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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

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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,*

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007".

(b) TABLE OF CONTENTS.—The table of contents of 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 combined heat and power facilities.

TITLE IX—RENEWABLE PORTFOLIO STANDARD

Sec. 801. Renewable portfolio standard.

SEC. 2. RELATIONSHIP TO OTHER LAW.

Except to the extent expressly provided in this Act or an amendment made by this Act, nothing in this Act or an amendment made by this Act supersedes, limits the authority provided or responsibility conferred by, or authorizes any violation of any provision of law (including a regulation), including any energy or environmental law or regulation.

TITLE I—BIOFUELS FOR ENERGY SECURITY AND TRANSPORTATION

SEC. 101. SHORT TITLE.

This title may be cited as the ''Biofuels for Energy Security and Transportation Act of 2007''.

SEC. 102. DEFINITIONS.

In this title:

(1) ADVANCED BIOFUEL.—

(A) IN GENERAL.—The term ''advanced biofuel'' means fuel derived from renewable biomass other than corn starch.

(B) INCLUSIONS.—The term ''advanced biofuel'' includes—

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

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

(iii) ethanol derived from waste material, including crop residue, other vegetative waste material, animal waste, and food waste and yard waste;

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

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

(vi) butanol or other alcohols produced through the conversion of organic matter from renewable biomass; and

(vii) other fuel derived from cellulosic biomass.

(2) CELLULOSIC BIOMASS ETHANOL.—The term ''cellulosic biomass ethanol'' means ethanol de-

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

(3) CONVENTIONAL BIOFUEL.—The term ''conventional biofuel'' means ethanol derived from corn starch.

(4) RENEWABLE BIOMASS.—The term ''renewable biomass'' means—

(A) nonmerchantable materials or precommercial thinnings that—

(i) are byproducts of preventive treatments, such as trees, wood, brush, thinnings, chips, and slash, that are removed—

(I) to reduce hazardous fuels;

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

(III) to restore forest health;

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

(iii) are harvested from National Forest System land or public land (as defined in section 103 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702))—

(I) where permitted by law; and

(II) in accordance with—

(aa) applicable land management plans; and

(bb) the requirements for old-growth maintenance, restoration, and management direction of paragraphs (2), (3), and (4) of subsection (e) and the requirements for large-tree retention of subsection (f) of section 102 of the Healthy Forests Restoration Act of 2003 (16 U.S.C. 6512); or

(B) any organic matter that is available on a renewable or recurring basis from non-Federal land or from land belonging to an Indian tribe, or an Indian individual, that is held in trust by the United States or subject to a restriction against alienation imposed by the United States, including—

(i) renewable plant material, including—

(I) feed grains;

(II) other agricultural commodities;

(III) other plants and trees; and

(IV) algae; and

(ii) waste material, including—

(I) crop residue;

(II) other vegetative waste material (including wood waste and wood residues);

(III) animal waste and byproducts (including fats, oils, greases, and manure); and

(IV) food waste and yard waste.

(5) RENEWABLE FUEL.—

(A) IN GENERAL.—The term ''renewable fuel'' means motor vehicle fuel or home heating fuel that is—

(i) produced from renewable biomass; and

(ii) used to replace or reduce the quantity of fossil fuel present in a fuel or fuel mixture used to operate a motor vehicle or furnace.

(B) INCLUSION.—The term ''renewable fuel'' includes—

(i) conventional biofuel; and

(ii) advanced biofuel.

(6) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(7) SMALL REFINERY.—The term ''small refinery'' means a refinery for which the average aggregate daily crude oil throughput for a calendar year (as determined by dividing the aggregate throughput for the calendar year by the number of days in the calendar year) does not exceed 75,000 barrels.

Subtitle A—Renewable Fuel Standard

SEC. 111. RENEWABLE FUEL STANDARD.

(a) RENEWABLE FUEL PROGRAM.—

(1) REGULATIONS.—

(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the President shall promulgate regulations to ensure that motor vehicle fuel and home heating oil sold or introduced into commerce in the United States (except in noncontiguous States or territories), on an annual average basis, contains the applicable volume of renewable fuel determined in accordance with paragraph (2).

(B) PROVISIONS OF REGULATIONS.—Regardless of the date of promulgation, the regulations promulgated under subparagraph (A)—

(i) shall contain compliance provisions applicable to refineries, blenders, distributors, and importers, as appropriate, to ensure that—

(I) the requirements of this subsection are met; and

(II) renewable fuels produced from facilities that commence operations after the date of enactment of this Act achieve at least a 20 percent reduction in life cycle greenhouse gas emissions compared to gasoline; but

(ii) shall not—

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

(II) impose any per-gallon obligation for the use of renewable fuel.

(C) RELATIONSHIP TO OTHER REGULATIONS.—Regulations promulgated under this paragraph shall, to the maximum extent practicable, incorporate the program structure, compliance, and reporting requirements established under the final regulations promulgated to implement the renewable fuel program established

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

(2) APPLICABLE VOLUME.—

(A) CALENDAR YEARS 2008 THROUGH 2022.—

(i) RENEWABLE FUEL.—For the purpose of paragraph (1), subject to clause (ii), the applicable volume for any of calendar years 2008 through 2022 shall be determined in accordance with the following 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.

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

biofuels shall be determined in accordance 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.

(B) CALENDAR YEAR 2023 AND THEREAFTER.—Subject to subparagraph (C), for the purposes of paragraph (1), the applicable volume for calendar year 2023 and each calendar year thereafter shall be determined by the President, in coordination with the Secretary of Energy, the Secretary of Agriculture, and the Administrator of the Environmental Protection Agency, based on a review of the implementation of the program during calendar years 2007 through 2022, including a review of—

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

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

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

cluding deliverability of materials, goods, and products other than renewable fuel, and the sufficiency of infrastructure to deliver renewable fuel; and

(iv) the impact of the use of renewable fuels on other factors, including job creation, the price and supply of agricultural commodities, rural economic development, and the environment.

(C) MINIMUM APPLICABLE VOLUME.—Subject to subparagraph (D), for the purpose of paragraph (1), the applicable volume for calendar year 2023 and each calendar year thereafter shall be equal to the product obtained by multiplying—

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

(ii) the ratio that—

(I) 36,000,000,000 gallons of renewable fuel; bears to

(II) the number of gallons of gasoline sold or introduced into commerce in calendar year 2022.

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

(b) APPLICABLE PERCENTAGES.—

(1) PROVISION OF ESTIMATE OF VOLUMES OF GASOLINE SALES.—Not later than October 31 of each of calendar years 2008 through 2021, the Administrator of the Energy Information Administration shall provide to the President an estimate, with respect to the following calendar year, of the volumes of gasoline projected to be sold or introduced into commerce in the United States.

(2) DETERMINATION OF APPLICABLE PERCENTAGES.—

(A) IN GENERAL.—Not later than November 30 of each of calendar years 2008 through 2022, based on the estimate provided under paragraph (1), the President shall determine and publish in the Federal Register, with respect to the following calendar year, the renewable fuel obligation that ensures that the requirements of subsection (a) are met.

(B) REQUIRED ELEMENTS.—The renewable fuel obligation determined for a calendar year under subparagraph (A) shall—

(i) be applicable to refineries, blenders, and importers, as appropriate;

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

(iii) subject to paragraph (3)(A), consist of a single applicable percentage that applies to all categories of persons specified in clause (i).

(3) ADJUSTMENTS.—In determining the applicable percentage for a calendar year, the President shall make adjustments—

(A) to prevent the imposition of redundant obligations on any person specified in paragraph (2)(B)(i); and

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

(c) VOLUME CONVERSION FACTORS FOR RENEWABLE FUELS BASED ON ENERGY CONTENT OR REQUIREMENTS.—

(1) IN GENERAL.—For the purpose of subsection (a), the President shall assign values to specific types of advanced biofuels for the purpose of satisfying the fuel volume requirements of subsection (a)(2) in accordance with this subsection.

(2) ENERGY CONTENT RELATIVE TO ETHANOL.—For advanced biofuel, 1 gallon of the advanced biofuel shall be considered to be the equivalent of 1 gallon of renewable fuel multiplied by the ratio that—

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

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

(3) TRANSITIONAL ENERGY-RELATED CONVERSION FACTORS FOR CELLULOSIC BIOMASS ETHANOL.—For any of calendar years 2008 through 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

are excessive seasonal variations in the use of renewable fuel.

(2) REGULATION OF EXCESSIVE SEASONAL VARIATIONS.—If, for any calendar year, the Administrator of the Energy Information Administration, based on the study under paragraph (1), makes the determinations specified in paragraph (3), the President shall promulgate regulations to ensure that 25 percent or more of the quantity of renewable fuel necessary to meet the requirements of subsection (a) is used during each of the 2 periods specified in paragraph (4) of each subsequent calendar year.

(3) DETERMINATIONS.—The determinations referred to in paragraph (2) are that—

(A) less than 25 percent of the quantity of renewable fuel necessary to meet the requirements of subsection (a) has been used during 1 of the 2 periods specified in paragraph (4) of the calendar year;

(B) a pattern of excessive seasonal variation described in subparagraph (A) will continue in subsequent calendar years; and

(C) promulgating regulations or other requirements to impose a 25 percent or more sea-

sonal use of renewable fuels will not significantly—

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

(ii) prevent or interfere with the attainment of national ambient air quality standards.

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

(A) April through September; and

(B) January through March and October through December.

(f) WAIVERS.—

(1) IN GENERAL.—The President, in consultation with the Secretary of Energy, the Secretary of Agriculture, and the Administrator of the Environmental Protection Agency, may waive the requirements of subsection (a) in whole or in part on petition by one or more States by reducing the national quantity of renewable fuel required under subsection (a), based on a determination by the President (after public notice and opportunity for comment), that—

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

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

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

(2) PETITIONS FOR WAIVERS.—The President, in consultation with the Secretary of Energy, the Secretary of Agriculture, and the Administrator of the Environmental Protection Agency, shall approve or disapprove a State petition for a waiver of the requirements of subsection (a) within 30 days after the date on which the petition is received by the President.

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

(g) SMALL REFINERIES.—

(1) TEMPORARY EXEMPTION.—

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

(i) small refineries (other than a small refinery described in clause (ii)) until calendar year 2013; and

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

(B) EXTENSION OF EXEMPTION.—

(i) STUDY BY SECRETARY.—Not later than December 31, 2008, the Secretary shall submit to the President and Congress a report describing the results of a study to determine whether compliance with the requirements of subsection (a) would impose a disproportionate economic hardship on small refineries.

(ii) EXTENSION OF EXEMPTION.—In the case of a small refinery that the Secretary determines under clause (i) would be subject to a disproportionate economic hardship if required to comply with subsection (a), the President shall extend the exemption under subparagraph (A) for the small refinery for a period of not less than 2 additional years.

(2) PETITIONS BASED ON DISPROPORTIONATE ECONOMIC HARDSHIP.—

(A) EXTENSION OF EXEMPTION.—A small refinery may at any time petition the President for an extension of the exemption under paragraph (1) for the reason of disproportionate economic hardship.

(B) EVALUATION OF PETITIONS.—In evaluating a petition under subparagraph (A), the President, in consultation with the Secretary, shall consider the findings of the study under paragraph (1)(B) and other economic factors.

(C) DEADLINE FOR ACTION ON PETITIONS.—The President shall act on any petition submitted by a small refinery for a hardship exemption not later than 90 days after the date of receipt of the petition.

(3) OPT-IN FOR SMALL REFINERIES.—A small refinery shall be subject to the requirements of subsection (a) if the small refinery notifies the President that the small refinery waives the exemption under paragraph (1).

(h) PENALTIES AND ENFORCEMENT.—

(1) CIVIL PENALTIES.—

(A) IN GENERAL.—Any person that violates a regulation promulgated under subsection (a), or that fails to furnish any information required under such a regulation, shall be liable to the United States for a civil penalty of not more than the total of—

(i) $25,000 for each day of the violation; and

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

(B) COLLECTION.—Civil penalties under subparagraph (A) shall be assessed by, and collected in a civil action brought by, the Secretary or such other officer of the United States as is designated by the President.

(2) INJUNCTIVE AUTHORITY.—

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

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

(ii) award other appropriate relief; and

(iii) compel the furnishing of information required under the regulation.

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

(C) SUBPOENAS.—In the action, a subpoena for a witness who is required to attend a district court in any district may apply in any other district.

(i) VOLUNTARY LABELING PROGRAM.—

(1) IN GENERAL.—The President shall establish criteria for a system of voluntary labeling of renewable fuels based on life cycle greenhouse gas emissions.

(2) CONSUMER EDUCATION.—The President shall ensure that the labeling system under this subsection provides useful information to consumers making fuel purchases.

(3) FLEXIBILITY.—In carrying out this subsection, the President may establish more than 1 label, as appropriate.

(j) STUDY OF IMPACT OF RENEWABLE FUEL STANDARD.—

(1) IN GENERAL.—The Secretary shall enter into an arrangement with the National Academy of Sciences under which the Academy shall conduct a study to assess the impact of the requirements described in subsection (a)(2) on each industry relating to the production of feed grains, livestock, food, and energy.

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

(A) producers of feed grains;

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

(C) producers of food and food products;

(D) producers of energy;

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

(F) users of renewable fuels.

(3) CONSIDERATIONS.—In conducting the study, the National Academy of Sciences shall consider—

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

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

(4) COMPONENTS.—The study shall include—

(A) a description of the conditions under which the requirements described in subsection (a)(2) should be suspended or reduced to prevent adverse impacts to domestic animal agriculture feedstocks described in paragraph (3)(B); and

(B) recommendations for the means by which the Federal Government could prevent or minimize adverse economic hardships and impacts.

(5) DEADLINE FOR COMPLETION OF STUDY.—Not later than 270 days after the date of enactment of this Act, the Secretary shall submit to Congress a report that describes the results of the study.

(6) PERIODIC REVIEWS.—

(A) IN GENERAL.—To allow for the appropriate adjustment of the requirements described

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

(i) existing technologies;

(ii) the feasibility of achieving compliance with the requirements; and

(iii) the impacts of the requirements described in subsection (a)(2) on each individual and entity described in paragraph (2).

(k) EFFECTIVE DATE.—Except as otherwise specifically provided in this section, this section takes effect on the date on which the National Academies of Science completes the study under subsection (j).

SEC. 112. PRODUCTION OF RENEWABLE FUEL USING RENEWABLE ENERGY.

(a) DEFINITIONS.—In this section:

(1) FACILITY.—The term ''facility'' means a facility used for the production of renewable fuel.

(2) RENEWABLE ENERGY.—

(A) IN GENERAL.—The term ''renewable energy'' has the meaning given the term in section 203(b) of the Energy Policy Act of 2005 (42 U.S.C. 15852(b)).

(B) INCLUSION.—The term ''renewable energy'' includes biogas produced through the

conversion of organic matter from renewable biomass.

(b) ADDITIONAL CREDIT.—

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

(2) CREDIT AMOUNT.—The President may provide the credit in a quantity that is not more than the equivalent of 1.5 gallons of renewable fuel for each gallon of renewable fuel produced in a facility described in paragraph (1).

SEC. 113. SENSE OF CONGRESS RELATING TO THE USE OF RENEWABLE RESOURCES TO GENERATE ENERGY.

(a) FINDINGS.—Congress finds that—

(1) the United States has a quantity of renewable energy resources that is sufficient to supply a significant portion of the energy needs of the United States;

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

(3) accelerated development and use of renewable energy technologies provide numerous benefits to the United States, including improved national security, improved balance of payments, healthier rural economies, improved environmental quality, and abundant, reliable, and affordable energy for all citizens of the United States;

(4) the production of transportation fuels from renewable energy would help the United States meet rapidly growing domestic and global energy demands, reduce the dependence of the United States on energy imported from volatile regions of the world that are politically unstable, stabilize the cost and availability of energy, and safeguard the economy and security of the United States;

(5) increased energy production from domestic renewable resources would attract substantial new investments in energy infrastructure, create economic growth, develop new jobs for the citizens of the United States, and increase the income for farm, ranch, and forestry jobs in the rural regions of the United States;

(6) increased use of renewable energy is practical and can be cost effective with the implementa-

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

(7) public policies aimed at enhancing renewable energy production and accelerating technological improvements will further reduce energy costs over time and increase market demand.

(b) SENSE OF CONGRESS.—It is the sense of Congress that it is the goal of the United States that, not later than January 1, 2025, the agricultural, forestry, and working land of the United States should—

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

(2) continue to produce safe, abundant, and affordable food, feed, and fiber.

Subtitle B—Renewable Fuels Infrastructure

SEC. 121. INFRASTRUCTURE PILOT PROGRAM FOR RENEWABLE FUELS.

(a) IN GENERAL.—The Secretary, in consultation with the Secretary of Transportation and the Administrator of the Environmental Protection Agency, shall establish a competitive grant pilot program (referred to in this section as the ''pilot program''), to be administered through the Vehicle Technology Deployment Program of

the Department of Energy, to provide not more than 10 geographically-dispersed project grants to State governments, Indian tribal governments, local governments, metropolitan transportation authorities, or partnerships of those entities to carry out 1 or more projects for the purposes described in subsection (b).

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

(1) installation of infrastructure and equipment necessary to ensure adequate distribution of renewable fuels within the corridor;

(2) installation of infrastructure and equipment necessary to directly support vehicles powered by renewable fuels; and

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

(c) APPLICATIONS.—

(1) REQUIREMENTS.—

(A) IN GENERAL.—Subject to subparagraph (B), not later than 90 days after the date

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

(B) MINIMUM REQUIREMENTS.—At a minimum, the Secretary shall require that an application for a grant under this section—

(i) be submitted by—

(I) the head of a State, tribal, or local government or a metropolitan transportation authority, or any combination of those entities; and

(II) a registered participant in the Vehicle Technology Deployment Program of the Department of Energy; and

(ii) include—

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

(II) an estimate of the degree of use of the project, including the estimated size of fleet of vehicles operated with renewable fuel available within the geographic region of the corridor,

measured as a total quantity and a percentage;

(III) an estimate of the potential petroleum displaced as a result of the project (measured as a total quantity and a percentage), and a plan to collect and disseminate petroleum displacement and other relevant data relating to the project to be funded under the grant, over the expected life of the project;

(IV) a description of the means by which the project will be sustainable without Federal assistance after the completion of the term of the grant;

(V) a complete description of the costs of the project, including acquisition, construction, operation, and maintenance costs over the expected life of the project; and

(VI) a description of which costs of the project will be supported by Federal assistance under this subsection.

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

(d) SELECTION CRITERIA.—In evaluating applications under the pilot program, the Secretary shall—

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

(2) give priority consideration to applications that—

(A) are most likely to maximize displacement of petroleum consumption, measured as a total quantity and a percentage;

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

(C) demonstrate the greatest commitment on the part of the applicant to ensure funding for the proposed project and the greatest likelihood that the project will be maintained or expanded after Federal assistance under this subsection is completed;

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

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

(e) PILOT PROJECT REQUIREMENTS.—

(1) MAXIMUM AMOUNT.—The Secretary shall provide not more than $20,000,000 in Federal assistance under the pilot program to any applicant.

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

(3) MAXIMUM PERIOD OF GRANTS.—The Secretary shall not provide funds to any applicant under the pilot program for more than 2 years.

(4) DEPLOYMENT AND DISTRIBUTION.—The Secretary shall seek, to the maximum extent practicable, to ensure a broad geographic distribution of project sites funded by grants under this section.

(5) TRANSFER OF INFORMATION AND KNOWLEDGE.—The Secretary shall establish mechanisms to ensure that the information and knowledge gained by participants in the pilot program are transferred among the pilot program participants and to other interested parties, including other applicants that submitted applications.

(f) SCHEDULE.—

(1) INITIAL GRANTS.—

(A) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Secretary shall publish in the Federal Register, Commerce Business Daily, and such other publications as the Secretary considers to be appropriate, a notice and request for applications to carry out projects under the pilot program.

(B) DEADLINE.—An application described in subparagraph (A) shall be submitted to the Secretary by not later than 180 days after the date of publication of the notice under that subparagraph.

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

(2) ADDITIONAL GRANTS.—

(A) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Secretary shall publish in the Federal Register, Commerce Business Daily, and such other publications as the Secretary considers to be appro-

priate, a notice and request for additional applications to carry out projects under the pilot program that incorporate the information and knowledge obtained through the implementation of the first round of projects authorized under the pilot program.

(B) DEADLINE.—An application described in subparagraph (A) shall be submitted to the Secretary by not later than 180 days after the date of publication of the notice under that subparagraph.

(C) INITIAL SELECTION.—Not later than 90 days after the date by which applications for grants are due under subparagraph (B), the Secretary shall select by competitive, peer-reviewed proposal such additional applications for projects to be awarded a grant under the pilot program as the Secretary determines to be appropriate.

(g) REPORTS TO CONGRESS.—

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

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

(B) an identification of other applicants that submitted applications for the pilot program but to which funding was not provided; and

(C) a description of the mechanisms used by the Secretary to ensure that the information and knowledge gained by participants in the pilot program are transferred among the pilot program participants and to other interested parties, including other applicants that submitted applications.

(2) EVALUATION.—Not later than 2 years after the date of enactment of this Act, and annually thereafter until the termination of the pilot program, the Secretary shall submit to Congress a report containing an evaluation of the effectiveness of the pilot program, including an assessment of the petroleum displacement and benefits to the environment derived from the projects included in the pilot program.

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

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

SEC. 122. BIOENERGY RESEARCH AND DEVELOPMENT.

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

(1) in paragraph (2), by striking ''$251,000,000'' and inserting ''$377,000,000''; and

(2) in paragraph (3), by striking ''$274,000,000'' and inserting ''$398,000,000''.

SEC. 123. BIORESEARCH CENTERS FOR SYSTEMS BIOLOGY PROGRAM.

Section 977(a)(1) of the Energy Policy Act of 2005 (42 U.S.C. 16317(a)(1)) is amended by inserting before the period at the end the following: '', including the establishment of at least 11 bioresearch centers of varying sizes, as appropriate, that focus on biofuels, of which at least 2 centers shall be located in each of the 4 Petroleum Administration for Defense Districts with no subdistricts and 1 center shall be located in each of the subdistricts of the Petroleum Administration for Defense District with subdistricts''.

SEC. 124. LOAN GUARANTEES FOR RENEWABLE FUEL FACILITIES.

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

"(f) RENEWABLE FUEL FACILITIES.—

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

"(2) REQUIREMENTS.—A project under this subsection shall employ new or significantly improved technologies for the production of renewable fuels as compared to commercial technologies in service in the United States at the time that the guarantee is issued.

