
2 to electric consumers in violation of subsection (a)
3 by the greater of—

4 “(A) the value of the alternative compli-
5 ance payment, as adjusted to reflect changes
6 for the 12-month period ending the preceding
7 November 30 in the Consumer Price Index for
8 All Urban Consumers published by the Bureau
9 of Labor Statistics of the Department of Labor;
10 or

11 “(B) 200 percent of the average market
12 value of renewable energy credits during the
13 year in which the violation occurred.

14 “(3) MITIGATION OR WAIVER.—

15 “(A) PENALTY.—

16 “(i) IN GENERAL.—The Secretary
17 may mitigate or waive a civil penalty under
18 this subsection if the electric utility is un-
19 able to comply with subsection (a) for a
20 reason outside of the reasonable control of
21 the utility.

22 “(ii) AMOUNT.—The Secretary shall
23 reduce the amount of any penalty deter-
24 mined under paragraph (2) by the amount
25 paid by the electric utility to a State for

1 failure to comply with the requirement of
2 a State renewable energy program if the
3 State requirement is greater than the ap-
4 plicable requirement of subsection (a).

5 “(B) REQUIREMENT.—The Secretary may
6 waive the requirements of subsection (a) for a
7 period of up to 5 years with respect to an elec-
8 tric utility if the Secretary determines that the
9 electric utility cannot meet the requirements be-
10 cause of a hurricane, tornado, fire, flood, earth-
11 quake, ice storm, or other natural disaster or
12 act of God beyond the reasonable control of the
13 utility.

14 “(4) PROCEDURE FOR ASSESSING PENALTY.—
15 The Secretary shall assess a civil penalty under this
16 subsection in accordance with the procedures pre-
17 scribed by section 333(d) of the Energy Policy and
18 Conservation Act of 1954 (42 U.S.C. 6303).

19 “(d) STATE RENEWABLE ENERGY ACCOUNT PRO-
20 GRAM.—

21 “(1) IN GENERAL.—There is established in the
22 Treasury a State renewable energy account program.

23 “(2) DEPOSITS.—All money collected by the
24 Secretary from alternative compliance payments and
25 the assessment of civil penalties under this section

1 shall be deposited into the renewable energy account
2 established pursuant to this subsection.

3 “(3) USE.—Proceeds deposited in the State re-
4 newable energy account shall be used by the Sec-
5 retary, subject to appropriations, for a program to
6 provide grants to the State agency responsible for
7 developing State energy conservation plans under
8 section 362 of the Energy Policy and Conservation
9 Act (42 U.S.C. 6322) for the purposes of promoting
10 renewable energy production, including programs
11 that promote technologies that reduce the use of
12 electricity at customer sites such as solar water
13 heating.

14 “(4) ADMINISTRATION.—The Secretary may
15 issue guidelines and criteria for grants awarded
16 under this subsection. State energy offices receiving
17 grants under this section shall maintain such
18 records and evidence of compliance as the Secretary
19 may require.

20 “(5) PREFERENCE.—In allocating funds under
21 this program, the Secretary shall give preference—

22 “(A) to States in regions which have a dis-
23 proportionately small share of economically sus-
24 tainable renewable energy generation capacity;
25 and

1 “(B) to State programs to stimulate or en-
2 hance innovative renewable energy technologies.

3 “(e) RULES.—The Secretary shall issue rules imple-
4 menting this section not later than 1 year after the date
5 of enactment of this section.

6 “(f) EXEMPTIONS.—This section shall not apply in
7 any calendar year to an electric utility—

8 “(1) that sold less than 4,000,000 megawatt-
9 hours of electric energy to electric consumers during
10 the preceding calendar year; or

11 “(2) in Hawaii.

12 “(g) INFLATION ADJUSTMENT.—Not later than De-
13 cember 31 of each year beginning in 2008, the Secretary
14 shall adjust for inflation the rate of the alternative compli-
15 ance payment under subsection (a)(2)(B) and the amount
16 of the civil penalty per kilowatt-hour under subsection
17 (c)(2).

18 “(h) STATE PROGRAMS.—

19 “(1) IN GENERAL.—Nothing in this section di-
20 minishes any authority of a State or political sub-
21 division of a State to adopt or enforce any law or
22 regulation respecting renewable energy or the regu-
23 lation of electric utilities, but, except as provided in
24 subsection (c)(3), no such law or regulation shall re-
25 lieve any person of any requirement otherwise appli-

1 cable under this section. The Secretary, in consulta-
2 tion with States having such renewable energy pro-
3 grams, shall, to the maximum extent practicable, fa-
4 cilitate coordination between the Federal program
5 and State programs.

6 “(2) REGULATIONS.—

7 “(A) IN GENERAL.—The Secretary, in con-
8 sultation with States, shall promulgate regula-
9 tions to ensure that an electric utility that is
10 subject to the requirements of this section and
11 is subject to a State renewable energy standard
12 receives renewable energy credits if—

13 “(i) the electric utility complies with
14 State standard by generating or pur-
15 chasing renewable electric energy or renew-
16 able energy certificates or credits; or

17 “(ii) the State imposes or allows other
18 mechanisms for achieving the State stand-
19 ard, including the payment of taxes, fees,
20 surcharges, or other financial obligations.