"(3) ISSUANCE OF FIRST LOAN GUARANTEES.—The requirement of section 20320(b) of division B of the Continuing Appropriations Resolution, 2007 (Public Law 109–289, Public Law 110–5), relating to the issuance of final regulations, shall not apply to the first 6 guarantees issued under this subsection.

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

a project design that has been validated through the operation of a continuous process pilot facility with an annual output of at least 50,000 gallons of ethanol or the energy equivalent volume of other advanced biofuels.

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

"(6) AMOUNT OF GUARANTEE.—The Secretary shall guarantee 100 percent of the principal and interest due on 1 or more loans made for a facility that is the subject of the guarantee under paragraph (3).

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

"(8) REPORT.—Not later than 30 days after approving or disapproving an application under paragraph (7), the Secretary shall submit to Congress a report on the approval or disapproval (including the reasons for the action).".

(b) IMPROVEMENTS TO UNDERLYING LOAN GUARANTEE AUTHORITY.—

(1) DEFINITION OF COMMERCIAL TECHNOLOGY.—Section 1701(1) of the Energy Policy Act of 2005 (42 U.S.C. 16511(1)) is amended by striking subparagraph (B) and inserting the following:

"(B) EXCLUSION.—The term 'commercial technology' does not include a technology if the sole use of the technology is in connection with—

"(i) a demonstration plant; or

"(ii) a project for which the Secretary approved a loan guarantee.".

(2) SPECIFIC APPROPRIATION OR CONTRIBUTION.—Section 1702 of the Energy Policy Act of 2005 (42 U.S.C. 16512) is amended by striking subsection (b) and inserting the following:

"(b) SPECIFIC APPROPRIATION OR CONTRIBUTION.—

"(1) IN GENERAL.—No guarantee shall be made unless—

"(A) an appropriation for the cost has been made; or

"(B) the Secretary has received from the borrower a payment in full for the cost of the obligation and deposited the payment into the Treasury.

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

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

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

"(c) AMOUNT.—

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

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

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

(A) by striking subparagraph (B); and

(B) by redesignating subparagraph (C) as subparagraph (B).

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

"(2) AVAILABILITY.—Fees collected under this subsection shall—

"(A) be deposited by the Secretary into a special fund in the Treasury to be known as the 'Incentives For Innovative Technologies Fund'; and

"(B) remain available to the Secretary for expenditure, without further appropriation or fiscal year limitation, for administrative expenses incurred in carrying out this title.".

SEC. 125. GRANTS FOR RENEWABLE FUEL PRODUCTION RESEARCH AND DEVELOPMENT IN CERTAIN STATES.

(a) IN GENERAL.—The Secretary shall provide grants to eligible entities to conduct research into, and develop and implement, renewable fuel production technologies in States with low rates of ethanol production, including low rates of production of cellulosic biomass ethanol, as determined by the Secretary.

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

(1)(A) be an institution of higher education (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)) located in a State described in subsection (a);

(B) be an institution—

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

(ii) that is eligible for a grant under the Tribally Controlled College or University Assistance Act of 1978 (25 U.S.C. 1801 et seq.), including Diné College; or

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

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

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

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

SEC. 126. GRANTS FOR INFRASTRUCTURE FOR TRANSPORTATION OF BIOMASS TO LOCAL BIOREFINERIES.

(a) IN GENERAL.—The Secretary shall conduct a program under which the Secretary shall provide grants to Indian tribal and local governments and other eligible entities (as determined by the Secretary) (referred to in this section as ''eligible entities'') to promote the development of infrastructure to support the separation, production, processing, and transportation of biomass to local biorefineries, including by portable processing equipment.

(b) PHASES.—The Secretary shall conduct the program in the following phases:

(1) DEVELOPMENT.—In the first phase of the program, the Secretary shall make grants to eligible entities to assist the eligible entities in the development of local projects to promote the development of infrastructure to support the separation, production, processing, and transportation of biomass to local biorefineries, including by portable processing equipment.

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

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

SEC. 127. BIOREFINERY INFORMATION CENTER.

(a) IN GENERAL.—The Secretary, in cooperation with the Secretary of Agriculture, shall establish a biorefinery information center to make available to interested parties information on—

(1) renewable fuel resources, including information on programs and incentives for renewable fuels;

(2) renewable fuel producers;

(3) renewable fuel users; and

(4) potential renewable fuel users.

(b) ADMINISTRATION.—In administering the biorefinery information center, the Secretary shall—

(1) continually update information provided by the center;

(2) make information available to interested parties on the process for establishing a biorefinery; and

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

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

SEC. 128. ALTERNATIVE FUEL DATABASE AND MATERIALS.

The Secretary and the Director of the National Institute of Standards and Technology shall jointly establish and make available to the public—

(1) a database that describes the physical properties of different types of alternative fuel; and

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

SEC. 129. FUEL TANK CAP LABELING REQUIREMENT.

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

(1) by striking ''The Federal Trade Commission'' and inserting the following:

''(1) IN GENERAL.—The Federal Trade Commission''; and

(2) by adding at the end the following:

''(2) FUEL TANK CAP LABELING REQUIREMENT.—Beginning with model year 2010, the fuel tank cap of each alternative fueled vehicle manufac-

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

SEC. 130. BIODIESEL.

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

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

(c) NATIONAL BIODIESEL FUEL QUALITY STANDARD.—

(1) QUALITY REGULATIONS.—Not later than 180 days after the date of enactment of this Act, the President shall promulgate regulations to ensure that each diesel-equivalent fuel derived from renewable biomass and introduced into interstate commerce is tested and certified to comply with applicable standards of the American Society for Testing and Materials.

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

(3) FUNDING.—There are authorized to be appropriated to the President to carry out this section:

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

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

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

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

(a) DEFINITIONS.—In this section:

(1) CELLULOSIC CROP.—The term ''cellulosic crop'' means a tree or grass that is grown specifically—

(A) to provide raw materials (including feedstocks) for conversion to liquid transportation fuels or chemicals through biochemical or thermochemical processes; or

(B) for energy generation through combustion, pyrolysis, or cofiring.

(2) CELLULOSIC REFINER.—The term ''cellulosic refiner'' means the owner or operator of a cellulosic refinery.

(3) CELLULOSIC REFINERY.—The term ''cellulosic refinery'' means a refinery that processes a cellulosic crop.

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

(A) the subject of a contract or memorandum of understanding between the producer and a cellulosic refiner, under which the producer is obligated to sell the crop to the cellulosic refiner by a certain date; and

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

(5) SECRETARY.—The term ''Secretary'' means the Secretary of Agriculture.

(b) TRANSITIONAL ASSISTANCE PAYMENTS.—The Secretary shall make transitional assistance payments to an agricultural producer during the first year in which the producer devotes land to the production of a qualified cellulosic crop.

(c) AMOUNT OF PAYMENT.—

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

be made to an agricultural producer under this section, based on the opportunity cost (as determined in accordance with such standard as the Secretary may establish, taking into consideration land rental rates and other applicable costs) incurred by the producer during the first year in which the producer devotes land to the production of the qualified cellulosic crop.

(2) LIMITATION.—The total of the amount paid to a producer under this section shall not exceed an amount equal to 25 percent of the amounts made available under subsection (e) for the applicable fiscal year.

(d) REGULATIONS.—The Secretary shall promulgate such regulations as the Secretary determines to be necessary to carry out this section.

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

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

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

sure the protection of wildlife habitat, biodiversity, water quality, air quality, and rural and regional economies throughout the lifecycle of each low-carbon fuel, it is necessary and desirable to undertake a combination of basic and applied research, as well as technology development and demonstration, involving the colleges and universities of the United States, in partnership with the Federal Government, State governments, and the private sector.

(b) PURPOSE.—The purpose of this section is to provide for research support to facilitate the development of sustainable markets and technologies to produce and use woody biomass and other low-carbon fuels for the production of thermal and electric energy, biofuels, and bioproducts.

(c) DEFINITION OF FUEL EMISSION BASELINE.—In this section, the term ''fuel emission baseline'' means the average lifecycle greenhouse gas emissions per unit of energy of the fossil fuel component of conventional transportation fuels in commerce in the United States in calendar year 2008, as determined by the President.

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

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

(A) use woody biomass to deploy advanced technologies for production of thermal and electric energy, biofuels, and bioproducts; and

(B) are targeted at regional feedstocks and markets;

(2) conducting targeted research for the development of cellulosic ethanol and other liquid fuels from woody or other biomass that may be used in transportation or stationary applications, such as industrial processes or industrial, commercial, and residential heating;

(3) conducting research into the best scientifically-based and periodically-updated methods of assessing and certifying the impacts of each low-carbon fuel with respect to—

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

(i) the fuel emission baseline; and

(ii) the greenhouse gas emissions of other sectors, such as the agricultural, industrial, and manufacturing sectors;

(B) the contribution of the fuel toward enhancing the energy security of the United States by displacing imported petroleum and petroleum products;

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

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

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

(5) conducting research for the development of the supply infrastructure that may provide renewable biomass feedstocks in a consistent, predictable, and environmentally-sustainable manner;

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

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

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

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

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

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

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

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

Subtitle C—Studies

SEC. 141. STUDY OF ADVANCED BIOFUELS TECHNOLOGIES.

(a) IN GENERAL.—Not later than October 1, 2012, the Secretary shall offer to enter into a contract with the National Academy of Sciences under which the Academy shall conduct a study of technologies relating to the production, transportation, and distribution of advanced biofuels.

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

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

(2) consider whether the rate of development of those technologies will be sufficient to meet the advanced biofuel standards required under section 111;

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

partment of Energy relating to advanced biofuel technologies; and

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

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

SEC. 142. STUDY OF INCREASED CONSUMPTION OF ETHANOL-BLENDED GASOLINE WITH HIGHER LEVELS OF ETHANOL.

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

(b) STUDY.—The study under subsection (a) shall include—

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

(2) an evaluation of the economic, market, and energy-related impacts of State and regional differences in ethanol blends;

(3) an evaluation of the economic, market, and energy-related impacts on gasoline retailers and consumers of separate and distinctly labeled fuel storage facilities and dispensers;

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

(5) an evaluation of the impacts of mid-level ethanol blends on the operation, durability, and performance of on-road, off-road, and marine engines, recreational boats, vehicles, and equipment; and

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

(c) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the results of the study conducted under this section.

SEC. 143. PIPELINE FEASIBILITY STUDY.

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

(b) FACTORS.—In conducting the study, the Secretary shall consider—

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

(2) existing or potential barriers to dedicated ethanol pipelines, including technical, siting, financing, and regulatory barriers;

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

(4) regulatory, financing, and siting options that would mitigate risk in those areas and help ensure the construction of 1 or more dedicated ethanol pipelines;

(5) financial incentives that may be necessary for the construction of dedicated ethanol pipelines, including the return on equity that sponsors of the initial dedicated ethanol pipelines will require to invest in the pipelines;

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

fying remedial and preventative measures to ensure pipeline integrity; and

(7) such other factors as the Secretary considers appropriate.

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

SEC. 144. STUDY OF OPTIMIZATION OF FLEXIBLE FUELED VEHICLES TO USE E–85 FUEL.

(a) IN GENERAL.—The Secretary shall conduct a study of methods of increasing the fuel efficiency of flexible fueled vehicles by optimizing flexible fueled vehicles to operate using E–85 fuel.

(b) REPORT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives a report that describes the results of the study, including any recommendations of the Secretary.

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

(a) DEFINITION OF ELECTRIC VEHICLE.—In this section, the term ''electric vehicle'' means an electric

motor vehicle (as defined in section 601 of the Energy Policy Act of 1992 (42 U.S.C. 13271)) for which the rechargeable storage battery—

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

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

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

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

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

(2) alternatives for—

(A) designing a pilot program to determine the feasibility of using renewable electricity to power electric vehicles as an adjunct to a renewable fuels mandate;

(B) allowing the use, under the pilot program designed under subparagraph (A), of electricity generated from nuclear energy as an additional source of supply;

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

(D) equating specific quantities of electricity to quantities of renewable fuel under section 111(d).

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

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

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

(1) an assessment of whether the use of biodiesel in conventional diesel engines lessens engine durability; and

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

(A) B5;

(B) B10;

(C) B20; and

(D) B30.

SEC. 147. STUDY OF INCENTIVES FOR RENEWABLE FUELS.

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

(1) the costs to produce conventional and advanced biofuels;

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

(3) the financial incentives necessary to enhance, to the maximum extent practicable, the biofuels industry of the United States to reduce the dependence of the United States on foreign oil during calendar years 2011 through 2030.

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

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

SEC. 148. STUDY OF STREAMLINED LIFECYCLE ANALYSIS TOOLS FOR THE EVALUATION OF RENEWABLE CARBON CONTENT OF BIOFUELS.

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

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

(2) methods for performing simplified, streamlined lifecycle analyses of the fossil and renewable carbon content of biofuels.

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

(1) carbon inputs to feedstock production; and

(2) carbon inputs to the biofuel production process, including the carbon associated with electrical and thermal energy inputs.

SEC. 149. STUDY OF EFFECTS OF ETHANOL-BLENDED GASOLINE ON OFF-ROAD VEHICLES.

(a) STUDY.—

(1) IN GENERAL.—The Secretary, in consultation with the Secretary of Transportation and the Administrator of the Environmental Protection Agency, shall conduct a study to determine the effects of ethanol-blended gasoline on off-road vehicles and recreational boats.

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

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

SEC. 150. STUDY OF OFFSHORE WIND RESOURCES.

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE INSTITUTION.—The term ''eligible institution'' means a college or university that—

(A) as of the date of enactment of this Act, has an offshore wind power research program; and

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

eastern outer Continental Shelf, as determined by the Secretary.

(2) SECRETARY.—The term ''Secretary'' means the Secretary of the Interior, acting through the Director of the Minerals Management Service.

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

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

(1) a description of—

(A) the locations and total power generation resources of the best offshore wind resources located in the region of the eastern outer Continental Shelf, as determined by the Secretary;

(B) based on conflicting zones relating to any infrastructure that, as of the date of enactment of this Act, is located in close proximity to any offshore wind resource, the likely exclusion zones of each offshore wind resource described in subparagraph (A);

(C) the relationship of the temporal variation of each offshore wind resource described in subparagraph (A) with—

(i) any other offshore wind resource; and

(ii) with loads and corresponding system operator markets;

(D) the geological compatibility of each offshore wind resource described in subparagraph (A) with any potential technology relating to sea floor towers; and

(E) with respect to each area in which an offshore wind resource described in subparagraph (A) is located, the relationship of the authority under any coastal management plan of the State in which the area is located with the Federal Government; and

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

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

(1) relating to any offshore wind resource located in any appropriate area of the outer Continental Shelf, as determined by the Secretary; and

(2) that is completed on or after the date of enactment of this Act.

(e) EFFECT.—Nothing in this section—

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

(2) limits the authority of the Secretary to lease any offshore wind resource located in any appropriate area of the outer Continental Shelf, as determined by the Secretary.

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

Subtitle D—Environmental Safeguards

SEC. 161. GRANTS FOR PRODUCTION OF ADVANCED BIOFUELS.

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

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

(1) shall make awards to the proposals for advanced biofuels with the greatest reduction in lifecycle greenhouse gas emissions compared to the comparable motor vehicle fuel lifecycle emissions during calendar year 2007; and

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

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

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

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

"(t) STUDIES OF EFFECTS OF RENEWABLE FUEL USE.—

"(1) IN GENERAL.—Not later than 1 year after the date of enactment of this subsection, the Administrator shall offer to enter into appropriate arrangements with the National Academy of Sciences and any other independent research institute determined to be appropriate by the Administrator, in consulta-

tion with appropriate Federal agencies, to conduct 2 studies on the effects of increased domestic use of renewable fuels under the Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007.

"(2) MATTERS TO BE STUDIED.—

"(A) IN GENERAL.—The studies under this subsection shall assess, quantify, and recommend analytical methodologies in relation to environmental changes associated with the increased domestic use of renewable fuels under the Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007, including production, handling, transportation, and use of the fuels.

"(B) SPECIFIC MATTERS.—The studies shall include an assessment and quantification, to the maximum extent practicable, of significant changes—

"(i) in air and water quality and the quality of other natural resources;

"(ii) in land use patterns;

"(iii) in the rate of deforestation in the United States and globally;

"(iv) to greenhouse gas emissions;

"(v) to significant geographic areas and habitats with high biodiversity values (including species richness, the presence of species that are exclusively native to a place, or the presence of endangered species); or

"(vi) in the long-term capacity of the United States to produce biomass feedstocks.

"(C) BASELINE COMPARISON.—In making an assessment or quantifying effects of increased use of renewable fuels, the studies shall use an appropriate baseline involving increased use of the conventional transportation fuels, if displacement by use of renewable fuels had not occurred.

"(3) REPORTS TO CONGRESS.—The Administrator shall submit to Congress a report summarizing the assessments and findings of—

"(A) the first study, along with any recommendations by the Administrator to mitigate adverse effects identified by the study, not later than 3 years after the date of enactment of this subsection; and

"(B) the second study, along with any recommendations by the Administrator to mitigate adverse effects identified by the study, not later December 31, 2015.".

SEC. 163. INTEGRATED CONSIDERATION OF WATER QUALITY IN DETERMINATIONS ON FUELS AND FUEL ADDITIVES.

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

(1) by striking "nonroad vehicle (A) if in the judgment of the Administrator" and inserting "nonroad vehicle—

"(A) if, in the judgment of the Administrator, any fuel or fuel additive or";

(2) in subparagraph (A), by striking "air pollution which" and inserting "air pollution or water pollution (including any degradation in the quality of groundwater) that"; and

(3) by striking ", or (B) if" and inserting the following: "; or

"(B) if".

SEC. 164. ANTI-BACKSLIDING.

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

"(u) PREVENTION OF AIR QUALITY DETERIORATION.—

"(1) STUDY.—

"(A) IN GENERAL.—Not later than 18 months after the date of enactment of the Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007, the Administrator shall complete a study to determine whether the renewable fuel volumes required by that Act will adversely impact air quality as a result of changes in vehicle and engine emissions of air pollutants regulated under this Act.

"(B) CONSIDERATIONS.—The study shall include consideration of—

"(i) different blend levels, types of renewable fuels, and available vehicle technologies; and

"(ii) appropriate national, regional, and local air quality control measures.

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

"(A) promulgate regulations to implement appropriate measures to mitigate, to the great-

est extent achievable, considering the results of the study under paragraph (1), any adverse impacts on air quality, as the result of the renewable volumes required by that Act; or

"(B) make a determination that no such measures are necessary.

"(3) OTHER REQUIREMENTS.—Nothing in title I of the Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007 supercedes or otherwise affects any Federal or State requirement under any other provision of law that is more stringent than any requirement of this title.".

TITLE II—ENERGY EFFICIENCY PROMOTION

SEC. 201. SHORT TITLE.

This title may be cited as the "Energy Efficiency Promotion Act of 2007".

SEC. 202. DEFINITION OF SECRETARY.

In this title, the term "Secretary" means the Secretary of Energy.

Subtitle A—Promoting Advanced Lighting Technologies

SEC. 211. ACCELERATED PROCUREMENT OF ENERGY EFFICIENT LIGHTING.

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

"(f) ACCELERATED PROCUREMENT OF ENERGY EFFICIENT LIGHTING.—

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

"(2) GUIDELINES.—

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

"(B) REPLACEMENT COSTS.—The guidelines shall take into consideration the costs of replacing all general service lighting and the reduced cost of operation and maintenance expected to result from such replacement.".

SEC. 212. INCANDESCENT REFLECTOR LAMP EFFICIENCY STANDARDS.

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

(1) in paragraph (30)(C)(ii)—

(A) in the matter preceding subclause (I)—

(i) by striking ''or similar bulb shapes (excluding ER or BR)'' and inserting ''ER, BR, BPAR, or similar bulb shapes''; and

(ii) by striking ''2.75'' and inserting ''2.25''; and

(B) by striking ''is either—'' and all that follows through subclause (II) and inserting ''has a rated wattage that is 40 watts or higher''; and

(2) by adding at the end the following:

''(52) BPAR INCANDESCENT REFLECTOR LAMP.—The term 'BPAR incandescent reflector lamp' means a reflector lamp as shown in figure C78.21–278 on page 32 of ANSI C78.21–2003.

''(53) BR INCANDESCENT REFLECTOR LAMP; BR30; BR40.—

''(A) BR INCANDESCENT REFLECTOR LAMP.—The term 'BR incandescent reflector lamp' means a reflector lamp that has—

"(i) a bulged section below the major diameter of the bulb and above the approximate baseline of the bulb, as shown in figure 1 (RB) on page 7 of ANSI C79.1–1994, incorporated by reference in section 430.22 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this paragraph); and

"(ii) a finished size and shape shown in ANSI C78.21–1989, including the referenced reflective characteristics in part 7 of ANSI C78.21–1989, incorporated by reference in section 430.22 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this paragraph).

"(B) BR30.—The term 'BR30' means a BR incandescent reflector lamp with a diameter of 30/8ths of an inch.

"(C) BR40.—The term 'BR40' means a BR incandescent reflector lamp with a diameter of 40/8ths of an inch.

"(54) ER INCANDESCENT REFLECTOR LAMP; ER30; ER40.—

"(A) ER INCANDESCENT REFLECTOR LAMP.—The term 'ER incandescent reflector lamp' means a reflector lamp that has—

"(i) an elliptical section below the major diameter of the bulb and above the approximate baseline of the bulb, as shown in figure 1 (RE) on page 7 of ANSI C79.1–1994, incorporated by reference in section 430.22 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this paragraph); and

"(ii) a finished size and shape shown in ANSI C78.21–1989, incorporated by reference in section 430.22 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this paragraph).

"(B) ER30.—The term 'ER30' means an ER incandescent reflector lamp with a diameter of 30/8ths of an inch.

"(C) ER40.—The term 'ER40' means an ER incandescent reflector lamp with a diameter of 40/8ths of an inch.

"(55) R20 INCANDESCENT REFLECTOR LAMP.—The term 'R20 incandescent reflector lamp'

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

(b) STANDARDS FOR FLUORESCENT LAMPS AND INCANDESCENT REFLECTOR LAMPS.—Section 325(i) of the Energy Policy and Conservation Act (42 U.S.C. 6925(i)) is amended by striking paragraph (1) and inserting the following:

''(1) STANDARDS.—

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

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

''FLUORESCENT LAMPS

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

"(C) EXEMPTIONS.—The standards specified in subparagraph (B) shall not apply to the following types of incandescent reflector lamps:

"(i) Lamps rated at 50 watts or less that are ER30, BR30, BR40, or ER40 lamps.

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

"(iii) R20 incandescent reflector lamps rated 45 watts or less.

"(D) EFFECTIVE DATES.—

"(i) ER, BR, AND BPAR LAMPS.—The standards specified in subparagraph (B) shall apply with respect to ER incandescent reflector lamps, BR incandescent reflector lamps, BPAR incandescent reflector

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

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

SEC. 213. BRIGHT TOMORROW LIGHTING PRIZES.

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

(b) PRIZE SPECIFICATIONS.—

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

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

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

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

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

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

(F) having 70 percent of the lumen value under subparagraph (A) exceeding 25,000 hours under typical conditions expected in residential use;

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

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

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

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

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

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

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

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

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

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

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

(F) having 70 percent of the lumen value under subparagraph (A) exceeding 25,000 hours under typical conditions expected in residential use;

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

(H) having a size and shape that fits within the maximum dimensions of a PAR 38 halogen lamp in accordance with American National Standards Institute standard C78–21–2003, figure C78.21–238;

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

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

(3) TWENTY-FIRST CENTURY LAMP PRIZE.—The Secretary shall award a Twenty-First Century Lamp Prize to an entrant that produces a solid-state-light-light capable of—

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

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

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

(D) having a color coordinate temperature between 2,800 and 3,000 degrees Kelvin; and

(E) having a lifetime exceeding 25,000 hours.

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

(d) TECHNICAL REVIEW.—The Secretary shall establish a technical review committee composed of non-Federal officers to review entrant data submitted under this section to determine whether the data meets the prize specifications described in subsection (b).

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

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

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

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

(3) the Twenty-First Century Lamp Prize described in subsection (b)(3) shall be $5,000,000.

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

(1) 60-WATT INCANDESCENT REPLACEMENT.—Subject to paragraph (3), as soon as practicable after the successful award of the 60-Watt Incandescent Replacement Lamp Prize under subsection (b)(1), the Secretary (in consultation with the Administrator of General Services) shall develop governmentwide Federal purchase guidelines with a goal of replacing the use of 60-watt incandescent lamps in Federal Government buildings with a solid-state-light package described in subsection (b)(1) by not later than the date that is 5 years after the date the award is made.

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

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

(3) WAIVERS.—

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

(B) REPORT OF WAIVER.—If the Secretary or Administrator waives the application of paragraph (1) or (2), the Secretary or Administrator, respectively, shall submit to Congress an annual report that describes the waiver and provides a detailed justification for the waiver.

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

(i) BRIGHT LIGHT TOMORROW AWARD FUND.—

(1) ESTABLISHMENT.—There is established in the United States Treasury a Bright Light Tomorrow permanent fund without fiscal year limitation to award prizes under paragraphs (1), (2), and (3) of subsection (b).

(2) SOURCES OF FUNDING.—The fund established under paragraph (1) shall accept—

(A) fiscal year appropriations; and

(B) private contributions authorized under subsection (c).

(j) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section.

SEC. 214. SENSE OF SENATE CONCERNING EFFICIENT LIGHTING STANDARDS.

(a) FINDINGS.—The Senate finds that—

(1) there are approximately 4,000,000,000 screw-based sockets in the United States that contain traditional, energy-inefficient, incandescent light bulbs;

(2) incandescent light bulbs are based on technology that is more than 125 years old;

(3) there are radically more efficient lighting alternatives in the market, with the promise of even more choices over the next several years;

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

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

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

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

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

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

(1) pass a set of mandatory, technology-neutral standards to establish firm energy efficiency performance targets for lighting products;

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

(3) in developing the standards—

(A) establish the efficiency requirements to ensure that replacement lamps will provide consumers with the same quantity of light while using significantly less energy;

(B) ensure that consumers will continue to have multiple product choices, including energy-saving halogen, incandescent, compact fluorescent, and LED light bulbs; and

(C) work with industry and key stakeholders on measures that can assist consumers and businesses in making the important transition to more efficient lighting.

SEC. 215. RENEWABLE ENERGY CONSTRUCTION GRANTS.

(a) DEFINITIONS.—In this section:

(1) ALASKA SMALL HYDROELECTRIC POWER.—The term ''Alaska small hydroelectric power'' means power that—

(A) is generated—

(i) in the State of Alaska;

(ii) without the use of a dam or impoundment of water; and

(iii) through the use of—

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

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

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

(2) ELIGIBLE APPLICANT.—The term ''eligible applicant'' means any—

(A) governmental entity;

(B) private utility;

(C) public utility;

(D) municipal utility;

(E) cooperative utility;

(F) Indian tribes; and

(G) Regional Corporation (as defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602)).

(3) OCEAN ENERGY.—

(A) INCLUSIONS.—The term ''ocean energy'' includes current, wave, and tidal energy.

(B) EXCLUSION.—The term ''ocean energy'' excludes thermal energy.

(4) RENEWABLE ENERGY PROJECT.—The term ''renewable energy project'' means a project—

(A) for the commercial generation of electricity; and

(B) that generates electricity from—

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

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

(iii) landfill gas; or

(iv) Alaska small hydroelectric power.

(b) RENEWABLE ENERGY CONSTRUCTION GRANTS.—

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

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

(3) APPLICATION.—To receive a grant from the Secretary under paragraph (1), an eligible applicant shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require, including a written assurance that—

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

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

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

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

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

Subtitle B—Expediting New Energy Efficiency Standards

SEC. 221. DEFINITION OF ENERGY CONSERVATION STANDARD.

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

"(6) ENERGY CONSERVATION STANDARD.—

"(A) IN GENERAL.—The term 'energy conservation standard' means 1 or more performance standards that—

"(i) for covered products (excluding clothes washers, dishwashers, showerheads, faucets, water closets, and urinals), prescribe a minimum level of energy efficiency or a maximum quantity of energy use, determined in accordance with test procedures prescribed under section 323;

"(ii) for showerheads, faucets, water closets, and urinals, prescribe a minimum level of water efficiency or a maximum quantity of water use, determined in accordance with test procedures prescribed 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—

"(i) would contribute to energy savings that are substantially greater than that of a single national energy standard; and

"(ii) are economically justified.

"(C) REGIONS.—On making a determination described in subparagraph (B), the Secretary shall establish the regions so that the more stringent standards would achieve the maximum level of energy savings that is technologically feasible and economically justified.

"(D) FACTORS.—In determining the appropriateness of 1 or more regional standards for furnaces, boilers, and central and commercial air conditioning equipment, the Secretary shall consider all of the factors described in paragraphs (1) through (4) of section 325(o).

"(2) STATE PETITION.—After a determination made by the Secretary under paragraph (1), a State may petition the Secretary requesting a rule that a State regulation that establishes a standard for furnaces, boilers, or central air conditioners become effective at a level determined by the Secretary to be appropriate for the region that includes the State.

"(3) RULE.—Subject to paragraphs (4) through (7), the Secretary may issue the rule during the period described in paragraph (4) and after consideration of the petition and the comments of interested persons.

"(4) PROCEDURE.—

"(A) NOTICE.—The Secretary shall provide notice of any petition filed under paragraph (2) and afford interested persons a reasonable opportunity to make written comments, including rebuttal comments, on the petition.

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

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

"(i) extending the period to a specified date, but not longer than 1 year after the date on which the petition is filed; and

"(ii) describing the reasons for the delay.

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

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

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

"(A) IN GENERAL.—The Secretary may not issue a rule under this subsection if the Secretary finds (and publishes the finding) that interested persons have established, by a preponderance of the evidence, that the State regulation will significantly burden manufacturing, marketing, distribution, sale, or servicing of a covered product on a national basis.

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

"(i) the extent to which the State regulation will increase manufacturing or distribution costs of manufacturers, distributors, and others;

"(ii) the extent to which the State regulation will disadvantage smaller manufacturers, distributors, or dealers or lessen

competition in the sale of the covered product in the State; and

"(iii) the extent to which the State regulation would cause a burden to manufacturers to redesign and produce the covered product type (or class), taking into consideration the extent to which the regulation would result in a reduction—

"(I) in the current models, or in the projected availability of models, that could be shipped on the effective date of the regulation to the State and within the United States; or

"(II) in the current or projected sales volume of the covered product type (or class) in the State and the United States.

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

"(7) PETITION TO WITHDRAW FEDERAL RULE FOLLOWING AMENDMENT OF FEDERAL STANDARD.—

"(A) IN GENERAL.—If a State has issued a rule under paragraph (3) with respect to a covered product and subsequently a Federal energy conservation standard concerning the product is amended pursuant to section 325, any person subject to the State regulation may file a petition with the Secretary requesting the Secretary to withdraw the rule issued under paragraph (3) with respect to the product in the State.

"(B) BURDEN OF PROOF.—The Secretary shall consider the petition in accordance with paragraph (5) and the burden shall be on the petitioner to show by a preponderance of the evidence that the rule received by the State under paragraph (3) should be withdrawn as a result of the amendment to the Federal standard.

"(C) WITHDRAWAL.—If the Secretary determines that the petitioner has shown that the rule issued by the Secretary under paragraph (3) should be withdrawn in accordance with subparagraph (B), the Secretary shall withdraw the rule.".

(b) CONFORMING AMENDMENTS.—

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

(A) in subsection (b)—

(i) in paragraph (2), by striking ''subsection (e)'' and inserting ''subsection (f)''; and

(ii) in paragraph (3)—

(I) by striking ''subsection (f)(1)'' and inserting ''subsection (g)(1)''; and

(II) by striking ''subsection (f)(2)'' and inserting ''subsection (g)(2)''; and

(B) in subsection (c)(3), by striking ''subsection (f)(3)'' and inserting ''subsection (g)(3)''.

(2) Section 345(b)(2) of the Energy Policy and Conservation Act (42 U.S.C. 6316(b)(2)) is amended by adding at the end the following:

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

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

SEC. 223. FURNACE FAN RULEMAKING.

Section 325(f)(3) of the Energy Policy and Conservation Act (42 U.S.C. 6295(f)(3)) is amended by adding at the end the following:

''(E) FINAL RULE.—

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

''(ii) CRITERIA.—The standards shall meet the criteria established under subsection (o).''.

SEC. 224. EXPEDITED RULEMAKINGS.

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

''(5) DIRECT FINAL RULES.—

''(A) IN GENERAL.—On receipt of a statement that is submitted jointly by interested persons that are fairly representative of relevant points of view (including representatives of

manufacturers of covered products, States, and efficiency advocates), as determined by the Secretary, and contains recommendations with respect to an energy or water conservation standard—

"(i) if the Secretary determines that the recommended standard contained in the statement is in accordance with subsection (o) or section 342(a)(6)(B), as applicable, the Secretary may issue a final rule that establishes an energy or water conservation standard and is published simultaneously with a notice of proposed rulemaking that proposes a new or amended energy or water conservation standard that is identical to the standard established in the final rule to establish the recommended standard (referred to in this paragraph as a 'direct final rule'); or

"(ii) if the Secretary determines that a direct final rule cannot be issued based on the statement, the Secretary shall publish a notice of the determination, together with an explanation of the reasons for the determination.

"(B) PUBLIC COMMENT.—The Secretary shall—

"(i) solicit public comment with respect to each direct final rule issued by the Secretary under subparagraph (A)(i); and

"(ii) publish a response to each comment so received.

"(C) WITHDRAWAL OF DIRECT FINAL RULES.—

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

"(I) the Secretary receives 1 or more adverse public comments relating to the direct final rule under subparagraph (B)(i); and

"(II) based on the complete rulemaking record relating to the direct final rule, the Secretary tentatively determines that the adverse public comments are relevant under sub-

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

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

"(I) proceed with the notice of proposed rulemaking published simultaneously with the direct final rule as described in subparagraph (A)(i); and

"(II) publish in the Federal Register the reasons why the direct final rule was withdrawn.

"(iii) TREATMENT OF WITHDRAWN DIRECT FINAL RULES.—A direct final rule that is withdrawn under clause (i) shall not be considered to be a final rule for purposes of subsection (o).

"(D) EFFECT OF PARAGRAPH.—Nothing in this paragraph authorizes the Secretary to issue a direct final rule based solely on receipt of more than 1 statement containing recommended standards relating to the direct final rule.".

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

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

SEC. 225. PERIODIC REVIEWS.

(a) TEST PROCEDURES.—Section 323(b)(1) of the Energy Policy and Conservation Act (42 U.S.C. 6293(b)(1)) is amended by striking "(1)" and all that follows through the end of the paragraph and inserting the following:

"(1) TEST PROCEDURES.—

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

"(i) amend test procedures with respect to any covered product, if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of paragraph (3); or

"(ii) publish notice in the Federal Register of any determination not to amend a test procedure.".

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

(1) by designating the first and second sentences as paragraphs (1) and (4), respectively;

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

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

"(2) ANALYSIS.—Prior to publication of the determination, the Secretary shall publish a notice of availability describing the analysis of the Department and provide opportunity for written comment.

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

(3) in paragraph (4) (as so designated), by striking "(4) An" and inserting the following:

"(4) APPLICATION OF AMENDMENT.—An".

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

amended by striking "(6)(A)(i)" and all that follows through the end of subparagraph (A) and inserting the following:

"(6) AMENDED ENERGY EFFICIENCY STANDARDS.—

"(A) IN GENERAL.—

"(i) ANALYSIS OF POTENTIAL ENERGY SAVINGS.—If ASHRAE/IES Standard 90.1 is amended with respect to any small commercial package air conditioning and heating equipment, large commercial package air conditioning and heating equipment, very large commercial package air conditioning and heating equipment, packaged terminal air conditioners, packaged terminal heat pumps, warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, or unfired hot water storage tanks, not later than 180 days after the amendment of the standard, the Secretary shall publish in the Federal Register for public comment an analysis of the energy savings potential of amended energy efficiency standards.

"(ii) AMENDED UNIFORM NATIONAL STANDARD FOR PRODUCTS.—

"(I) IN GENERAL.—Except as provided in subclause (II), not later than 18 months after the date of publication of the amendment to the ASHRAE/IES Standard 90.1 for a product described in clause (i), the Secretary shall establish an amended uniform national standard for the product at the minimum level specified in the amended ASHRAE/IES Standard 90.1.

"(II) MORE STRINGENT STANDARD.—Subclause (I) shall not apply if the Secretary determines, by rule published in the Federal Register, and supported by clear and convincing evidence, that adoption of a uniform national standard more stringent than the amended ASHRAE/IES Standard 90.1 for the product would result in significant additional conservation of energy and is technologically feasible and economically justified.

"(iii) RULE.—If the Secretary makes a determination described in clause (ii)(II) for a product described in clause (i), not later than 30 months after the date of publication of the amendment to the ASHRAE/IES Standard 90.1 for the product, the Secretary shall issue the rule establishing the amended standard.".

(d) TEST PROCEDURES.—Section 343(a) of the Energy Policy and Conservation Act (42 U.S.C. 6313(a)) is amended by striking "(a)" and all that follows through the end of paragraph (1) and inserting the following:

"(a) PRESCRIPTION BY SECRETARY; REQUIREMENTS.—

"(1) TEST PROCEDURES.—

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

"(i) if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of paragraphs (2) and (3), shall prescribe test procedures for the class in accordance with this section; or

"(ii) shall publish notice in the Federal Register of any determination not to amend a test procedure.".

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

SEC. 226. ENERGY EFFICIENCY LABELING FOR CONSUMER ELECTRONIC PRODUCTS.

(a) IN GENERAL.—Section 324(a) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)) is amended—

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

"(H) LABELING REQUIREMENTS.—

"(i) IN GENERAL.—Subject to clauses (ii) through (iv), not later than 18 months after the date of issuance of applicable Department of Energy testing procedures, the Commission, in consultation with the Secretary and the Administrator of the Environmental Protection Agency (acting through the Energy Star program), shall, by regulation, promulgate labeling or other disclosure requirements for the energy use of—

"(I) televisions;

"(II) personal computers;

"(III) cable or satellite set-top boxes;

"(IV) stand-alone digital video recorder boxes; and

"(V) personal computer monitors.

"(ii) ALTERNATE TESTING PROCEDURES.—In the absence of applicable testing procedures described in clause (i) for products described in subclauses (I) through (V) of that clause, the Commission may by regulation promulgate labeling requirements for a consumer product category described in clause (i) if the Commission—

"(I) identifies adequate non-Department of Energy testing procedures for those products; and

"(II) determines that labeling of those products is likely to assist consumers in making purchasing decisions.

"(iii) DEADLINE AND REQUIREMENTS FOR LABELING.—

"(I) DEADLINE.—Not later than 18 months after the date of promulgation of any requirements under clause (i) or (ii), the Commission shall require labeling of electronic products described in clause (i).

"(II) REQUIREMENTS.—The requirements promulgated under clause (i) or (ii) may include specific requirements for each electronic product to be labeled with respect to the placement, size, and content of Energy Guide labels.

"(iv) DETERMINATION OF FEASIBILITY.—Clause (i) or (ii) shall not apply in any case in which the Commission determines that labeling in accordance with this subsection—

"(I) is not technologically or economically feasible; or

"(II) is not likely to assist consumers in making purchasing decisions."; and

(2) by adding at the end the following:

"(6) AUTHORITY TO INCLUDE ADDITIONAL PRODUCT CATEGORIES.—The Commission may require labeling in accordance with this subsection for any consumer product not specified in this subsection or section 322 if the Commission determines that labeling for the product is likely to assist consumers in making purchasing decisions.".

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

"(9) DISCRETIONARY APPLICATION.—The Commission may apply paragraphs (1), (2), (3), (5), and (6) of this subsection to the labeling of any product covered by paragraph (2)(H) or (6) of subsection (a).".

SEC. 227. RESIDENTIAL BOILER EFFICIENCY STANDARDS.

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

(1) by redesignating paragraph (3) as paragraph (4); and

(2) by inserting after paragraph (2) the following:

"(3) BOILERS.—

"(A) IN GENERAL.—Subject to subparagraphs (B) and (C), boilers manufactured on or

after September 1, 2012, shall meet the following requirements:

Gas Hot Water	82%	No Constant Burning Pilot, Automatic Means for Adjusting 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

''(B) PILOTS.—The manufacturer shall not equip gas hot water or steam boilers with constant-burning pilot lights.

''(C) AUTOMATIC MEANS FOR ADJUSTING WATER TEMPERATURE.—

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

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

providing an automatic means that allows the burner or heating element to fire only when the means has determined that the inferred heat load cannot be met by the residual heat of the water in the system.

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

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

SEC. 228. TECHNICAL CORRECTIONS.

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

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

subparagraph (A) by striking ''but before January 1, 2010,''.

(c) MERCURY VAPOR LAMP BALLASTS.—

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

(A) in paragraph (46)(A)—

(i) in clause (i), by striking ''bulb'' and inserting ''the arc tube''; and

(ii) in clause (ii), by striking ''has a bulb'' and inserting ''wall loading is'';

(B) in paragraph (47)(A), by striking ''operating at a partial'' and inserting ''typically operating at a partial vapor'';

(C) in paragraph (48), by inserting ''intended for general illumination'' after ''lamps''; and

(D) by adding at the end the following:

''(56) The term 'specialty application mercury vapor lamp ballast' means a mercury vapor lamp ballast that—

''(A) is designed and marketed for medical use, optical comparators, quality inspection, industrial processing, or scientific use, including fluorescent microscopy, ultraviolet curing, and

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

"(B) in the case of a specialty application mercury vapor lamp ballast, is labeled as a specialty application mercury vapor lamp ballast.".

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

SEC. 229. ELECTRIC MOTOR EFFICIENCY STANDARDS.

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

"(A)(i) The term 'electric motor' means—

"(I) a general purpose electric motor—subtype I; and

"(II) a general purpose electric motor—subtype II.

"(ii) The term 'general purpose electric motor—subtype I' means any motor that is considered a general purpose motor under section 431.12 of title 10, Code of Federal Regulations (or successor regulations).

"(iii) The term 'general purpose electric motor—subtype II' means a motor that, in addition to the design elements for a general purpose electric motor—subtype I, incorporates the design elements (as established in National Electrical Manufacturers Association MG–1 (2006)) for any of the following:

"(I) A U–Frame Motor.

"(II) A Design C Motor.

"(III) A close-coupled pump motor.

"(IV) A footless motor.

"(V) A vertical solid shaft normal thrust (tested in a horizontal configuration).

"(VI) An 8-pole motor.

"(VII) A poly-phase motor with voltage of not more than 600 volts (other than 230 or 460 volts).".

(b) STANDARDS.—Section 342(b) of the Energy Policy and Conservation Act (42 U.S.C. 6313(13)) is amended by striking paragraph (1) and inserting the following:

"(1) STANDARDS.—

"(A) GENERAL PURPOSE ELECTRIC MOTORS—SUBTYPE I.—

"(i) IN GENERAL.—Except as otherwise provided in this subparagraph, a general purpose electric motor—subtype I

with a power rating of not less than 1, and not more than 200, horsepower manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of enactment of this subparagraph, shall have a nominal full load efficiency established in Table 12–12 of National Electrical Manufacturers Association (referred to in this paragraph as 'NEMA') MG–1 (2006).

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

''(B) GENERAL PURPOSE ELECTRIC MOTORS—SUBTYPE II.—A general purpose electric motor—subtype II with a power rating of not less than 1, and not more than 200, horsepower manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of enactment of this subparagraph, shall have a nominal full load efficiency established in Table 12–11 of NEMA MG–1 (2006).

"(C) DESIGN B, GENERAL PURPOSE ELECTRIC MOTORS.—A NEMA Design B, general purpose electric motor with a power rating of not less than 201, and not more than 500, horsepower manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of the enactment of this subparagraph shall have a nominal full load efficiency established in Table 12–11 of NEMA MG–1 (2006).".

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

SEC. 230. ENERGY STANDARDS FOR HOME APPLIANCES.

(a) DEFINITION OF ENERGY CONSERVATION STANDARD.—Section 321(6)(A) of the Energy Policy and Conservation Act (42 U.S.C. 6291(6)(A)) is amended by striking "or, in the case of" and inserting "and, in the case of residential clothes washers, residential dishwashers,".

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

"(4) REFRIGERATORS, REFRIGERATOR-FREEZERS, AND FREEZERS MANUFACTURED ON OR AFTER

JANUARY 1, 2014.—Not later than December 31, 2010, the Secretary shall publish a final rule determining whether to amend the standards in effect for refrigerators, refrigerator-freezers, and freezers manufactured on or after January 1, 2014, and including any amended standards.''.