21 “(B) AMOUNT OF CREDITS.—The amount
22 of credits received by an electric utility under
23 this subsection shall equal—

24 “(i) in the case of subparagraph
25 (A)(i), the renewable energy resulting from

1 the generation or purchase by the electric
2 utility of existing renewable energy or new
3 renewable energy; and

4 “(ii) in the case of subparagraph
5 (A)(ii), the pro rata share of the electric
6 utility, based on the contributions to the
7 mechanism made by the electric utility or
8 customers of the electric utility, in the
9 State, of the renewable energy resulting
10 from those mechanisms.

11 “(C) PROHIBITION ON DOUBLE COUNT-
12 ING.—The regulations promulgated under this
13 paragraph shall ensure that a kilowatt-hour as-
14 sociated with a renewable energy credit issued
15 pursuant to this subsection shall not be used
16 for compliance with this section more than
17 once.

18 “(i) DEFINITIONS.—In this section:

19 “(1) BASE AMOUNT OF ELECTRICITY.—The
20 term ‘base amount of electricity’ means the total
21 amount of electricity sold by an electric utility to
22 electric consumers in a calendar year, excluding—

23 “(A) electricity generated by a hydro-
24 electric facility (including a pumped storage fa-

1 cility but excluding incremental hydropower);
2 and

3 “(2) DISTRIBUTED GENERATION FACILITY.—

4 The term ‘distributed generation facility’ means a
5 facility at a customer site.

6 “(3) EXISTING RENEWABLE ENERGY.—The

7 term ‘existing renewable energy’ means, except as
8 provided in paragraph (7)(B), electric energy gen-
9 erated at a facility (including a distributed genera-
10 tion facility) placed in service prior to January 1,
11 2001, from solar, wind, or geothermal energy, ocean
12 energy, biomass (as defined in section 203(a) of the
13 Energy Policy Act of 2005), or landfill gas.

14 “(4) GEOTHERMAL ENERGY.—The term ‘geo-

15 thermal energy’ means energy derived from a geo-
16 thermal deposit (within the meaning of section
17 613(e)(2) of the Internal Revenue Code of 1986).

18 “(5) INCREMENTAL GEOTHERMAL PRODUC-

19 TION.—

20 “(A) IN GENERAL.—The term ‘incremental

21 geothermal production’ means for any year the
22 excess of—

23 “(i) the total kilowatt hours of elec-
24 tricity produced from a facility (including a

1 distributed generation facility) using geo-
2 thermal energy; over

3 “(ii) the average annual kilowatt
4 hours produced at such facility for 5 of the
5 previous 7 calendar years before the date
6 of enactment of this section after elimi-
7 nating the highest and the lowest kilowatt
8 hour production years in such 7-year pe-
9 riod.

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

20 “(6) INCREMENTAL HYDROPOWER.—The term
21 ‘incremental hydropower’ means additional energy
22 generated as a result of efficiency improvements or
23 capacity additions made on or after January 1,
24 2001, or the effective date of an existing applicable
25 State renewable portfolio standard program at a hy-

1 hydroelectric facility that was placed in service before
2 that date. The term does not include additional en-
3 ergy generated as a result of operational changes not
4 directly associated with efficiency improvements or
5 capacity additions. Efficiency improvements and ca-
6 pacity additions shall be measured on the basis of
7 the same water flow information used to determine
8 a historic average annual generation baseline for the
9 hydroelectric facility and certified by the Secretary
10 or the Federal Energy Regulatory Commission.

11 “(7) NEW RENEWABLE ENERGY.—The term
12 ‘new renewable energy’ means—

13 “(A) electric energy generated at a facility
14 (including a distributed generation facility)
15 placed in service on or after January 1, 2001,
16 from—

17 “(i) solar, wind, or geothermal energy
18 or ocean energy;

19 “(ii) biomass (as defined in section
20 203(b) of the Energy Policy Act of 2005
21 (42 U.S.C. 15852(b));

22 “(iii) landfill gas; or

23 “(iv) incremental hydropower; and

1 “(B) for electric energy generated at a fa-
2 cility (including a distributed generation facil-
3 ity) placed in service before January 1, 2001—

4 “(i) the additional energy above the
5 average generation during the period be-
6 ginning on January 1, 1998, and ending
7 on January 1, 2001, at the facility from—

8 “(I) solar or wind energy or
9 ocean energy;

10 “(II) biomass (as defined in sec-
11 tion 203(b) of the Energy Policy Act
12 of 2005 (42 U.S.C. 15852(b));

13 “(III) landfill gas; or

14 “(IV) incremental hydropower;

15 and

16 “(ii) incremental geothermal produc-
17 tion.

18 “(8) OCEAN ENERGY.—The term ‘ocean energy’
19 includes current, wave, tidal, and thermal energy.

20 “(9) RETAIL ELECTRIC SUPPLIER.—The term
21 ‘retail electric supplier’ means a person that sells
22 electric energy to electric consumers and sold not
23 less than 1,000,000 megawatt-hours of electric en-
24 ergy to electric consumers for purposes other than
25 resale during the preceding calendar year; except

1 that such term does not include the United States,
2 a State or any political subdivision of a State, or any
3 agency, authority, or instrumentality of any one or
4 more of the foregoing, or a rural electric cooperative.

5 “(j) SUNSET.—This section expires on December 31,
6 2030.”.

7 (b) TABLE OF CONTENTS AMENDMENT.—The table
8 of contents of the Public Utility Regulatory Policies Act
9 of 1978 (16 U.S.C. prec. 2601) is amended by adding at
10 the end of the items relating to title VI the following:

“Sec. 610. Renewable portfolio standard.”.