(c) RESIDENTIAL CLOTHES WASHERS AND DISHWASHERS.—Section 325(g)(4) of the Energy Policy and Conservation Act (42 U.S.C. 6295(g)(4)) is amended by adding at the end the following:

''(D) CLOTHES WASHERS.—

''(i) CLOTHES WASHERS MANUFACTURED ON OR AFTER JANUARY 1, 2011.—A residential clothes washer manufactured on or after January 1, 2011, shall have—

''(I) a modified energy factor of at least 1.26; and

''(II) a water factor of not more than 9.5.

''(ii) CLOTHES WASHERS MANUFACTURED ON OR AFTER JANUARY 1, 2015.—Not later than January 1, 2015, the Secretary shall publish a final rule determining whether to amend the standards in effect for residential clothes washers manu-

factured on or after January 1, 2015, and including any amended standards.

"(E) DISHWASHERS.—

"(i) DISHWASHERS MANUFACTURED ON OR AFTER JANUARY 1, 2010.—A dishwasher manufactured on or after January 1, 2010, shall use not more than—

"(I) in the case of a standard-size dishwasher, 355 kWh per year or 6.5 gallons of water per cycle; and

"(II) in the case of a compact-size dishwasher, 260 kWh per year or 4.5 gallons of water per cycle.

"(ii) DISHWASHERS MANUFACTURED ON OR AFTER JANUARY 1, 2018.—Not later than January 1, 2015, the Secretary shall publish a final rule determining whether to amend the standards for dishwashers manufactured on or after January 1, 2018, and including any amended standards.".

(d) DEHUMIDIFIERS.—Section 325(cc) of the Energy Policy and Conservation Act (42 U.S.C. 6295(cc)) is amended—

(1) in paragraph (1), by inserting "and before October 1, 2012," after "2007,"; and

(2) by striking paragraph (2) and inserting the following:

"(2) DEHUMIDIFIERS MANUFACTURED ON OR AFTER OCTOBER 1, 2012.—Dehumidifiers manufactured on or after October 1, 2012, shall have an Energy Factor that meets or exceeds the following values:

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.".

(e) ENERGY STAR PROGRAM.—Section 324A(d)(2) of the Energy Policy and Conservation Act (42 U.S.C. 6294a(d)(2)) is amended by striking "2010" and inserting "2009".

SEC. 231. IMPROVED ENERGY EFFICIENCY FOR APPLIANCES AND BUILDINGS IN COLD CLIMATES.

(a) RESEARCH.—Section 911(a)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16191(a)(2)) is amended—

(1) in subparagraph (C), by striking "and" at the end;

(2) in subparagraph (D), by striking the period at the end and inserting "; and"; and

(3) by adding at the end the following:

"(E) technologies to improve the energy efficiency of appliances and mechanical systems for buildings in cold climates, including combined heat and power units and increased use of renewable resources, including fuel.".

(b) REBATES.—Section 124 of the Energy Policy Act of 2005 (42 U.S.C. 15821) is amended—

(1) in subsection (b)(1), by inserting ", or products with improved energy efficiency in cold climates," after "residential Energy Star products"; and

(2) in subsection (e), by inserting "or product with improved energy efficiency in a cold climate" after "residential Energy Star product" each place it appears.

SEC. 232. DEPLOYMENT OF NEW TECHNOLOGIES FOR HIGH-EFFICIENCY CONSUMER PRODUCTS.

(a) DEFINITIONS.—In this section:

(1) ENERGY SAVINGS.—The term "energy savings" means megawatt-hours of electricity or million British thermal units of natural gas saved by a product, in comparison to projected energy consumption under the energy efficiency standard applicable to the product.

(2) HIGH-EFFICIENCY CONSUMER PRODUCT.—The term ''high-efficiency consumer product'' means a product that exceeds the energy efficiency of comparable products available in the market by a percentage determined by the Secretary to be an appropriate benchmark for the consumer product category competing for an award under this section.

(b) FINANCIAL INCENTIVES PROGRAM.—Effective beginning October 1, 2007, the Secretary shall competitively award financial incentives under this section for the manufacture of high-efficiency consumer products.

(c) REQUIREMENTS.—

(1) IN GENERAL.—The Secretary shall make awards under this section to manufacturers of high-efficiency consumer products, based on the bid of each manufacturer in terms of dollars per megawatt-hour or million British thermal units saved.

(2) ACCEPTANCE OF BIDS.—In making awards under this section, the Secretary shall—

(A) solicit bids for reverse auction from appropriate manufacturers, as determined by the Secretary; and

(B) award financial incentives to the manufacturers that submit the lowest bids that

meet the requirements established by the Secretary.

(d) FORMS OF AWARDS.—An award for a high-efficiency consumer product under this section shall be in the form of a lump sum payment in an amount equal to the product obtained by multiplying—

(1) the amount of the bid by the manufacturer of the high-efficiency consumer product; and

(2) the energy savings during the projected useful life of the high-efficiency consumer product, not to exceed 10 years, as determined under regulations issued by the Secretary.

SEC. 233. INDUSTRIAL EFFICIENCY PROGRAM.

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE ENTITY.—The term eligible entity means—

(A) an institution of higher education under contract or in partnership with a nonprofit or for-profit private entity acting on behalf of an industrial or commercial sector or subsector;

(B) a nonprofit or for-profit private entity acting on behalf on an industrial or commercial sector or subsector; or

(C) a consortia of entities acting on behalf of an industrial or commercial sector or subsector.

(2) ENERGY-INTENSIVE COMMERCIAL APPLICATIONS.—The term ''energy-intensive commercial applications'' means processes and facilities that use significant quantities of energy as part of the primary economic activities of the processes and facilities, including—

(A) information technology data centers;

(B) product manufacturing; and

(C) food processing.

(3) FEEDSTOCK.—The term ''feedstock'' means the raw material supplied for use in manufacturing, chemical, and biological processes.

(4) MATERIALS MANUFACTURERS.—The term ''materials manufacturers'' means the energy-intensive primary manufacturing industries, including the aluminum, chemicals, forest and paper products, glass, metal casting, and steel industries.

(5) PARTNERSHIP.—The term ''partnership'' means an energy efficiency and utilization partnership established under subsection (c)(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—

(i) increase the energy efficiency of industrial and commercial processes and facilities in energy-intensive commercial application sectors;

(ii) research, develop, and demonstrate advanced technologies capable of energy intensity reductions and increased environmental performance in energy-intensive commercial application sectors; and

(iii) promote the use of the processes, technologies, and techniques described in clauses (i) and (ii); and

(B) pay the Federal share of the cost of any eligible partnership activities for which a proposal has been submitted and approved in accordance with paragraph (3)(B).

(2) ELIGIBLE ACTIVITIES.—Partnership activities eligible for financial assistance under this subsection include—

(A) feedstock and recycling research, development, and demonstration activities to identify and promote—

(i) opportunities for meeting manufacturing feedstock requirements with more

energy efficient and flexible sources of feedstock or energy supply;

(ii) strategies to develop and deploy technologies that improve the quality and quantity of feedstocks recovered from process and waste streams; and

(iii) other methods using recycling, reuse, and improved industrial materials;

(B) industrial and commercial energy efficiency and sustainability assessments to—

(i) assist individual industrial and commercial sectors in developing tools, techniques, and methodologies to assess—

(I) the unique processes and facilities of the sectors;

(II) the energy utilization requirements of the sectors; and

(III) the application of new, more energy efficient technologies; and

(ii) conduct energy savings assessments;

(C) the incorporation of technologies and innovations that would significantly improve the energy efficiency and utilization of energy-intensive commercial applications; and

(D) any other activities that the Secretary determines to be appropriate.

(3) PROPOSALS.—

(A) IN GENERAL.—To be eligible for financial assistance under this subsection, a partnership shall submit to the Secretary a proposal that describes the proposed research, development, or demonstration activity to be conducted by the partnership.

(B) REVIEW.—After reviewing the scientific, technical, and commercial merit of a proposals submitted under subparagraph (A), the Secretary shall approve or disapprove the proposal.

(C) COMPETITIVE AWARDS.—The provision of financial assistance under this subsection shall be on a competitive basis.

(4) COST-SHARING REQUIREMENT.—In carrying out this section, the Secretary shall require cost sharing in accordance with section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).

(d) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There are authorized to be appropriated to the Secretary to carry out this section—

(A) $184,000,000 for fiscal year 2008;

(B) $190,000,000 for fiscal year 2009;

(C) $196,000,000 for fiscal year 2010;

(D) $202,000,000 for fiscal year 2011;

(E) $208,000,000 for fiscal year 2012; and

(F) such sums as are necessary for fiscal year 2013 and each fiscal year thereafter.

(2) PARTNERSHIP ACTIVITIES.—Of the amounts made available under paragraph (1), not less than 50 percent shall be used to pay the Federal share of partnership activities under subsection (c).

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

SEC. 241. LIGHTWEIGHT MATERIALS RESEARCH AND DEVELOPMENT.

(a) IN GENERAL.—As soon as practicable after the date of enactment of this Act, the Secretary shall establish a research and development program to determine ways in which—

(1) the weight of vehicles may be reduced to improve fuel efficiency without compromising passenger safety; and

(2) the cost of lightweight materials (such as steel alloys, fiberglass, and carbon composites) required for the construction of lighter-weight vehicles may be reduced.

(b) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $60,000,000 for each of fiscal years 2007 through 2012.

SEC. 242. LOAN GUARANTEES FOR FUEL-EFFICIENT AUTOMOBILE PARTS MANUFACTURERS.

(a) IN GENERAL.—Section 712(a) of the Energy Policy Act of 2005 (42 U.S.C. 16062(a)) is amended in the second sentence by striking ''grants to automobile manufacturers'' and inserting ''grants and loan guarantees under section 1703 to automobile manufacturers and suppliers''.

(b) CONFORMING AMENDMENT.—Section 1703(b) of the Energy Policy Act of 2005 (42 U.S.C. 16513(b)) is amended by striking paragraph (8) and inserting the following:

''(8) Production facilities for the manufacture of fuel efficient vehicles or parts of those vehicles, including electric drive vehicles and advanced diesel vehicles.''.

SEC. 243. ADVANCED TECHNOLOGY VEHICLES MANUFACTURING INCENTIVE PROGRAM.

(a) DEFINITIONS.—In this section:

(1) ADJUSTED AVERAGE FUEL ECONOMY.—The term ''adjusted average fuel economy'' means the average fuel economy of a manufacturer for all light duty vehicles produced by the manufacturer, adjusted such that the fuel economy of each vehicle that qualifies for an award shall be considered to be equal to the average fuel economy for vehicles of a similar footprint for model year 2005.

(2) ADVANCED TECHNOLOGY VEHICLE.—The term ''advanced technology vehicle'' means a light duty vehicle that meets—

(A) the Bin 5 Tier II emission standard established in regulations issued by the Administrator of the Environmental Protection Agency under section 202(i) of the Clean Air Act (42 U.S.C. 7521(i)), or a lower-numbered Bin emission standard;

(B) any new emission standard for fine particulate matter prescribed by the Administrator under that Act (42 U.S.C. 7401 et seq.); and

(C) at least 125 percent of the average base year combined fuel economy, calculated on

an energy-equivalent basis, for vehicles of a substantially similar footprint.

(3) COMBINED FUEL ECONOMY.—The term ''combined fuel economy'' means—

(A) the combined city/highway miles per gallon values, as reported in accordance with section 32908 of title 49, United States Code; and

(B) in the case of an electric drive vehicle with the ability to recharge from an off-board source, the reported mileage, as determined in a manner consistent with the Society of Automotive Engineers recommended practice for that configuration or a similar practice recommended by the Secretary, using a petroleum equivalence factor for the off-board electricity (as defined in section 474 of title 10, Code of Federal Regulations).

(4) ENGINEERING INTEGRATION COSTS.—The term ''engineering integration costs'' includes the cost of engineering tasks relating to—

(A) incorporating qualifying components into the design of advanced technology vehicles; and

(B) designing new tooling and equipment and developing new manufacturing processes and material suppliers for production facilities that produce qualifying components or advanced technology vehicles.

(5) QUALIFYING COMPONENTS.—The term ''qualifying components'' means components that the Secretary determines to be—

(A) specially designed for advanced technology vehicles; and

(B) installed for the purpose of meeting the performance requirements of advanced technology vehicles.

(b) ADVANCED VEHICLES MANUFACTURING FACILITY.—The Secretary shall provide facility funding awards under this section to automobile manufacturers and component suppliers to pay not more than 30 percent of the cost of—

(1) reequipping, expanding, or establishing a manufacturing facility in the United States to produce—

(A) qualifying advanced technology vehicles; or

(B) qualifying components; and

(2) engineering integration performed in the United States of qualifying vehicles and qualifying components.

(c) PERIOD OF AVAILABILITY.—An award under subsection (b) shall apply to—

(1) facilities and equipment placed in service before December 30, 2017; and

(2) engineering integration costs incurred during the period beginning on the date of enactment of this Act and ending on December 30, 2017.

(d) IMPROVEMENT.—The Secretary shall issue regulations that require that, in order for an automobile manufacturer to be eligible for an award under this section during a particular year, the adjusted average fuel economy of the manufacturer for light duty vehicles produced by the manufacturer during the most recent year for which data are available shall be not less than the average fuel economy for all light duty vehicles of the manufacturer for model year 2005.

(e) SET ASIDE FOR SMALL AUTOMOBILE MANUFACTURERS AND COMPONENT SUPPLIERS.—

(1) DEFINITION OF COVERED FIRM.—In this subsection, the term ''covered firm'' means a firm that—

(A) employs less than 500 individuals; and

(B) manufactures automobiles or components of automobiles.

(2) SET ASIDE.—Of the amount of funds that are used to provide awards for each fiscal year under this section, the Secretary shall use not less than 30 percent of the amount to provide awards to covered firms or consortia led by a covered firm.

SEC. 244. ENERGY STORAGE COMPETITIVENESS.

(a) SHORT TITLE.—This section may be cited as the ''United States Energy Storage Competitiveness Act of 2007''.

(b) ENERGY STORAGE SYSTEMS FOR MOTOR TRANSPORTATION AND ELECTRICITY TRANSMISSION AND DISTRIBUTION.—

(1) DEFINITIONS.—In this subsection:

(A) COUNCIL.—The term ''Council'' means the Energy Storage Advisory Council established under paragraph (3).

(B) COMPRESSED AIR ENERGY STORAGE.—The term ''compressed air energy storage'' means, in the case of an electricity grid application, the storage of energy through the compression of air.

(C) DEPARTMENT.—The term ''Department'' means the Department of Energy.

(D) FLYWHEEL.—The term ''flywheel'' means, in the case of an electricity grid application, a device used to store rotational kinetic energy.

(E) ULTRACAPACITOR.—The term ''ultracapacitor'' means an energy storage device that has a power density comparable to conventional capacitors but capable of exceeding the energy density of conventional capacitors by several orders of magnitude.

(2) PROGRAM.—The Secretary shall carry out a research, development, and demonstration program to support the ability of the United States to remain globally competitive in energy storage systems for motor transportation and electricity transmission and distribution.

(3) ENERGY STORAGE ADVISORY COUNCIL.—

(A) ESTABLISHMENT.—Not later than 90 days after the date of enactment of this Act, the Secretary shall establish an Energy Storage Advisory Council.

(B) COMPOSITION.—

(i) IN GENERAL.—Subject to clause (ii), the Council shall consist of not less 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.

(E) REVIEW.—The Council shall—

(i) assess the performance of the Department in meeting the goals of the plans developed under subparagraph (D); and

(ii) make specific recommendations to the Secretary on programs or activities that should be established or terminated to meet those goals.

(4) BASIC RESEARCH PROGRAM.—

(A) BASIC RESEARCH.—The Secretary shall conduct a basic research program on energy storage systems to support motor transportation and electricity transmission and distribution, including—

(i) materials design;

(ii) materials synthesis and characterization;

(iii) electrode-active materials, including electrolytes and bioelectrolytes;

(iv) surface and interface dynamics;

(v) modeling and simulation; and

(vi) thermal behavior and life degradation mechanisms; and

(vii) thermal behavior and life degradation mechanisms.

(B) NANOSCIENCE CENTERS.—The Secretary, in cooperation with the Council, shall coordinate the activities of the nanoscience centers of the Department to help the nanoscience centers of the Department maintain a globally competitive posture in energy storage systems for motor transportation and electricity transmission and distribution.

(5) APPLIED RESEARCH PROGRAM.—The Secretary shall conduct an applied research program on energy storage systems to support motor transportation and electricity transmission and distribution technologies, including—

(A) ultracapacitors;

(B) flywheels;

(C) batteries and battery systems (including flow batteries);

(D) compressed air energy systems;

(E) power conditioning electronics;

(F) manufacturing technologies for energy storage systems; and

(G) thermal management systems.

(6) ENERGY STORAGE RESEARCH CENTERS.—

(A) IN GENERAL.—The Secretary shall establish, through competitive bids, not more than

4 energy storage research centers to translate basic research into applied technologies to advance the capability of the United States to maintain a globally competitive posture in energy storage systems for motor transportation and electricity transmission and distribution.

(B) PROGRAM MANAGEMENT.—The centers shall be jointly managed by the Under Secretary for Science of the Department.

(C) PARTICIPATION AGREEMENTS.—As a condition of participating in a center, a participant shall enter into a participation agreement with the center that requires that activities conducted by the participant for the center promote the goal of enabling the United States to compete successfully in global energy storage markets.

(D) PLANS.—A center shall conduct activities that promote the achievement of the goals of the plans of the Council under paragraph (3)(D).

(E) COST SHARING.—In carrying out this paragraph, the Secretary shall require cost-sharing in accordance with section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).

(F) NATIONAL LABORATORIES.—A national laboratory (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)) may participate in a center established under this paragraph, including a cooperative research and development agreement (as defined in section 12(d) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(d))).

(7) DISCLOSURE.—Section 623 of the Energy Policy Act of 1992 (42 U.S.C. 13293) may apply to any project carried out through a grant, contract, or cooperative agreement under this section.

(8) INTELLECTUAL PROPERTY.—In accordance with section 202(a)(ii) of title 35, United States Code, section 152 of the Atomic Energy Act of 1954 (42 U.S.C. 2182), and section 9 of the Federal Nonnuclear Research and Development Act of 1974 (42 U.S.C. 5908), the Secretary may require, for any new invention developed under paragraph (6)—

(A) that any industrial participant that is active in a Energy Storage Research Center established under paragraph (6) related to the advancement of energy storage technologies carried out, in whole or in part, with Federal funding, be granted the first option to negotiate

with the invention owner, at least in the field of energy storage technologies, nonexclusive licenses and royalties on terms that are reasonable, as determined by the Secretary;

(B) that, during a 2-year period beginning on the date on which an invention is made, the patent holder shall not negotiate any license or royalty agreement with any entity that is not an industrial participant under paragraph (6);

(C) that, during the 2-year period described in subparagraph (B), the patent holder shall negotiate nonexclusive licenses and royalties in good faith with any interested industrial participant under paragraph (6); and

(D) such other terms as the Secretary determines to be necessary to promote the accelerated commercialization of inventions made under paragraph (6) to advance the capability of the United States to successfully compete in global energy storage markets.

(9) REVIEW BY NATIONAL ACADEMY OF SCIENCES.—Not later than 3 years after the date of enactment of this Act, the Secretary shall offer to enter into an arrangement with the National Acad-

emy of Sciences to assess the performance of the Department in carrying out this section.

(10) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out—

(A) the basic research program under paragraph (4) $50,000,000 for each of fiscal years 2008 through 2017;

(B) the applied research program under paragraph (5) $80,000,000 for each of fiscal years 2008 through 2017; and

(C) the energy storage research center program under paragraph (6) $100,000,000 for each of fiscal years 2008 through 2017.

SEC. 245. ADVANCED TRANSPORTATION TECHNOLOGY PROGRAM.

(a) ELECTRIC DRIVE VEHICLE DEMONSTRATION PROGRAM.—

(1) DEFINITIONS.—In this subsection—

(A) BATTERY.—The term ''battery'' means an electrochemical energy storage device powered directly by electrical current.

(B) PLUG-IN ELECTRIC DRIVE VEHICLE.—The term ''plug-in electric drive vehicle'' means a precommercial vehicle that—

(i) draws motive power from a battery with a capacity of at least 4 kilowatt-hours;

(ii) can be recharged from an external source of electricity for motive power; and

(iii) is a light-, medium-, or heavy-duty onroad or nonroad vehicle.

(2) PROGRAM.—The Secretary shall establish a competitive program to provide grants for demonstrations of plug-in electric drive vehicles.

(3) ELIGIBILITY.—

(A) IN GENERAL.—A State government, local government, metropolitan transportation authority, air pollution control district, private entity, and nonprofit entity shall be eligible to receive a grant under this subsection.

(B) CERTAIN APPLICANTS.—A battery manufacturer that proposes to supply to an applicant for a grant under this section a battery with a capacity of greater than 1 kilowatt-hour for use in a plug-in electric drive vehicle shall—

(i) ensure that the applicant includes in the application a description of the price of the battery per kilowatt-hour;

(ii) on approval by the Secretary of the application, publish, or permit the Secretary to publish, the price described in clause (i); and

(iii) for any order received by the battery manufacturer for at least 1,000 batteries, offer the batteries at that price.

(4) PRIORITY.—In making grants under this subsection, the Secretary shall give priority to proposals that—

(A) are likely to contribute to the commercialization and production of plug-in electric drive vehicles in the United States; and

(B) reduce petroleum usage.

(5) SCOPE OF DEMONSTRATIONS.—The Secretary shall ensure, to the extent practicable, that the program established under this subsection includes a variety of applications, manufacturers, and end-uses.

(6) REPORTING.—The Secretary shall require a grant recipient under this subsection to submit to the Secretary, on an annual basis, data relating to vehicle, performance, life cycle costs, and emissions of vehicles demonstrated under the grant, including emissions of greenhouse gases.

(7) COST SHARING.—Section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352) shall apply to a grant made under this subsection.

(8) AUTHORIZATIONS OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this subsection $60,000,000 for each of fiscal years 2008 through 2012, of which not less than $20,000,000 shall be available each fiscal year only to make grants local and municipal governments.

(b) NEAR-TERM ELECTRIC DRIVE TRANSPORTATION DEPLOYMENT PROGRAM.—

(1) DEFINITION OF QUALIFIED ELECTRIC TRANSPORTATION PROJECT.—

(A) IN GENERAL.—In this subsection, the term ''qualified electric transportation project'' means a project that would simultaneously reduce emissions of criteria pollutants, greenhouse gas emissions, and petroleum usage by at least 40 percent as compared to commercially available, petroleum-based technologies.

(B) INCLUSIONS.—In this subsection, the term ''qualified electric transportation project'' includes a project relating to—

(i) shipside or shoreside electrification for vessels;

(ii) truck-stop electrification;

(iii) electric truck refrigeration units;

(iv) battery powered auxiliary power units for trucks;

(v) electric airport ground support equipment;

(vi) electric material and cargo handling equipment;

(vii) electric or dual-mode electric freight rail;

(viii) any distribution upgrades needed to supply electricity to the project; and

(ix) any ancillary infrastructure, including panel upgrades, battery chargers, in-situ transformers, and trenching.

(2) ESTABLISHMENT.—Not later than 1 year after the date of enactment of this Act, the Secretary, in consultation with the Secretary of Transportation and the Administrator of the Environmental Protection Agency, shall establish a program to provide grants and loans to eligible entities for the conduct of qualified electric transportation projects.

(3) GRANTS.—

(A) IN GENERAL.—Of the amounts made available for grants under paragraph (2)—

(i) ⅔ shall be made available by the Secretary on a competitive basis for qualified electric transportation projects based on the overall cost-effectiveness of a qualified electric transportation project in reducing emissions of criteria pollutants, emissions of greenhouse gases, and petroleum usage; and

(ii) ⅓ shall be made available by the Secretary for qualified electric transportation projects in the order that the grant applications are received, if the qualified electric transportation projects meet the minimum standard for the reduction of emissions of criteria pollutants, emissions of greenhouse gases, and petroleum usage described in paragraph (1)(A).

(B) PRIORITY.—In providing grants under this paragraph, the Secretary shall give priority to large-scale projects and large-scale aggregators of projects.

(C) COST SHARING.—Section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352)

shall apply to a grant made under this paragraph.

(4) REVOLVING LOAN PROGRAM.—

(A) IN GENERAL.—The Secretary shall establish a revolving loan program to provide loans to eligible entities for the conduct of qualified electric transportation projects under paragraph (2).

(B) CRITERIA.—The Secretary shall establish criteria for the provision of loans under this paragraph.

(C) FUNDING.—Of amounts made available to carry out this subsection, the Secretary shall use any amounts not used to provide grants under paragraph (3) to carry out the revolving loan program under this paragraph.

(c) MARKET ASSESSMENT PROGRAM.—The Administrator of the Environmental Protection Agency, in consultation with the Secretary and private industry, shall carry out a program—

(1) to inventory and analyze existing electric drive transportation technologies and hybrid technologies and markets; and

(2) to identify and implement methods of removing barriers for existing and emerging applica-

tions of electric drive transportation technologies and hybrid transportation technologies.

(d) ELECTRICITY USAGE PROGRAM.—

(1) IN GENERAL.—The Secretary, in consultation with the Administrator of the Environmental Protection Agency and private industry, shall carry out a program—

(A) to work with utilities to develop low-cost, simple methods of—

(i) using off-peak electricity; or

(ii) managing on-peak electricity use;

(B) to develop systems and processes—

(i) to enable plug-in electric vehicles to enhance the availability of emergency back-up power for consumers;

(ii) to study and demonstrate the potential value to the electric grid to use the energy stored in the on-board storage systems to improve the efficiency and reliability of the grid generation system; and

(iii) to work with utilities and other interested stakeholders to study and demonstrate the implications of the introduction of plug-in electric vehicles and other types of electric transportation on the pro-

duction of electricity from renewable resources.

(2) OFF-PEAK ELECTRICITY USAGE GRANTS.—In carrying out the program under paragraph (1), the Secretary shall provide grants to assist eligible public and private electric utilities for the conduct of programs or activities to encourage owners of electric drive transportation technologies—

(A) to use off-peak electricity; or

(B) to have the load managed by the utility.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out subsections (b), (c), and (d) $125,000,000 for each of fiscal years 2008 through 2013.

(f) ELECTRIC DRIVE TRANSPORTATION TECHNOLOGIES.—

(1) DEFINITIONS.—In this subsection:

(A) BATTERY.—The term ''battery'' means an electrochemical energy storage device powered directly by electrical current.

(B) ELECTRIC DRIVE TRANSPORTATION TECHNOLOGY.—The term ''electric drive transportation technology'' means—

(i) technology used in vehicles that use an electric motor for all or part of the motive power of the vehicles, including battery electric, hybrid electric, plug-in hybrid electric, fuel cell, and plug-in fuel cell vehicles, or rail transportation; or

(ii) equipment relating to transportation or mobile sources of air pollution that use an electric motor to replace an internal combustion engine for all or part of the work of the equipment, including—

(I) corded electric equipment linked to transportation or mobile sources of air pollution; and

(II) electrification technologies at airports, ports, truck stops, and material-handling facilities.

(C) ENERGY STORAGE DEVICE.—

(i) IN GENERAL.—The term ''energy storage device'' means the onboard device used in an on-road or nonroad vehicle to store energy, or a battery, ultracapacitor, compressed air energy storage system, or flywheel used to store energy in a stationary application.

(ii) INCLUSIONS.—The term ''energy storage device'' includes—

(I) in the case of an electric or hybrid electric or fuel cell vehicle, a battery, ultracapacitor, or similar device; and

(II) in the case of a hybrid hydraulic vehicle, an accumulator or similar device.

(D) ENGINE DOMINANT HYBRID VEHICLE.—The term ''engine dominant hybrid vehicle'' means an on-road or nonroad vehicle that—

(i) is propelled by an internal combustion engine or heat engine using—

(I) any combustible fuel; and

(II) an on-board, rechargeable energy storage device; and

(ii) has no means of using an off-board source of energy.

(E) NONROAD VEHICLE.—The term ''nonroad vehicle'' means a vehicle—

(i) powered by—

(I) a nonroad engine, as that term is defined in section 216 of the Clean Air Act (42 U.S.C. 7550); or

(II) fully or partially by an electric motor powered by a fuel cell, a battery, or an off-board source of electricity; and

(ii) that is not a motor vehicle or a vehicle used solely for competition.

(F) PLUG-IN ELECTRIC DRIVE VEHICLE.—In this section, the term ''plug-in electric drive vehicle'' means a precommercial vehicle that—

(i) draws motive power from a battery with a capacity of at least 4 kilowatt-hours;

(ii) can be recharged from an external source of electricity for motive power; and

(iii) is a light-, medium-, or heavy-duty onroad or nonroad vehicle.

(2) EVALUATION OF PLUG-IN ELECTRIC DRIVE TRANSPORTATION TECHNOLOGY BENEFITS.—

(A) IN GENERAL.—The Secretary, in cooperation with the Administrator of the Environmental Protection Agency, the heads of other appropriate Federal agencies, and appro-

priate interested stakeholders, shall evaluate and, as appropriate, modify existing test protocols for fuel economy and emissions to ensure that any protocols for electric drive transportation technologies, including plug-in electric drive vehicles, accurately measure the fuel economy and emissions performance of the electric drive transportation technologies.

(B) REQUIREMENTS.—Test protocols (including any modifications to test protocols) for electric drive transportation technologies under subparagraph (A) shall—

(i) be designed to assess the full potential of benefits in terms of reduction of emissions of criteria pollutants, reduction of energy use, and petroleum reduction; and

(ii) consider—

(I) the vehicle and fuel as a system, not just an engine;

(II) nightly off-board charging, as applicable; and

(III) different engine-turn on speed control strategies.

(3) PLUG-IN ELECTRIC DRIVE VEHICLE RESEARCH AND DEVELOPMENT.—The Secretary shall conduct an applied research program for plug-in electric drive vehicle technology and engine dominant hybrid vehicle technology, including—

(A) high-capacity, high-efficiency energy storage devices that, as compared to existing technologies that are in commercial service, have improved life, energy storage capacity, and power delivery capacity;

(B) high-efficiency on-board and off-board charging components;

(C) high-power and energy-efficient drivetrain systems for passenger and commercial vehicles and for nonroad vehicles;

(D) development and integration of control systems and power trains for plug-in electric vehicles, plug-in hybrid fuel cell vehicles, and engine dominant hybrid vehicles, including—

(i) development of efficient cooling systems;

(ii) analysis and development of control systems that minimize the emissions profile in cases in which clean diesel en-

gines are part of a plug-in hybrid drive system; and

(iii) development of different control systems that optimize for different goals, including—

(I) prolonging energy storage device life;

(II) reduction of petroleum consumption; and

(III) reduction of greenhouse gas emissions;

(E) application of nanomaterial technology to energy storage devices and fuel cell systems; and

(F) use of smart vehicle and grid interconnection devices and software that enable communications between the grid of the future and electric drive transportation technology vehicles.

(4) EDUCATION PROGRAM.—

(A) IN GENERAL.—The Secretary shall develop a nationwide electric drive transportation technology education program under which the Secretary shall provide—

(i) teaching materials to secondary schools and high schools; and

(ii) assistance for programs relating to electric drive system and component engineering to institutions of higher education.

(B) ELECTRIC VEHICLE COMPETITION.—The program established under subparagraph (A) shall include a plug-in hybrid electric vehicle competition for institutions of higher education, which shall be known as the ''Dr. Andrew Frank Plug-In Electric Vehicle Competition''.

(C) ENGINEERS.—In carrying out the program established under subparagraph (A), the Secretary shall provide financial assistance to institutions of higher education to create new, or support existing, degree programs to ensure the availability of trained electrical and mechanical engineers with the skills necessary for the advancement of—

(i) plug-in electric drive vehicles; and

(ii) other forms of electric drive transportation technology vehicles.

(5) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated for each of fiscal years 2008 through 2013—

(A) to carry out paragraph (3) $200,000,000; and

(B) to carry out paragraph (4) $5,000,000.

(g) COLLABORATION AND MERIT REVIEW.—

(1) COLLABORATION WITH NATIONAL LABORATORIES.—To the maximum extent practicable, National Laboratories shall collaborate with the public, private, and academic sectors and with other National Laboratories in the design, conduct, and dissemination of the results of programs and activities authorized under this section.

(2) COLLABORATION WITH MOBILE ENERGY STORAGE PROGRAM.—To the maximum extent practicable, the Secretary shall seek to coordinate the stationary and mobile energy storage programs of the Department of the Energy with the programs and activities authorized under this section.

(3) MERIT REVIEW.—Notwithstanding section 989 of the Energy Policy Act of 2005 (42 U.S.C. 16353), of the amounts made available to carry out

this section, not more than 30 percent shall be provided to National Laboratories.

SEC. 246. INCLUSION OF ELECTRIC DRIVE IN ENERGY POLICY ACT OF 1992.

Section 508 of the Energy Policy Act of 1992 (42 U.S.C. 13258) is amended—

(1) by redesignating subsections (a) through (d) as subsections (b) through (e), respectively;

(2) by inserting before subsection (b) the following:

''(a) DEFINITIONS.—In this section:

''(1) FUEL CELL ELECTRIC VEHICLE.—The term 'fuel cell electric vehicle' means an on-road or nonroad vehicle that uses a fuel cell (as defined in section 803 of the Spark M. Matsunaga Hydrogen Act of 2005 (42 U.S.C. 16152)).

''(2) HYBRID ELECTRIC VEHICLE.—The term 'hybrid electric vehicle' means a new qualified hybrid motor vehicle (as defined in section 30B(d)(3) of the Internal Revenue Code of 1986).

''(3) MEDIUM- OR HEAVY-DUTY ELECTRIC VEHICLE.—The term 'medium- or heavy-duty electric vehicle' means an electric, hybrid electric, or plug-in hybrid electric vehicle with a gross vehicle weight of more than 8,501 pounds.

"(4) NEIGHBORHOOD ELECTRIC VEHICLE.—The term 'neighborhood electric vehicle' means a 4-wheeled on-road or nonroad vehicle that—

"(A) has a top attainable speed in 1 mile of more than 20 mph and not more than 25 mph on a paved level surface; and

"(B) is propelled by an electric motor and on-board, rechargeable energy storage system that is rechargeable using an off-board source of electricity.

"(5) PLUG-IN HYBRID ELECTRIC VEHICLE.—The term 'plug-in hybrid electric vehicle' means a light-duty, medium-duty, or heavy-duty on-road or nonroad vehicle that is propelled by any combination of—

"(A) an electric motor and on-board, rechargeable energy storage system capable of operating the vehicle in intermittent or continuous all-electric mode and which is rechargeable using an off-board source of electricity; and

"(B) an internal combustion engine or heat engine using any combustible fuel.";

(3) in subsection (b) (as redesignated by paragraph (1))—

(A) by striking ''The Secretary'' and inserting the following:

''(1) ALLOCATION.—The Secretary''; and

(B) by adding at the end the following:

''(2) ELECTRIC VEHICLES.—Not later than January 31, 2009, the Secretary shall—

''(A) allocate credit in an amount to be determined by the Secretary for—

''(i) acquisition of—

''(I) a hybrid electric vehicle;

''(II) a plug-in hybrid electric vehicle;

''(III) a fuel cell electric vehicle;

''(IV) a neighborhood electric vehicle; or

''(V) a medium- or heavy-duty electric vehicle; and

''(ii) investment in qualified alternative fuel infrastructure or nonroad equipment, as determined by the Secretary; and

''(B) allocate more than 1, but not to exceed 5, credits for investment in an emerging technology relating to any vehicle described in subparagraph (A) to encourage—

"(i) a reduction in petroleum demand;

"(ii) technological advancement; and

"(iii) a reduction in vehicle emissions.".

(4) in subsection (c) (as redesignated by paragraph (1)), by striking "subsection (a)" and inserting "subsection (b)"; and

(5) by adding at the end the following:

"(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 2008 through 2013.".

SEC. 247. COMMERCIAL INSULATION DEMONSTRATION PROGRAM.

(a) DEFINITIONS.—In this section:

(1) ADVANCED INSULATION.—The term "advanced insulation" means insulation that has an R value of not less than R35 per inch.

(2) COVERED REFRIGERATION UNIT.—The term "covered refrigeration unit" means any—

(A) commercial refrigerated truck;

(B) commercial refrigerated trailer; and

(C) commercial refrigerator, freezer, or refrigerator-freezer described in section 342(c) of

the Energy Policy and Conservation Act (42 U.S.C. 6313(c)).

(b) REPORT.—Not later than 90 days after the date of enactment of this Act, the Secretary shall submit to Congress a report that includes an evaluation of—

(1) the state of technological advancement of advanced insulation; and

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

(c) DEMONSTRATION PROGRAM.—

(1) ESTABLISHMENT.—If the Secretary determines in the report described in subsection (b) that the implementation of advanced insulation into covered refrigeration units would generate an economically justifiable amount of cost savings, the Secretary, in cooperation with manufacturers of covered refrigeration units, shall establish a demonstration program under which the Secretary shall demonstrate the cost-effectiveness of advanced insulation.

(2) DISCLOSURE.—Section 623 of the Energy Policy Act of 1992 (42 U.S.C. 13293) may apply to any project carried out under this subsection.

(3) COST-SHARING.—Section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352) shall apply to any project carried out under this subsection.

(d) AUTHORIZATION OF APPROPRIATIONS.—Of the funds authorized under section 911(b) of Public Law 109–58, the Energy Policy Act of 2005, such sums shall be allocated to carry out this program.

Subtitle D—Setting Energy Efficiency Goals

SEC. 251. OIL SAVINGS PLAN AND REQUIREMENTS.

(a) OIL SAVINGS TARGET AND ACTION PLAN.—Not later than 270 days after the date of enactment of this Act, the Director of the Office of Management and Budget (referred to in this section as the ''Director'') shall publish in the Federal Register an action plan consisting of—

(1) a list of requirements proposed or to be proposed pursuant to subsection (b) that are authorized to be issued under law in effect on the date of enactment of this Act, and this Act, that will be sufficient, when taken together, to save from the baseline determined under subsection (e)—

(A) 2,500,000 barrels of oil per day on average during calendar year 2016;

(B) 7,000,000 barrels of oil per day on average during calendar year 2026; and

(C) 10,000,000 barrels per day on average during calendar year 2031; and

(2) a Federal Government-wide analysis demonstrating—

(A) the expected oil savings from the baseline to be accomplished by each requirement; and

(B) that all such requirements, taken together, will achieve the oil savings specified in this subsection.

(b) STANDARDS AND REQUIREMENTS.—

(1) IN GENERAL.—On or before the date of publication of the action plan under subsection (a), the Secretary of Energy, the Secretary of Transportation, the Secretary of Defense, the Secretary of Agriculture, the Secretary of the Treasury, the Administrator of the Environmental Protection Agency, and the head of any other agency the President determines appropriate shall each propose, or issue a notice of intent to propose, regulations establishing each standard or other requirement listed in the action plan that is under the jurisdiction of the respective agency using authorities described in paragraph (2).

(2) AUTHORITIES.—The head of each agency described in paragraph (1) shall use to carry out this subsection—

(A) any authority in existence on the date of enactment of this Act (including regulations); and

(B) any new authority provided under this Act (including an amendment made by this Act).

(3) FINAL REGULATIONS.—Not later than 18 months after the date of enactment of this Act, the head of each agency described in paragraph (1) shall promulgate final versions of the regulations required under this subsection.

(4) CONTENT OF REGULATIONS.—Each proposed and final regulation promulgated under this subsection shall—

(A) be sufficient to achieve at least the oil savings resulting from the regulation under the action plan published under subsection (a); and

(B) be accompanied by an analysis by the applicable agency demonstrating that the regulation will achieve the oil savings from the baseline determined under subsection (e).

(c) INITIAL EVALUATION.—

(1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Director shall—

(A) publish in the Federal Register a Federal Government-wide analysis of—

(i) the oil savings achieved from the baseline established under subsection (e); and

(ii) the expected oil savings under the standards and requirements of this Act (and amendments made by this Act); and

(B) determine whether oil savings will meet the targets established under subsection (a).

(2) INSUFFICIENT OIL SAVINGS.—If the oil savings are less than the targets established under subsection (a), simultaneously with the analysis required under paragraph (1)—

(A) the Director shall publish a revised action plan that is sufficient to achieve the targets; and

(B) the head of each agency referred to in subsection (b)(1) shall propose new or revised 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

savings target for calendar year 2017 or any subsequent calendar year.

(2) INSUFFICIENT OIL SAVINGS.—If the oil savings are less than the targets established under subsection (a), simultaneously with the report required under paragraph (1)—

(A) the Director shall publish a revised action plan that is sufficient to achieve the targets; and

(B) the head of each agency referred to in subsection (b)(1) shall propose new or revised regulations that are sufficient to achieve the targets under paragraphs (1), (2), and (3), respectively, of subsection (b).

(3) FINAL REGULATIONS.—Not later than 180 days after the date on which regulations are proposed under paragraph (2)(B), the head of each agency referred to in subsection (b)(1) shall promulgate final versions of those regulations that comply with subsection (b)(1).

(e) BASELINE AND ANALYSIS REQUIREMENTS.—In performing the analyses and promulgating proposed or final regulations to establish standards and other requirements necessary to achieve the oil savings required by this 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

(2) a projection of the barrels of oil saved through enactment of this Act and the Energy Policy Act of 2005 (42 U.S.C. 15801 et seq.).

SEC. 252. NATIONAL ENERGY EFFICIENCY IMPROVEMENT GOALS.

(a) GOALS.—The goals of the United States are—

(1) to achieve an improvement in the overall energy productivity of the United States (measured in gross domestic product per unit of energy input) of at least 2.5 percent per year by the year 2012; and

(2) to maintain that annual rate of improvement each year through 2030.

(b) STRATEGIC PLAN.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary, in cooperation with the Administrator of the Environmental Protection Agency and the heads of other appropriate Federal agencies, shall develop a strategic plan to achieve the national goals for improvement in energy productivity established under subsection (a).

(2) PUBLIC INPUT AND COMMENT.—The Secretary shall develop the plan in a manner that provides appropriate opportunities for public input and comment.

(c) PLAN CONTENTS.—The strategic plan shall—

(1) establish future regulatory, funding, and policy priorities to ensure compliance with the national goals;

(2) include energy savings estimates for each sector; and

(3) include data collection methodologies and compilations used to establish baseline and energy savings data.

(d) PLAN UPDATES.—

(1) IN GENERAL.—The Secretary shall—

(A) update the strategic plan biennially; and

(B) include the updated strategic plan in the national energy policy plan required by section 801 of the Department of Energy Organization Act (42 U.S.C. 7321).

(2) CONTENTS.—In updating the plan, the Secretary shall—

(A) report on progress made toward implementing efficiency policies to achieve the national goals established under subsection (a); and

(B) verify, to the maximum extent practicable, energy savings resulting from the policies.

(e) REPORT TO CONGRESS AND PUBLIC.—The Secretary shall submit to Congress, and make available to the public, the initial strategic plan developed under subsection (b) and each updated plan.

SEC. 253. NATIONAL MEDIA CAMPAIGN.

(a) IN GENERAL.—The Secretary, acting through the Assistant Secretary for Energy Efficiency and Renewable Energy (referred to in this section as the ''Secretary''), shall develop and conduct a national media campaign—

(1) to increase energy efficiency throughout the economy of the United States over the next decade;

(2) to promote the national security benefits associated with increased energy efficiency; and

(3) to decrease oil consumption in the United States over the next decade.

(b) CONTRACT WITH ENTITY.—The Secretary shall carry out subsection (a) directly or through—

(1) competitively bid contracts with 1 or more nationally recognized media firms for the development and distribution of monthly television, radio, and newspaper public service announcements; or

(2) collective agreements with 1 or more nationally recognized institutes, businesses, or nonprofit organizations for the funding, development, and distribution of monthly television, radio, and newspaper public service announcements.

(c) USE OF FUNDS.—

(1) IN GENERAL.—Amounts made available to carry out this section shall be used for the following:

(A) ADVERTISING COSTS.—

(i) The purchase of media time and space.

(ii) Creative and talent costs.

(iii) Testing and evaluation of advertising.

(iv) Evaluation of the effectiveness of the media campaign.

(B) ADMINISTRATIVE COSTS.—Operational and management expenses.

(2) LIMITATIONS.—In carrying out this section, the Secretary shall allocate not less than 85 percent of funds made available under subsection (e) for each fiscal year for the advertising functions specified under paragraph (1)(A).

(d) REPORTS.—The Secretary shall annually submit to Congress a report that describes—

(1) the strategy of the national media campaign and whether specific objectives of the campaign were accomplished, including—

(A) determinations concerning the rate of change of energy consumption, in both absolute and per capita terms; and

(B) an evaluation that enables consideration whether the media campaign contributed to reduction of energy consumption;

(2) steps taken to ensure that the national media campaign operates in an effective and efficient manner consistent with the overall strategy and focus of the campaign;

(3) plans to purchase advertising time and space;

(4) policies and practices implemented to ensure that Federal funds are used responsibly to purchase advertising time and space and eliminate the potential for waste, fraud, and abuse; and

(5) all contracts or cooperative agreements entered into with a corporation, partnership, or individual working on behalf of the national media campaign.

(e) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There is authorized to be appropriated to carry out this section $5,000,000 for each of fiscal years 2008 through 2012.

(2) DECREASED OIL CONSUMPTION.—The Secretary shall use not less than 50 percent of the amount that is made available under this section for each fiscal year to develop and conduct a national media campaign to decrease oil consumption in the United States over the next decade.

SEC. 254. MODERNIZATION OF ELECTRICITY GRID SYSTEM.

(a) STATEMENT OF POLICY.—It is the policy of the United States that developing and deploying advanced technology to modernize and increase the efficiency of the electricity grid system of the United States is essential to maintain a reliable and secure electricity transmission and distribution infrastructure that can meet future demand growth.

(b) PROGRAMS.—The Secretary, the Federal Energy Regulatory Commission, and other Federal agencies, as appropriate, shall carry out programs to support the use, development, and demonstration of advanced transmission and distribution technologies, including real-time monitoring and analytical software—

(1) to maximize the capacity and efficiency of electricity networks;

(2) to enhance grid reliability;

(3) to reduce line losses;

(4) to facilitate the transition to real-time electricity pricing;

(5) to allow grid incorporation of more onsite renewable energy generators;

(6) to enable electricity to displace a portion of the petroleum used to power the national transportation system of the United States; and

(7) to enable broad deployment of distributed generation and demand side management technology.

SEC. 255. SMART GRID SYSTEM REPORT.

(a) IN GENERAL.—The Secretary, acting through the Director of the Office of Electricity Delivery and Energy Reliability (referred to in this section as the ''Secretary''), shall, after consulting with any interested individual or entity as appropriate, no later than one year after enactment, report to Congress concerning the status of smart grid deployments nationwide and any regulatory or government barriers to continued deployment.

SEC. 256. SMART GRID TECHNOLOGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION.

(a) POWER GRID DIGITAL INFORMATION TECHNOLOGY.—The Secretary, in consultation with the Federal

Energy Regulatory Commission and other appropriate agencies, electric utilities, the States, and other stakeholders, shall carry out a program—

(1) to develop advanced techniques for measuring peak load reductions and energy-efficiency savings from smart metering, demand response, distributed generation, and electricity storage systems;

(2) to investigate means for demand response, distributed generation, and storage to provide ancillary services;

(3) to conduct research to advance the use of wide-area measurement and control networks, including data mining, visualization, advanced computing, and secure and dependable communications in a highly-distributed environment;

(4) to test new reliability technologies in a grid control room environment against a representative set of local outage and wide area blackout scenarios;

(5) to investigate the feasibility of a transition to time-of-use and real-time electricity pricing;

(6) to develop algorithms for use in electric transmission system software applications;

(7) to promote the use of underutilized electricity generation capacity in any substitution of

electricity for liquid fuels in the transportation system of the United States; and

(8) in consultation with the Federal Energy Regulatory Commission, to propose interconnection protocols to enable electric utilities to access electricity stored in vehicles to help meet peak demand loads.

(b) SMART GRID REGIONAL DEMONSTRATION INITIATIVE.—

(1) IN GENERAL.—The Secretary shall establish a smart grid regional demonstration initiative (referred to in this subsection as the ''Initiative'') composed of demonstration projects specifically focused on advanced technologies for use in power grid sensing, communications, analysis, and power flow control. The Secretary shall seek to leverage existing smart grid deployments.

(2) GOALS.—The goals of the Initiative shall be—

(A) to demonstrate the potential benefits of concentrated investments in advanced grid technologies on a regional grid;

(B) to facilitate the commercial transition from the current power transmission and dis-

tribution system technologies to advanced technologies;

(C) to facilitate the integration of advanced technologies in existing electric networks to improve system performance, power flow control, and reliability;

(D) to demonstrate protocols and standards that allow for the measurement and validation of the energy savings and fossil fuel emission reductions associated with the installation and use of energy efficiency and demand response technologies and practices; and

(E) to investigate differences in each region and regulatory environment regarding best practices in implementing smart grid technologies.

(3) DEMONSTRATION PROJECTS.—

(A) IN GENERAL.—In carrying out the initiative, the Secretary shall carry out smart grid demonstration projects in up to 5 electricity control areas, including rural areas and at least 1 area in which the majority of generation and transmission assets are controlled by a tax-exempt entity.

(B) COOPERATION.—A demonstration project under subparagraph (A) shall be carried out in cooperation with the electric utility that owns the grid facilities in the electricity control area in which the demonstration project is carried out.

(C) FEDERAL SHARE OF COST OF TECHNOLOGY INVESTMENTS.—The Secretary shall provide to an electric utility described in subparagraph (B) financial assistance for use in paying an amount equal to not more than 50 percent of the cost of qualifying advanced grid technology investments made by the electric utility to carry out a demonstration project.

(4) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated—

(A) to carry out subsection (a), such sums as are necessary for each of fiscal years 2008 through 2012; and

(B) to carry out subsection (b), $100,000,000 for each of fiscal years 2008 through 2012.

SEC. 257. SMART GRID INTEROPERABILITY FRAMEWORK.

(a) INTEROPERABILITY FRAMEWORK.—The Federal Energy Regulatory Commission (referred to in this section

as the ''Commission''), in cooperation with other relevant federal agencies, shall coordinate with smart grid stakeholders to develop protocols for the establishment of a flexible framework for the connection of smart grid devices and systems that would align policy, business, and technology approaches in a manner that would enable all electric resources, including demand-side resources, to contribute to an efficient, reliable electricity network.

(c) SCOPE OF FRAMEWORK.—The framework developed under subsection (b) shall be designed—

(1) to accommodate traditional, centralized generation and transmission resources and consumer distributed resources, including distributed generation, renewable generation, energy storage, energy efficiency, and demand response and enabling devices and systems;

(2) to be flexible to incorporate—

(A) regional and organizational differences; and

(B) technological innovations; and

(3) to consider include voluntary uniform standards for certain classes of mass-produced electric appliances and equipment for homes and businesses that enable customers, at their election and consistent with applicable State and federal laws, and

are manufactured with the ability to respond to electric grid emergencies and demand response signals by curtailing all, or a portion of, the electrical power consumed by the appliances or equipment in response to an emergency or demand response signal, including through—

(A) load reduction to reduce total electrical demand;

(B) adjustment of load to provide grid ancillary services; and

(C) in the event of a reliability crisis that threatens an outage, short-term load shedding to help preserve the stability of the grid.

(4) Such voluntary standards should incorporate appropriate manufacturer lead time.

SEC. 258. STATE CONSIDERATION OF SMART GRID.

Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding at the end the following:

"(16) CONSIDERATION OF SMART GRID INVESTMENTS.—Each State shall consider requiring that, prior to undertaking investments in nonadvanced grid technologies, an electric utility of the State demonstrate to the State that the electric utility considered an investment in

a qualified smart grid system based on appropriate factors, including—

"(i) total costs;

"(ii) cost-effectiveness;

"(iii) improved reliability;

"(iv) security;

"(v) system performance; and

"(vi) societal benefit.

"(B) RATE RECOVERY.—Each State shall consider authorizing each electric utility of the State to recover from ratepayers any capital, operating expenditure, or other costs of the electric utility relating to the deployment of a qualified smart grid system, including a reasonable rate of return on the capital expenditures of the electric utility for the deployment of the qualified smart grid system.

"(C) OBSOLETE EQUIPMENT.—Each State shall consider authorizing any electric utility or other party of the State to deploy a qualified smart grid system to recover in a timely manner the remaining book-value costs of any equipment rendered obsolete by the deployment of the

qualified smart grid system, based on the remaining depreciable life of the obsolete equipment.''.

SEC. 259. SUPPORT FOR ENERGY INDEPENDENCE OF THE UNITED STATES.

It is the policy of the United States to provide support for projects and activities to facilitate the energy independence of the United States so as to ensure that all but 10 percent of the energy needs of the United States are supplied by domestic energy sources.

SEC. 260. ENERGY POLICY COMMISSION.

(a) ESTABLISHMENT.—

(1) IN GENERAL.—There is established a commission, to be known as the ''National Commission on Energy Independence'' (referred to in this section as the ''Commission'').

(2) MEMBERSHIP.—The Commission shall be composed of 15 members, of whom—

(A) 3 shall be appointed by the President;

(B) 3 shall be appointed by the majority leader of the Senate;

(C) 3 shall be appointed by the minority leader of the Senate;

(D) 3 shall be appointed by the Speaker of the House of Representatives; and

(E) 3 shall be appointed by the minority leader of the House of Representatives.

(3) CO-CHAIRPERSONS.—

(A) IN GENERAL.—The President shall designate 2 co-chairpersons from among the members of the Commission appointed.

(B) POLITICAL AFFILIATION.—The co-chairpersons designated under subparagraph (A) shall not both be affiliated with the same political party.

(4) DEADLINE FOR APPOINTMENT.—Members of the Commission shall be appointed not later than 90 days after the date of enactment of this Act.

(5) TERM; VACANCIES.—

(A) TERM.—A member of the Commission shall be appointed for the life of the Commission.

(B) VACANCIES.—Any vacancy in the Commission—

(i) shall not affect the powers of the Commission; and

(ii) shall be filled in the same manner as the original appointment.

(b) PURPOSE.—The Commission shall conduct a comprehensive review of the energy policy of the United States by—

(1) reviewing relevant analyses of the current and long-term energy policy of, and conditions in, the United States;

(2) identifying problems that may threaten the achievement by the United States of long-term energy policy goals, including energy independence;

(3) analyzing potential solutions to problems that threaten the long-term ability of the United States to achieve those energy policy goals; and

(4) providing recommendations that will ensure, to the maximum extent practicable, that the energy policy goals of the United States are achieved.

(c) REPORT AND RECOMMENDATIONS.—

(1) IN GENERAL.—Not later than December 31 of each of calendar years 2009, 2011, 2013, and 2015, the Commission shall submit to Congress and the President a report on the progress of United States in meeting the long-term energy policy goal of energy independence, including a detailed statement of the consensus findings, conclusions, and recommendations of the Commission.

(2) LEGISLATIVE LANGUAGE.—If a recommendation submitted under paragraph (1) involves legislative action, the report shall include proposed legislative language to carry out the action.

(d) COMMISSION PERSONNEL MATTERS.—

(1) STAFF AND DIRECTOR.—The Commission shall have a staff headed by an Executive Director.

(2) STAFF APPOINTMENT.—The Executive Director may appoint such personnel as the Executive Director and the Commission determine to be appropriate.

(3) EXPERTS AND CONSULTANTS.—With the approval of the Commission, the Executive Director may procure temporary and intermittent services under section 3109(b) of title 5, United States Code.

(4) FEDERAL AGENCIES.—

(A) DETAIL OF GOVERNMENT EMPLOYEES.—

(i) IN GENERAL.—Upon the request of the Commission, the head of any Federal agency may detail, without reimbursement, any of the personnel of the Federal agency to the Commission to assist in carrying out the duties of the Commission.

(ii) NATURE OF DETAIL.—Any detail of a Federal employee under clause (i) shall not interrupt or otherwise affect the civil service status or privileges of the Federal employee.

(B) TECHNICAL ASSISTANCE.—Upon the request of the Commission, the head of a Federal agency shall provide such technical assistance to the Commission as the Commission determines to be necessary to carry out the duties of the Commission.

(e) RESOURCES.—

(1) IN GENERAL.—The Commission shall have reasonable access to materials, resources, statistical data, and such other information from Executive agencies as the Commission determines to be necessary to carry out the duties of the Commission.

(2) FORM OF REQUESTS.—The co-chairpersons of the Commission shall make requests for access described in paragraph (1) in writing, as necessary.

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

SEC. 261. FEDERAL FLEET CONSERVATION REQUIREMENTS.

(a) FEDERAL FLEET CONSERVATION REQUIREMENTS.—

(1) IN GENERAL.—Part J of title III of the Energy Policy and Conservation Act (42 U.S.C. 6374 et seq.) is amended by adding at the end the following:

"SEC. 400FF. FEDERAL FLEET CONSERVATION REQUIREMENTS.

"(a) MANDATORY REDUCTION IN PETROLEUM CONSUMPTION.—

"(1) IN GENERAL.—The Secretary shall issue regulations (including provisions for waivers from the requirements of this section) for Federal fleets subject to section 400AA requiring that not later than October 1, 2015, each Federal agency achieve at least a 20 percent reduction in petroleum consumption, and that each Federal agency increase alternative fuel consumption by 10 percent annually, as calculated from the baseline established by the Secretary for fiscal year 2005.

"(2) PLAN.—

"(A) REQUIREMENT.—The regulations shall require each Federal agency to develop a plan to meet the required petroleum reduction levels and the alternative fuel consumption increases.

"(B) MEASURES.—The plan may allow an agency to meet the required petroleum reduction level through—

"(i) the use of alternative fuels;

"(ii) the acquisition of vehicles with higher fuel economy, including hybrid vehicles, neighborhood electric vehicles, electric vehicles, and plug–in hybrid vehicles if the vehicles are commercially available;

"(iii) the substitution of cars for light trucks;

"(iv) an increase in vehicle load factors;

"(v) a decrease in vehicle miles traveled;

"(vi) a decrease in fleet size; and

"(vii) other measures.

"(b) FEDERAL EMPLOYEE INCENTIVE PROGRAMS FOR REDUCING PETROLEUM CONSUMPTION.—

"(1) IN GENERAL.—Each Federal agency shall actively promote incentive programs that encourage Federal employees and contractors to reduce petroleum usage through the use of practices such as—

"(A) telecommuting;

"(B) public transit;

"(C) carpooling; and

"(D) bicycling and the use of 2-wheeled electric drive devices.

"(2) MONITORING AND SUPPORT FOR INCENTIVE PROGRAMS.—The Administrator of General Services, the Director of the Office of Personnel Management, and the Secretary of Energy shall monitor and provide appropriate support to agency programs described in paragraph (1).

"(3) RECOGNITION.—The Secretary may establish a program under which the Secretary recognizes private sector employers and State and local governments for outstanding programs to reduce petroleum usage through practices described in paragraph (1).

"(c) REPLACEMENT TIRES.—

"(1) IN GENERAL.—Except as provided in paragraph (2), the regulations issued under subsection (a)(1) shall include a requirement that, to the maximum extent practicable, each Federal agency pur-

chase energy-efficient replacement tires for the respective fleet vehicles of the agency.

"(2) EXCEPTIONS.—This section does not apply to—

"(A) law enforcement motor vehicles;

"(B) emergency motor vehicles; or

"(C) motor vehicles acquired and used for military purposes that the Secretary of Defense has certified to the Secretary must be exempt for national security reasons.

"(d) ANNUAL REPORTS ON COMPLIANCE.—The Secretary shall submit to Congress an annual report that summarizes actions taken by Federal agencies to comply with this section.".

(2) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Energy Policy and Conservation Act (42 U.S.C. prec. 6201) is amended by adding at the end of the items relating to part J of title III the following:

"Sec. 400FF. Federal fleet conservation requirements.".

(b) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out the amendment made by this section $10,000,000 for the period of fiscal years 2008 through 2013.

SEC. 262. FEDERAL REQUIREMENT TO PURCHASE ELECTRICITY GENERATED BY RENEWABLE ENERGY.

Section 203 of the Energy Policy Act of 2005 (42 U.S.C. 15852) is amended—

(1) by striking subsection (a) and inserting the following:

"(a) REQUIREMENT.—

"(1) IN GENERAL.—The President, acting through the Secretary, shall require that, to the extent economically feasible and technically practicable, of the total quantity of domestic electric energy the Federal Government consumes during any fiscal year, the following percentages shall be renewable energy from facilities placed in service after January 1, 1999:

"(A) Not less than 10 percent in fiscal year 2010.

"(B) Not less than 15 percent in fiscal year 2015.

"(2) CAPITOL COMPLEX.—The Architect of the Capitol, in consultation with the Secretary, shall ensure that, of the total quantity of electric energy the Capitol complex consumes during any fiscal year, the percentages prescribed in paragraph (1) shall be renewable energy.

"(3) WAIVER AUTHORITY.—The President may reduce or waive the requirement under paragraph (1) on a fiscal-year basis if the President determines that complying with paragraph (1) for a fiscal year would result in—

"(A) a negative impact on military training or readiness activities conducted by the Department of Defense;

"(B) a negative impact on domestic preparedness activities conducted by the Department of Homeland Security; or

"(C) a requirement that a Federal agency provide emergency response services in the event of a natural disaster or terrorist attack."; and

(2) by adding at the end the following:

"(e) CONTRACTS FOR RENEWABLE ENERGY FROM PUBLIC UTILITY SERVICES.—Notwithstanding section 501(b)(1)(B) of title 40, United States Code, a contract for renewable energy may be made for a period of not more than 50 years.".

SEC. 263. ENERGY SAVINGS PERFORMANCE CONTRACTS.

(a) RETENTION OF SAVINGS.—Section 546(c) of the National Energy Conservation Policy Act (42 U.S.C. 8256(c)) is amended by striking paragraph (5).

(b) SUNSET AND REPORTING REQUIREMENTS.—Section 801 of the National Energy Conservation Policy Act (42 U.S.C. 8287) is amended by striking subsection (c).

(c) DEFINITION OF ENERGY SAVINGS.—Section 804(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(2)) is amended—

(1) by redesignating subparagraphs (A), (B), and (C) as clauses (i), (ii), and (iii), respectively, and indenting appropriately;

(2) by striking ''means a reduction'' and inserting ''means—

''(A) a reduction'';

(3) by striking the period at the end and inserting a semicolon; and

(4) by adding at the end the following:

''(B) the increased efficient use of an existing energy source by cogeneration or heat recovery, and installation of renewable energy systems;

''(C) if otherwise authorized by Federal or State law (including regulations), the sale or transfer of electrical or thermal energy generated on-site from renewable energy sources or cogeneration, but in excess of Federal needs, to utilities or non-Federal energy users; and

"(D) the increased efficient use of existing water sources in interior or exterior applications.".

(d) NOTIFICATION.—

(1) AUTHORITY TO ENTER INTO CONTRACTS.—Section 801(a)(2)(D) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)(2)(D)) is amended—

(A) in clause (ii), by inserting "and" after the semicolon at the end;

(B) by striking clause (iii); and

(C) by redesignating clause (iv) as clause (iii).

(2) REPORTS.—Section 548(a)(2) of the National Energy Conservation Policy Act (42 U.S.C. 8258(a)(2)) is amended by inserting "and any termination penalty exposure" after "the energy and cost savings that have resulted from such contracts".

(3) CONFORMING AMENDMENT.—Section 2913 of title 10, United States Code, is amended by striking subsection (e).

(e) ENERGY AND COST SAVINGS IN NONBUILDING APPLICATIONS.—

(1) DEFINITIONS.—In this subsection:

(A) NONBUILDING APPLICATION.—The term ''nonbuilding application'' means—

(i) any class of vehicles, devices, or equipment that is transportable under the power of the applicable vehicle, device, or equipment by land, sea, or air and that consumes energy from any fuel source for the purpose of—

(I) that transportation; or

(II) maintaining a controlled environment within the vehicle, device, or equipment; and

(ii) any federally-owned equipment used to generate electricity or transport water.

(B) SECONDARY SAVINGS.—

(i) IN GENERAL.—The term ''secondary savings'' means additional energy or cost savings that are a direct consequence of the energy savings that result from the energy efficiency improvements that were financed and implemented pursuant to an energy savings performance contract.

(ii) INCLUSIONS.—The term ''secondary savings'' includes—

(I) energy and cost savings that result from a reduction in the need for fuel delivery and logistical support;

(II) personnel cost savings and environmental benefits; and

(III) in the case of electric generation equipment, the benefits of increased efficiency in the production of electricity, including revenues received by the Federal Government from the sale of electricity so produced.

(2) STUDY.—

(A) IN GENERAL.—As soon as practicable after the date of enactment of this Act, the Secretary and the Secretary of Defense shall jointly conduct, and submit to Congress and the President a report of, a study of the potential for the use of energy savings performance contracts to reduce energy consumption and provide energy and cost savings in nonbuilding applications.

(B) REQUIREMENTS.—The study under this subsection shall include—

(i) an estimate of the potential energy and cost savings to the Federal Government, including secondary savings and benefits, from increased efficiency in nonbuilding applications;

(ii) an assessment of the feasibility of extending the use of energy savings performance contracts to nonbuilding applications, including an identification of any regulatory or statutory barriers to such use; and

(iii) such recommendations as the Secretary and Secretary of Defense determine to be appropriate.

SEC. 264. ENERGY MANAGEMENT REQUIREMENTS FOR FEDERAL BUILDINGS.

Section 543(a)(1) of the National Energy Conservation Policy Act (42 U.S.C. 8253(a)(1)) is amended by 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.".

SEC. 265. COMBINED HEAT AND POWER AND DISTRICT ENERGY INSTALLATIONS AT FEDERAL SITES.

Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended by adding at the end the following:

"(f) COMBINED HEAT AND POWER AND DISTRICT ENERGY INSTALLATIONS AT FEDERAL SITES.—

"(1) IN GENERAL.—Not later than 18 months after the date of enactment of this subsection, the Secretary, in consultation with the Administrator of General Services and the Secretary of Defense, shall identify Federal sites that could achieve significant cost-effective energy savings through the use of combined heat and power or district energy installations.

"(2) INFORMATION AND TECHNICAL ASSISTANCE.—The Secretary shall provide agencies with information and technical assistance that will enable the agencies to take advantage of the energy savings described in paragraph (1).

"(3) ENERGY PERFORMANCE REQUIREMENTS.—Any energy savings from the installations described in paragraph (1) may be applied to meet the energy performance requirements for an agency under subsection (a)(1).".

SEC. 266. FEDERAL BUILDING ENERGY EFFICIENCY PERFORMANCE STANDARDS.

Section 305(a)(3)(A) of the Energy Conservation and Production Act (42 U.S.C. 6834(a)(3)(A)) is amended—

(1) in the matter preceding clause (i), by striking ''this paragraph'' and by inserting ''the Energy Efficiency Promotion Act of 2007''; and

(2) in clause (i)—

(A) in subclause (I), by striking ''and'' at the end;

(B) by redesignating subclause (II) as subclause (III); and

(C) by inserting after subclause (I) the following:

''(II) the buildings be designed, to the extent economically feasible and technically practicable, so that the fossil fuel-generated energy consumption of the buildings is reduced, as compared with the fossil fuel-generated energy consumption by a similar Federal building in fiscal year 2003 (as measured by Commercial Buildings Energy Consumption Survey or Residential Energy Consumption Survey data from the Energy Information Agency), by the percentage specified in the following table:

"Fiscal year	Percentage reduction
2007	50
2010	60
2015	70
2020	80
2025	90
2030	100;

and''.

SEC. 267. APPLICATION OF INTERNATIONAL ENERGY CONSERVATION CODE TO PUBLIC AND ASSISTED HOUSING.

Section 109 of the Cranston-Gonzalez National Affordable Housing Act (42 U.S.C. 12709) is amended—

(1) in subsection (a)(1)(C), by striking, '', where such standards are determined to be cost effective by the Secretary of Housing and Urban Development'';

(2) in subsection (a)(2)—

(A) by striking ''the Council of American Building Officials Model Energy Code, 1992'' and inserting ''2006 International Energy Conservation Code''; and

(B) by striking '', and, with respect to rehabilitation and new construction of public and assisted housing funded by HOPE VI revitalization grants under section 24 of the United States Housing Act of 1937 (42 U.S.C. 1437v), the 2003 International Energy Conservation Code'';

(3) in subsection (b)—

(A) in the heading, by striking ''MODEL ENERGY CODE.—'' and inserting ''**INTERNATIONAL ENERGY CONSERVATION CODE**.—'';

(B) after ''all new construction'' in the first sentence insert ''and rehabilitation''; and

(C) by striking '', and, with respect to rehabilitation and new construction of public and assisted housing funded by HOPE VI revitalization grants under section 24 of the United States Housing Act of 1937 (42 U.S.C. 1437v), the 2003 International Energy Conservation Code'';

(4) in subsection (c)—

(A) in the heading, by striking ''MODEL ENERGY CODE AND''; and

(B) by striking '', or, with respect to rehabilitation and new construction of public and assisted housing funded by HOPE VI revitalization grants under section 24 of the United States Housing Act of 1937 (42 U.S.C. 1437v), the 2003 International Energy Conservation Code'';

(5) by adding at the end the following:

"(d) FAILURE TO AMEND THE STANDARDS.—If the Secretaries have not, within 1 year after the requirements of the 2006 IECC or the ASHRAE Standard 90.1–2004 are revised, amended the standards or made a determination under subsection (c) of this section, the Secretary of Housing and Urban Development or the Secretary of Agriculture make a determination that the revised codes do not negatively affect the availability or affordability of new construction of assisted housing and single family and multifamily residential housing (other than manufactured homes) subject to mortgages insured under the National Housing Act (12 U.S.C. 1701 et seq.) or insured, guaranteed, or made by the Secretary of Agriculture under title V of the Housing Act of 1949 (42 U.S.C. 1471 et seq.), respectively, and the Secretary of Energy has made a determination under section 304 of the Energy Conservation and Production Act (42 U.S.C. 6833) that the revised code or standard would improve energy efficiency, all new construction and rehabilitation of housing specified in subsection (a) shall meet the requirements of the revised code or standard.";

(6) by striking "CABO Model Energy Code, 1992" each place it appears and inserting "the 2006 IECC"; and

(7) by striking ''1989'' each place it appears and inserting ''2004''.

SEC. 268. ENERGY EFFICIENT COMMERCIAL BUILDINGS INITIATIVE.

(a) DEFINITIONS.—In this section:

(1) CONSORTIUM.—The term ''consortium'' means a working group that is comprised of—

(A) individuals representing—

(i) 1 or more businesses engaged in—

(I) commercial building development;

(II) construction; or

(III) real estate;

(ii) financial institutions;

(iii) academic or research institutions;

(iv) State or utility energy efficiency programs;

(v) nongovernmental energy efficiency organizations; and

(vi) the Federal Government;

(B) 1 or more building designers; and

(C) 1 or more individuals who own or operate 1 or more buildings.

(2) ENERGY EFFICIENT COMMERCIAL BUILDING.—The term ''energy efficient commercial build-

ing'' means a commercial building that is designed, constructed, and operated—

(A) to require a greatly reduced quantity of energy;

(B) to meet, on an annual basis, the balance of energy needs of the commercial building from renewable sources of energy; and

(C) to be economically viable.

(3) INITIATIVE.—The term ''initiative'' means the Energy Efficient Commercial Buildings Initiative.

(b) INITIATIVE.—

(1) IN GENERAL.—The Secretary shall enter into an agreement with the consortium to develop and carry out the initiative—

(A) to reduce the quantity of energy consumed by commercial buildings located in the United States; and

(B) to achieve the development of energy efficient commercial buildings in the United States.

(2) GOAL OF INITIATIVE.—The goal of the initiative shall be to develop technologies and practices and implement policies that lead to energy efficient commercial buildings for—

(A) any commercial building newly constructed in the United States by 2030;

(B) 50 percent of the commercial building stock of the United States by 2040; and

(C) all commercial buildings in the United States by 2050.

(3) COMPONENTS.—In carrying out the initiative, the Secretary, in collaboration with the consortium, may—

(A) conduct research and development on building design, materials, equipment and controls, operation and other practices, integration, energy use measurement and benchmarking, and policies;

(B) conduct demonstration projects to evaluate replicable approaches to achieving energy efficient commercial buildings for a variety of building types in a variety of climate zones;

(C) conduct deployment activities to disseminate information on, and encourage widespread adoption of, technologies, practices, and policies to achieve energy efficient commercial buildings; and

(D) conduct any other activity necessary to achieve any goal of the initiative, as determined

by the Secretary, in collaboration with the consortium.

(c) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There are authorized to be appropriated such sums as are necessary to carry out this section.

(2) ADDITIONAL FUNDING.—In addition to amounts authorized to be appropriated under paragraph (1), the Secretary may allocate funds from other appropriations to the initiative without changing the purpose for which the funds are appropriated.

SEC. 269. CLEAN ENERGY CORRIDORS.

Section 216 of the Federal Power Act (16 U.S.C. 824p) is amended—

(1) in subsection (a)—

(A) by striking ''(1) Not later than'' and inserting the following:

''(1) IN GENERAL.—Not later than'';

(B) by striking paragraph (2) and inserting the following:

''(2) REPORT AND DESIGNATIONS.—

''(A) IN GENERAL.—After considering alternatives and recommendations from interested parties (including an opportunity for comment

from affected States), the Secretary shall issue a report, based on the study conducted under paragraph (1), in which the Secretary may designate as a national interest electric transmission corridor any geographic area experiencing electric energy transmission capacity constraints or congestion that adversely affects consumers, including constraints or congestion that—

"(i) increases costs to consumers;

"(ii) limits resource options to serve load growth; or

"(iii) limits access to sources of clean energy, such as wind, solar energy, geothermal energy, and biomass.

"(B) ADDITIONAL DESIGNATIONS.—In addition to the corridor designations made under subparagraph (A), the Secretary may designate additional corridors in accordance with that subparagraph upon the application by an interested person, on the condition that the Secretary provides for an opportunity for notice and comment by interested persons and affected States on the application.";

(C) in paragraph (3), the striking ''(3) The Secretary'' and inserting the following:

''(3) CONSULTATION.—The Secretary''; and

(D) in paragraph (4)—

(i) by striking ''(4) In determining'' and inserting the following:

''(4) BASIS FOR DETERMINATION.—In determining''; and

(ii) by striking subparagraphs (A) through (E) and inserting the following:

''(A) the economic vitality and development of the corridor, or the end markets served by the corridor, may be constrained by lack of adequate or reasonably priced electricity;

''(B)(i) economic growth in the corridor, or the end markets served by the corridor, may be jeopardized by reliance on limited sources of energy; and

''(ii) a diversification of supply is warranted;

''(C) the energy independence of the United States would be served by the designation;

''(D) the designation would be in the interest of national energy policy; and

"(E) the designation would enhance national defense and homeland security."; and

(2) by adding at the end the following:

"(l) RATES AND RECOVERY OF COSTS.—

"(1) IN GENERAL.—Not later than 1 year after the date of enactment of this subsection, the Commission shall promulgate regulations providing for the allocation and recovery of costs prudently incurred by public utilities in building and operating facilities authorized under this section for transmission of electric energy generated from clean sources (such as wind, solar energy, geothermal energy, and biomass).

"(2) APPLICABLE PROVISIONS.—All rates approved under the regulations promulgated under paragraph (1), including any revisions to the regulations, shall be subject to the requirements under sections 205 and 206 that all rates, charges, terms, and conditions be just and reasonable and not unduly discriminatory or preferential.".

SEC. 270. FEDERAL STANDBY POWER STANDARD.

(a) DEFINITIONS.—In this section:

(1) AGENCY.—

(A) IN GENERAL.—The term "Agency" has the meaning given the term "Executive

agency'' in section 105 of title 5, United States Code.

(B) INCLUSIONS.—The term ''Agency'' includes military departments, as the term is defined in section 102 of title 5, United States Code.

(2) ELIGIBLE PRODUCT.—The term ''eligible product'' means a commercially available, off-the-shelf product that—

(A)(i) uses external standby power devices; or

(ii) contains an internal standby power function; and

(B) is included on the list compiled under subsection (d).

(b) FEDERAL PURCHASING REQUIREMENT.—Subject to subsection (c), if an Agency purchases an eligible product, the Agency shall purchase—

(1) an eligible product that uses not more than 1 watt in the standby power consuming mode of the eligible product; or

(2) if an eligible product described in paragraph (1) is not available, the eligible product with the lowest available standby power wattage in the standby power consuming mode of the eligible product.

(c) LIMITATION.—The requirements of subsection (b) shall apply to a purchase by an Agency only if—

(1) the lower-wattage eligible product is—

(A) lifecycle cost-effective; and

(B) practicable; and

(2) the utility and performance of the eligible product is not compromised by the lower wattage requirement.

(d) ELIGIBLE PRODUCTS.—The Secretary of Energy, in consultation with the Secretary of Defense, the Administrator of the Environmental Protection Agency, and the Administrator of General Services, shall compile a publicly accessible list of cost-effective eligible products that shall be subject to the purchasing requirements of subsection (b).

SEC. 270A. STANDARD RELATING TO SOLAR HOT WATER HEATERS.

Section 305(a)(3)(A) of the Energy Conservation and Production Act (42 U.S.C. 6834(a)(3)(A)) (as amended by section 266) is amended—

(1) in clause (i)(III), by striking ''and'' at the end;

(2) in clause (ii), by striking the period at the end and inserting ''; and''; and

(3) by adding at the end the following:

"(iii) if life-cycle cost-effective, as compared to other reasonably available technologies, not less than 30 percent of the hot water demand for each new or substantially modified Federal building be met through the installation and use of solar hot water heaters.".

SEC. 270B. RENEWABLE ENERGY INNOVATION MANUFACTURING PARTNERSHIP.

(a) ESTABLISHMENT.—The Secretary shall carry out a program, to be known as the Renewable Energy Innovation Manufacturing Partnership Program (referred to in this section as the "Program"), to make assistance awards to eligible entities for use in carrying out research, development, and demonstration relating to the manufacturing of renewable energy technologies.

(b) SOLICITATION.—To carry out the Program, the Secretary shall annually conduct a competitive solicitation for assistance awards for an eligible project described in subsection (e).

(c) PROGRAM PURPOSES.—The purposes of the Program are—

(1) to develop, or aid in the development of, advanced manufacturing processes, materials, and infrastructure;

(2) to increase the domestic production of renewable energy technology and components; and

(3) to better coordinate Federal, State, and private resources to meet regional and national renewable energy goals through advanced manufacturing partnerships.

(d) ELIGIBLE ENTITIES.—An entity shall be eligible to receive an assistance award under the Program to carry out an eligible project described in subsection (e) if the entity is composed of—

(1) 1 or more public or private nonprofit institutions or national laboratories engaged in research, development, demonstration, or technology transfer, that would participate substantially in the project; and

(2) 1 or more private entities engaged in the manufacturing or development of renewable energy system components (including solar energy, wind energy, biomass, geothermal energy, energy storage, or fuel cells).

(e) ELIGIBLE PROJECTS.—An eligible entity may use an assistance award provided under this section to carry out a project relating to—

(1) the conduct of studies of market opportunities for component manufacturing of renewable energy systems;

(2) the conduct of multiyear applied research, development, demonstration, and deployment projects for advanced manufacturing processes, materials, and infrastructure for renewable energy systems; and

(3) other similar ventures, as approved by the Secretary, that promote advanced manufacturing of renewable technologies.

(f) CRITERIA AND GUIDELINES.—The Secretary shall establish criteria and guidelines for the submission, evaluation, and funding of proposed projects under the Program.

(g) COST SHARING.—Section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352) shall apply to a project carried out under this section.

(h) DISCLOSURE.—Section 623 of the Energy Policy Act of 1992 (42 U.S.C. 13293) shall apply to a project carried out under this subsection.

(i) SENSE OF THE SENATE.—It is the sense of the Senate that the Secretary should ensure that small businesses engaged in renewable manufacturing be considered

for loan guarantees authorized under title XVII of the Energy Policy Act of 2005 (42 U.S.C. 16511 et seq.).

(j) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated out of funds already authorized to carry out this section $25,000,000 for each of fiscal years 2008 through 2013, to remain available until expended.

SEC. 270C. EXPRESS LOANS FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY.

Section 7(a)(31) of the Small Business Act (15 U.S.C. 636(a)(31)) is amended by adding at the end the following:

"(F) EXPRESS LOANS FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY.—

"(i) DEFINITIONS.—In this subparagraph—

"(I) the term 'biomass'—

"(aa) means any organic material that is available on a renewable or recurring basis, including—

"(AA) agricultural crops;

"(BB) trees grown for energy production;

"(CC) wood waste and wood residues;

"(DD) plants (including aquatic plants and grasses);

"(EE) residues;

"(FF) fibers;

"(GG) animal wastes and other waste materials; and

"(HH) fats, oils, and greases (including recycled fats, oils, and greases); and

"(bb) does not include—

"(AA) paper that is commonly recycled; or

"(BB) unsegregated solid waste;

"(II) the term 'energy efficiency project' means the installation or upgrading of equipment that results in a significant reduction in energy usage; and

"(III) the term 'renewable energy system' means a system of energy derived from—

"(aa) a wind, solar, biomass (including biodiesel), or geothermal source; or

"(bb) hydrogen derived from biomass or water using an energy source described in item (aa).

"(ii) LOANS.—Loans may be made under the 'Express Loan Program' for the purpose of—

"(I) purchasing a renewable energy system; or

"(II) an energy efficiency project for an existing business.".

SEC. 270D. SMALL BUSINESS ENERGY EFFICIENCY.

(a) DEFINITIONS.—In this section—

(1) the terms "Administration" and "Administrator" mean the Small Business Administration and the Administrator thereof, respectively;

(2) the term "association" means the association of small business development centers established under section 21(a)(3)(A) of the Small Business Act (15 U.S.C. 648(a)(3)(A));

(3) the term ''disability'' has the meaning given that term in section 3 of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102);

(4) the term ''electric utility'' has the meaning given that term in section 3 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2602);

(5) the term ''on-bill financing'' means a low interest or no interest financing agreement between a small business concern and an electric utility for the purchase or installation of equipment, under which the regularly scheduled payment of that small business concern to that electric utility is not reduced by the amount of the reduction in cost attributable to the new equipment and that amount is credited to the electric utility, until the cost of the purchase or installation is repaid;

(6) the term ''small business concern'' has the meaning given that term in section 3 of the Small Business Act (15 U.S.C. 636);

(7) the term ''small business development center'' means a small business development center described in section 21 of the Small Business Act (15 U.S.C. 648);

(8) the term ''telecommuting'' means the use of telecommunications to perform work functions under

circumstances which reduce or eliminate the need to commute; and

(9) the term ''veteran'' has the meaning given that term in section 101 of title 38, United States Code.

(b) IMPLEMENTATION OF SMALL BUSINESS ENERGY EFFICIENCY PROGRAM.—

(1) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Administrator shall promulgate final rules establishing the Government-wide program authorized under subsection (d) of section 337 of the Energy Policy and Conservation Act (42 U.S.C. 6307) that ensure compliance with that subsection by not later than 6 months after such date of enactment.

(2) PLAN.—Not later than 90 days after the date of enactment of this Act, the Administrator shall publish a detailed plan regarding how the Administrator will—

(A) assist small business concerns in becoming more energy efficient; and

(B) build on the Energy Star for Small Business Program of the Department of Energy and the Environmental Protection Agency.

(3) ASSISTANT ADMINISTRATOR FOR SMALL BUSINESS ENERGY POLICY.—

(A) IN GENERAL.—There is in the Administration an Assistant Administrator for Small Business Energy Policy, who shall be appointed by, and report to, the Administrator.

(B) DUTIES.—The Assistant Administrator for Small Business Energy Policy shall—

(i) oversee and administer the requirements under this subsection and section 337(d) of the Energy Policy and Conservation Act (42 U.S.C. 6307(d)); and

(ii) promote energy efficiency efforts for small business concerns and reduce energy costs of small business concerns.

(4) REPORTS.—The Administrator shall submit to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business of the House of Representatives an annual report on the progress of the Administrator in encouraging small business concerns to become more energy efficient, including data on the rate of use of the Small Business Energy Clearinghouse established under section 337(d)(4) of the Energy Policy and Conservation Act (42 U.S.C. 6307(d)(4)).

(c) SMALL BUSINESS ENERGY EFFICIENCY.—

(1) AUTHORITY.—The Administrator shall establish a Small Business Energy Efficiency Pilot Program (in this subsection referred to as the ''Efficiency Pilot Program'') to provide energy efficiency assistance to small business concerns through small business development centers.

(2) SMALL BUSINESS DEVELOPMENT CENTERS.—

(A) IN GENERAL.—In carrying out the Efficiency Pilot Program, the Administrator shall enter into agreements with small business development centers under which such centers shall—

(i) provide access to information and resources on energy efficiency practices, including on-bill financing options;

(ii) conduct training and educational activities;

(iii) offer confidential, free, one-on-one, in-depth energy audits to the owners and operators of small business concerns regarding energy efficiency practices;

(iv) give referrals to certified professionals and other providers of energy effi-

ciency assistance who meet such standards for educational, technical, and professional competency as the Administrator shall establish; and

(v) act as a facilitator between small business concerns, electric utilities, lenders, and the Administration to facilitate on-bill financing arrangements.

(B) REPORTS.—Each small business development center participating in the Efficiency Pilot Program shall submit to the Administrator and the Administrator of the Environmental Protection Agency an annual report that includes—

(i) a summary of the energy efficiency assistance provided by that center under the Efficiency Pilot Program;

(ii) the number of small business concerns assisted by that center under the Efficiency Pilot Program;

(iii) statistics on the total amount of energy saved as a result of assistance provided by that center under the Efficiency Pilot Program; and

(iv) any additional information determined necessary by the Administrator, in consultation with the association.

(C) REPORTS TO CONGRESS.—Not later than 60 days after the date on which all reports under subparagraph (B) relating to a year are submitted, the Administrator shall submit to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business of the House of Representatives a report summarizing the information regarding the Efficiency Pilot Program submitted by small business development centers participating in that program.

(3) ELIGIBILITY.—A small business development center shall be eligible to participate in the Efficiency Pilot Program only if that center is certified under section 21(k)(2) of the Small Business Act (15 U.S.C. 648(k)(2)).

(4) SELECTION OF PARTICIPATING STATE PROGRAMS.—

(A) GROUPINGS.—

(i) SELECTION OF PROGRAMS.—The Administrator shall select the small business development center programs of 2

States from each of the groupings of States described in clauses (ii) through (xi) to participate in the pilot program established under this subsection.

(ii) GROUP 1.—Group 1 shall consist of Maine, Massachusetts, New Hampshire, Connecticut, Vermont, and Rhode Island.

(iii) GROUP 2.—Group 2 shall consist of New York, New Jersey, Puerto Rico, and the Virgin Islands.

(iv) GROUP 3.—Group 3 shall consist of Pennsylvania, Maryland, West Virginia, Virginia, the District of Columbia, and Delaware.

(v) GROUP 4.—Group 4 shall consist of Georgia, Alabama, North Carolina, South Carolina, Mississippi, Florida, Kentucky, and Tennessee.

(vi) GROUP 5.—Group 5 shall consist of Illinois, Ohio, Michigan, Indiana, Wisconsin, and Minnesota.

(vii) GROUP 6.—Group 6 shall consist of Texas, New Mexico, Arkansas, Oklahoma, and Louisiana.

(viii) GROUP 7.—Group 7 shall consist of Missouri, Iowa, Nebraska, and Kansas.

(ix) GROUP 8.—Group 8 shall consist of Colorado, Wyoming, North Dakota, South Dakota, Montana, and Utah.

(x) GROUP 9.—Group 9 shall consist of California, Guam, American Samoa, Hawaii, Nevada, and Arizona.

(xi) GROUP 10.—Group 10 shall consist of Washington, Alaska, Idaho, and Oregon.

(5) MATCHING REQUIREMENT.—Subparagraphs (A) and (B) of section 21(a)(4) of the Small Business Act (15 U.S.C. 648(a)(4)) shall apply to assistance made available under the Efficiency Pilot Program.

(6) GRANT AMOUNTS.—Each small business development center selected to participate in the Efficiency Pilot Program under paragraph (4) shall be eligible to receive a grant in an amount equal to—

(A) not less than $100,000 in each fiscal year; and

(B) not more than $300,000 in each fiscal year.

(7) EVALUATION AND REPORT.—The Comptroller General of the United States shall—

(A) not later than 30 months after the date of disbursement of the first grant under the Efficiency Pilot Program, initiate an evaluation of that pilot program; and

(B) not later than 6 months after the date of the initiation of the evaluation under subparagraph (A), submit to the Administrator, the Committee on Small Business and Entrepreneurship of the Senate, and the Committee on Small Business of the House of Representatives, a report containing—

(i) the results of the evaluation; and

(ii) any recommendations regarding whether the Efficiency Pilot Program, with or without modification, should be extended to include the participation of all small business development centers.

(8) GUARANTEE.—The Administrator may guarantee the timely payment of a loan made to a small business concern through an on-bill financing agreement on such terms and conditions as the Administrator shall establish through a formal rule

making, after providing notice and an opportunity for comment.

(9) AUTHORIZATION OF APPROPRIATIONS.—

(A) IN GENERAL.—There are authorized to be appropriated from such sums as are already authorized under section 21 of the Small Business Act to carry out this subsection—

(i) $5,000,000 for the first fiscal year beginning after the date of enactment of this Act; and

(ii) $5,000,000 for each of the 3 fiscal years following the fiscal year described in clause (i).

(B) LIMITATION ON USE OF OTHER FUNDS.—The Administrator may carry out the Efficiency Pilot Program only with amounts appropriated in advance specifically to carry out this subsection.

(10) TERMINATION.—The authority under this subsection shall terminate 4 years after the date of disbursement of the first grant under the Efficiency Pilot Program.

(d) SMALL BUSINESS TELECOMMUTING.—

(1) PILOT PROGRAM.—

(A) IN GENERAL.—In accordance with this subsection, the Administrator shall conduct, in not more than 5 of the regions of the Administration, a pilot program to provide information regarding telecommuting to employers that are small business concerns and to encourage such employers to offer telecommuting options to employees (in this subsection referred to as the ''Telecommuting Pilot Program'').

(B) SPECIAL OUTREACH TO INDIVIDUALS WITH DISABILITIES.—In carrying out the Telecommuting Pilot Program, the Administrator shall make a concerted effort to provide information to—

(i) small business concerns owned by or employing individuals with disabilities, particularly veterans who are individuals with disabilities;

(ii) Federal, State, and local agencies having knowledge and expertise in assisting individuals with disabilities, including veterans who are individuals with disabilities; and

(iii) any group or organization, the primary purpose of which is to aid individ-

uals with disabilities or veterans who are individuals with disabilities.

(C) PERMISSIBLE ACTIVITIES.—In carrying out the Telecommuting Pilot Program, the Administrator may—

(i) produce educational materials and conduct presentations designed to raise awareness in the small business community of the benefits and the ease of telecommuting;

(ii) conduct outreach—

(I) to small business concerns that are considering offering telecommuting options; and

(II) as provided in subparagraph (B); and

(iii) acquire telecommuting technologies and equipment to be used for demonstration purposes.

(D) SELECTION OF REGIONS.—In determining which regions will participate in the Telecommuting Pilot Program, the Administrator shall give priority consideration to regions in which Federal agencies and private-sec-

tor employers have demonstrated a strong regional commitment to telecommuting.

(2) REPORT TO CONGRESS.—Not later than 2 years after the date on which funds are first appropriated to carry out this subsection, the Administrator shall transmit to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business of the House of Representatives a report containing the results of an evaluation of the Telecommuting Pilot Program and any recommendations regarding whether the pilot program, with or without modification, should be extended to include the participation of all regions of the Administration.

(3) TERMINATION.—The Telecommuting Pilot Program shall terminate 4 years after the date on which funds are first appropriated to carry out this subsection.

(4) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Administration $5,000,000 to carry out this subsection.

(e) ENCOURAGING INNOVATION IN ENERGY EFFICIENCY.—Section 9 of the Small Business Act (15 U.S.C. 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-

sist Federal agencies in meeting the requirements of this section.

"(4) DEFINITIONS.—In this subsection—

"(A) the term 'biomass'—

"(i) means any organic material that is available on a renewable or recurring basis, including—

"(I) agricultural crops;

"(II) trees grown for energy production;

"(III) wood waste and wood residues;

"(IV) plants (including aquatic plants and grasses);

"(V) residues;

"(VI) fibers;

"(VII) animal wastes and other waste materials; and

"(VIII) fats, oils, and greases (including recycled fats, oils, and greases); and

"(ii) does not include—

"(I) paper that is commonly recycled; or

"(II) unsegregated solid waste;

"(B) the term 'energy efficiency project' means the installation or upgrading of equipment that results in a significant reduction in energy usage; and

"(C) the term 'renewable energy system' means a system of energy derived from—

"(i) a wind, solar, biomass (including biodiesel), or geothermal source; or

"(ii) hydrogen derived from biomass or water using an energy source described in clause (i).".

Subtitle F—Assisting State and Local Governments in Energy Efficiency

SEC. 271. WEATHERIZATION ASSISTANCE FOR LOW-INCOME PERSONS.

Section 422 of the Energy Conservation and Production Act (42 U.S.C. 6872) is amended by striking "$700,000,000 for fiscal year 2008" and inserting "$750,000,000 for each of fiscal years 2008 through 2012".

SEC. 272. STATE ENERGY CONSERVATION PLANS.

Section 365(f) of the Energy Policy and Conservation Act (42 U.S.C. 6325(f)) is amended by striking "fiscal

year 2008'' and inserting ''each of fiscal years 2008 through 2012''.

SEC. 273. UTILITY ENERGY EFFICIENCY PROGRAMS.

(a) ELECTRIC UTILITIES.—Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding at the end the following:

''(16) INTEGRATED RESOURCE PLANNING.—Each electric utility shall—

''(A) integrate energy efficiency resources into utility, State, and regional plans; and

''(B) adopt policies establishing cost-effective energy efficiency as a priority resource.

''(17) RATE DESIGN MODIFICATIONS TO PROMOTE ENERGY EFFICIENCY INVESTMENTS.—

''(A) IN GENERAL.—The rates allowed to be charged by any electric utility shall—

''(i) align utility incentives with the delivery of cost-effective energy efficiency; and

''(ii) promote energy efficiency investments.

''(B) POLICY OPTIONS.—In complying with subparagraph (A), each State regulatory authority and each nonregulated utility shall consider—

"(i) removing the throughput incentive and other regulatory and management disincentives to energy efficiency;

"(ii) providing utility incentives for the successful management of energy efficiency programs;

"(iii) including the impact on adoption of energy efficiency as 1 of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives;

"(iv) adopting rate designs that encourage energy efficiency for each customer class; and

"(v) allowing timely recovery of energy efficiency-related costs.".

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

"(5) ENERGY EFFICIENCY.—Each natural gas utility shall—

"(A) integrate energy efficiency resources into the plans and planning processes of the natural gas utility; and

"(B) adopt policies that establish energy efficiency as a priority resource in the plans and planning processes of the natural gas utility.

"(6) RATE DESIGN MODIFICATIONS TO PROMOTE ENERGY EFFICIENCY INVESTMENTS.—

"(A) IN GENERAL.—The rates allowed to be charged by a natural gas utility shall align utility incentives with the deployment of cost-effective energy efficiency.

"(B) POLICY OPTIONS.—In complying with subparagraph (A), each State regulatory authority and each nonregulated utility shall consider—

"(i) separating fixed-cost revenue recovery from the volume of transportation or sales service provided to the customer;

"(ii) providing to utilities incentives for the successful management of energy efficiency programs, such as allowing utilities to retain a portion of the cost-reducing benefits accruing from the programs;

"(iii) promoting the impact on adoption of energy efficiency as 1 of the goals of retail rate design, recognizing that en-

ergy efficiency must be balanced with other objectives; and

"(iv) adopting rate designs that encourage energy efficiency for each customer class.".

SEC. 274. ENERGY EFFICIENCY AND DEMAND RESPONSE PROGRAM ASSISTANCE.

The Secretary shall provide technical assistance regarding the design and implementation of the energy efficiency and demand response programs established under this title, and the amendments made by this title, to State energy offices, public utility regulatory commissions, and nonregulated utilities through the appropriate national laboratories of the Department of Energy.

SEC. 275. ENERGY AND ENVIRONMENTAL BLOCK GRANT.

Title I of the Housing and Community Development Act of 1974 (42 U.S.C. 5301 et seq.) is amended by adding at the end the following:

"SEC. 123. ENERGY AND ENVIRONMENTAL BLOCK GRANT.

"(a) DEFINITIONS.—In this section

"(1) ELIGIBLE ENTITY.—The term 'eligible entity' means—

"(A) a State;

"(B) an eligible unit of local government within a State; and

"(C) an Indian tribe.

"(2) ELIGIBLE UNIT OF LOCAL GOVERNMENT.—The term 'eligible unit of local government' means—

"(A) a city with a population—

"(i) of at least 35,000; or

"(ii) that causes the city to be 1 of the top 10 most populous cities of the State in which the city is located; and

"(B) a county with a population—

"(i) of at least 200,000; or

"(ii) that causes the county to be 1 of the top 10 most populous counties of the State in which the county is located.

"(3) SECRETARY.—The term 'Secretary' means the Secretary of Energy.

"(4) STATE.—The term 'State' means—

"(A) a State;

"(B) the District of Columbia;

"(C) the Commonwealth of Puerto Rico; and

"(D) any other territory or possession of the United States.

"(b) PURPOSE.—The purpose of this section is to assist State, Indian tribal, and local governments in implementing strategies—

"(1) to reduce fossil fuel emissions created as a result of activities within the boundaries of the States or units of local government in an environmentally sustainable way that, to the maximum extent practicable, maximizes benefits for local and regional communities;

"(2) to reduce the total energy use of the States, Indian tribes, and units of local government; and

"(3) to improve energy efficiency in the transportation sector, building sector, and any other appropriate sectors.

"(c) PROGRAM.—

"(1) IN GENERAL.—The Secretary shall provide to eligible entities block grants to carry out eligible activities (as specified under paragraph (2)) relating to the implementation of environmentally beneficial energy strategies.

"(2) ELIGIBLE ACTIVITIES.—The Secretary, in consultation with the Administrator of the Environmental Protection Agency, the Secretary of Transportation, and the Secretary of Housing and Urban

Development, shall establish a list of activities that are eligible for assistance under the grant program.

"(3) ALLOCATION TO STATES, INDIAN TRIBES, AND ELIGIBLE UNITS OF LOCAL GOVERNMENT.—

"(A) IN GENERAL.—Of the amounts made available to provide grants under this subsection, the Secretary shall allocate—

"(i) 68 percent to eligible units of local government;

"(ii) 28 percent to States; and

"(iii) 4 percent to Indian tribes.

"(B) DISTRIBUTION TO ELIGIBLE UNITS OF LOCAL GOVERNMENT.—

"(i) IN GENERAL.—The Secretary shall establish a formula for the distribution of amounts under subparagraph (A)(i) to eligible units of local government, taking into account any factors that the Secretary determines to be appropriate, including the residential and daytime population of the eligible units of local government.

"(ii) CRITERIA.—Amounts shall be distributed to eligible units of local government under clause (i) only if the eligible units of local government meet the criteria

for distribution established by the Secretary for units of local government.

"(C) DISTRIBUTION TO STATES.—

"(i) IN GENERAL.—Of the amounts provided to States under subparagraph (A)(ii), the Secretary shall distribute—

"(I) at least 1.25 percent to each State; and

"(II) the remainder among the States, based on a formula, to be determined by the Secretary, that takes into account the population of the States and any other criteria that the Secretary determines to be appropriate.

"(ii) CRITERIA.—Amounts shall be distributed to States under clause (i) only if the States meet the criteria for distribution established by the Secretary for States.

"(iii) LIMITATION ON USE OF STATE FUNDS.—At least 40 percent of the amounts distributed to States under this subparagraph shall be used by the States for the conduct of eligible activities in non-

entitlement areas in the States, in accordance with any criteria established by the Secretary.

"(D) DISTRIBUTION TO INDIAN TRIBES.—

"(i) IN GENERAL.—The Secretary shall establish a formula for the distribution of amounts under subparagraph (A)(iii) to eligible Indian tribes, taking into account any factors that the Secretary determines to be appropriate, including the residential and daytime population of the eligible Indian tribes.

"(ii) CRITERIA.—Amounts shall be distributed to eligible Indian tribes under clause (i) only if the eligible Indian tribes meet the criteria for distribution established by the Secretary for Indian tribes.

"(4) REPORT.—Not later than 2 years after the date on which an eligible entity first receives a grant under this section, and every 2 years thereafter, the eligible entity shall submit to the Secretary a report that describes any eligible activities carried out using assistance provided under this subsection.

"(5) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums

as are necessary to carry out this subsection for each of fiscal years 2008 through 2012.

"(d) ENVIRONMENTALLY BENEFICIAL ENERGY STRATEGIES SUPPLEMENTAL GRANT PROGRAM.—

"(1) IN GENERAL.—The Secretary shall provide to each eligible entity that meets the applicable criteria under subparagraph (B)(ii), (C)(ii), or (D)(ii) of subsection (c)(3) a supplemental grant to pay the Federal share of the total costs of carrying out an activity relating to the implementation of an environmentally beneficial energy strategy.

"(2) REQUIREMENTS.—To be eligible for a grant under paragraph (1), an eligible entity shall—

"(A) demonstrate to the satisfaction of the Secretary that the eligible entity meets the applicable criteria under subparagraph (B)(ii), (C)(ii), or (D)(ii) of subsection (c)(3); and

"(B) submit to the Secretary for approval a plan that describes the activities to be funded by the grant.

"(3) COST-SHARING REQUIREMENT.—

"(A) FEDERAL SHARE.—The Federal share of the cost of carrying out any activities under this subsection shall be 75 percent.

"(B) NON-FEDERAL SHARE.—

"(i) FORM.—Not more than 50 percent of the non-Federal share may be in the form of in-kind contributions.

"(ii) LIMITATION.—Amounts provided to an eligible entity under subsection (c) shall not be used toward the non-Federal share.

"(4) MAINTENANCE OF EFFORT.—An eligible entity shall provide assurances to the Secretary that funds provided to the eligible entity under this subsection will be used only to supplement, not to supplant, the amount of Federal, State, tribal, and local funds otherwise expended by the eligible entity for eligible activities under this subsection.

"(5) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this subsection for each of fiscal years 2008 through 2012.

"(e) GRANTS TO OTHER STATES AND COMMUNITIES.—

"(1) IN GENERAL.—Of the total amount of funds that are made available each fiscal year to carry out this section, the Secretary shall use 2 percent of the amount to make competitive grants under this section to States, Indian tribes, and units

of local government that are not eligible entities or to consortia of such units of local government.

"(2) APPLICATIONS.—To be eligible for a grant under this subsection, a State, Indian tribe, unit of local government, or consortia described in paragraph (1) shall apply to the Secretary for a grant to carry out an activity that would otherwise be eligible for a grant under subsection (c) or (d).

"(3) PRIORITY.—In awarding grants under this subsection, the Secretary shall give priority to—

"(A) States with populations of less than 2,000,000; and

"(B) projects that would result in significant energy efficiency improvements, reductions in fossil fuel use, or capital improvements.".

SEC. 276. ENERGY SUSTAINABILITY AND EFFICIENCY GRANTS FOR INSTITUTIONS OF HIGHER EDUCATION.

Part G of title III of the Energy Policy and Conservation Act is amended by inserting after section 399 (42 U.S.C. 371h) the following:

"SEC. 399A. ENERGY SUSTAINABILITY AND EFFICIENCY GRANTS FOR INSTITUTIONS OF HIGHER EDUCATION.

"(a) DEFINITIONS.—In this section:

"(1) ENERGY SUSTAINABILITY.—The term 'energy sustainability' includes using a renewable energy resource and a highly efficient technology for electricity generation, transportation, heating, or cooling.

"(2) INSTITUTION OF HIGHER EDUCATION.—The term 'institution of higher education' has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

"(b) GRANTS FOR ENERGY EFFICIENCY IMPROVEMENT.—

"(1) IN GENERAL.—The Secretary shall award not more than 100 grants to institutions of higher education to carry out projects to improve energy efficiency on the grounds and facilities of the institution of higher education, including not less than 1 grant to an institution of higher education in each State.

"(2) CONDITION.—As a condition of receiving a grant under this subsection, an institution of higher education shall agree to—

"(A) implement a public awareness campaign concerning the project in the community in which the institution of higher education is located; and

"(B) submit to the Secretary, and make available to the public, reports on any efficiency improvements, energy cost savings, and environmental benefits achieved as part of a project carried out under paragraph (1).

"(c) GRANTS FOR INNOVATION IN ENERGY SUSTAINABILITY.—

"(1) IN GENERAL.—The Secretary shall award not more than 250 grants to institutions of higher education to engage in innovative energy sustainability projects, including not less than 2 grants to institutions of higher education in each State.

"(2) INNOVATION PROJECTS.—An innovation project carried out with a grant under this subsection shall—

"(A) involve—

"(i) an innovative technology that is not yet commercially available; or

"(ii) available technology in an innovative application that maximizes energy efficiency and sustainability;

"(B) have the greatest potential for testing or demonstrating new technologies or processes; and

"(C) ensure active student participation in the project, including the planning, implementation, evaluation, and other phases of the project.

"(3) CONDITION.—As a condition of receiving a grant under this subsection, an institution of higher education shall agree to submit to the Secretary, and make available to the public, reports that describe the results of the projects carried out under paragraph (1).

"(d) AWARDING OF GRANTS.—

"(1) APPLICATION.—An institution of higher education that seeks to receive a grant under this section may submit to the Secretary an application for the grant at such time, in such form, and containing such information as the Secretary may prescribe.

"(2) SELECTION.—The Secretary shall establish a committee to assist in the selection of grant recipients under this section.

"(e) ALLOCATION TO INSTITUTIONS OF HIGHER EDUCATION WITH SMALL ENDOWMENTS.—Of the amount of grants provided for a fiscal year under this section, the Secretary shall provide not less 50 percent of the amount to institutions of higher education that have an

endowment of not more than $100,000,000, with 50 percent of the allocation set aside for institutions of higher education that have an endowment of not more than $50,000,000.

"(f) GRANT AMOUNTS.—The maximum amount of grants for a project under this section shall not exceed—

"(1) in the case of grants for energy efficiency improvement under subsection (b), $1,000,000; or

"(2) in the case of grants for innovation in energy sustainability under subsection (c), $500,000.

"(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 2008 through 2012.".

SEC. 277. ENERGY EFFICIENCY AND RENEWABLE ENERGY WORKER TRAINING PROGRAM.

Section 1101 of the Energy Policy Act of 2005 (42 U.S.C. 16411) is amended—

(1) by redesignating subsection (d) as subsection (e); and

(2) by inserting after subsection (c), the following:

"(d) ENERGY EFFICIENCY AND RENEWABLE ENERGY WORKER TRAINING PROGRAM.—

"(1) PURPOSE.—It is the purpose of this subsection to—

"(A) create a sustainable, comprehensive public program that provides quality training that is linked to jobs that are created through renewable energy and energy efficiency initiatives;

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

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

"(D) provide funds for national and State industry-wide research, labor market information and labor exchange programs, and the de-

velopment of nationally and State administered training programs.

"(2) GRANT PROGRAM.—

"(A) IN GENERAL.—Not later than 6 months after the date of enactment of this Act, the Secretary of Labor (referred to in this subsection as the 'Secretary'), in consultation with the Secretary of Energy, shall establish an energy efficiency and renewable energy worker training program under which the Secretary shall carry out the activities described in paragraph (3) to achieve the purposes of this subsection.

"(B) ELIGIBILITY.—For purposes of providing assistance and services under the program established under this subsection—

"(i) target populations of individuals eligible for training and other services shall include, but not be limited to—

"(I) veterans, or past and present members of the reserve components of the Armed Forces;

"(II) workers affected by national energy and environmental policy;

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.—

"(A) NATIONAL RESEARCH PROGRAM.—Under the program established under paragraph (2), the Secretary, acting through the Bureau of Labor Statistics, shall provide assistance to support national research to develop labor market data and to track future workforce trends resulting from energy-related initiatives carried out under this section. Activities carried out under this paragraph shall include—

"(i) linking research and development in renewable energy and energy efficiency technology with the development of standards and curricula for current and future jobs;

"(ii) the tracking and documentation of academic and occupational competencies as well as future skill needs with respect to renewable energy and energy efficiency technology;

"(iii) tracking and documentation of occupational information and workforce training data with respect to renewable energy and energy efficiency technology;

"(iv) assessing new employment and work practices including career ladder and upgrade training as well as high performance work systems; and

"(v) collaborating with State agencies, industry, organized labor, and community and nonprofit organizations to disseminate successful innovations for labor market services and worker training with respect to renewable energy and energy efficiency technology.

"(B) NATIONAL ENERGY TRAINING PARTNERSHIP GRANTS.—

"(i) IN GENERAL.—Under the program established under paragraph (2), the Secretary shall award National Energy Training Partnerships Grants on a competitive basis to eligible entities to enable such entities to carry out national training that leads to economic self-sufficiency and to develop an energy efficiency and renewable energy industries workforce. Grants shall be awarded under this subparagraph so as to ensure geographic diversity with at least 2 grants awarded to entities located

in each of the 4 Petroleum Administration for Defense Districts with no subdistricts and at least 1 grant awarded to an entity located in each of the subdistricts of the Petroleum Administration for Defense District with subdistricts.

"(ii) ELIGIBILITY.—To be eligible to receive a grant under clause (i), an entity shall be a non-profit partnership that—

"(I) includes the equal participation of industry, including public or private employers, and labor organizations, including joint labor-management training programs, and may include community-based organizations, educational institutions, small businesses, cooperatives, State and local veterans agencies, and veterans service organizations; and

"(II) demonstrates—

"(aa) experience in implementing and operating worker skills training and education programs;

"(bb) the ability to identify and involve in training programs carried out under this grant, target populations of workers who are, or will be engaged in, activities related to energy efficiency and renewable energy industries; and

"(cc) the ability to help workers achieve economic self-sufficiency.

"(iii) ACTIVITIES.—Activities to be carried out under a grant under this subparagraph may include—

"(I) the provision of occupational skills training, including curriculum development, on-the-job training, and classroom training;

"(II) the provision of safety and health training;

"(III) the provision of basic skills, literacy, GED, English as a second language, and job readiness training;

"(IV) individual referral and tuition assistance for a community college training program;

"(V) the provision of customized training in conjunction with an existing registered apprenticeship program or labor-management partnership;

"(VI) the provision of career ladder and upgrade training; and

"(VII) the implementation of transitional jobs strategies.

"(C) STATE LABOR MARKET RESEARCH, INFORMATION, AND LABOR EXCHANGE RESEARCH PROGRAM.—

"(i) IN GENERAL.—Under the program established under paragraph (2), the Secretary shall award competitive grants to States to enable such States to administer labor market and labor exchange informational programs that include the implementation of the activities described in clause (ii).

"(ii) ACTIVITIES.—A State shall use amounts awarded under a grant under this subparagraph to provide funding to the

State agency that administers the Wagner-Peyser Act and State unemployment compensation programs to carry out the following activities using State agency merit staff:

"(I) The identification of job openings in the renewable energy and energy efficiency sector.

"(II) The administration of skill and aptitude testing and assessment for workers.

"(III) The counseling, case management, and referral of qualified job seekers to openings and training programs, including energy efficiency and renewable energy training programs.

"(D) STATE ENERGY TRAINING PARTNERSHIP PROGRAM.—

"(i) IN GENERAL.—Under the program established under paragraph (2), the Secretary shall award competitive grants to States to enable such States to administer renewable energy and energy efficiency workforce development programs that in-

clude the implementation of the activities described in clause (ii).

"(ii) ACTIVITIES.—

"(I) IN GENERAL.—A State shall use amounts awarded under a grant under this subparagraph to award competitive grants to eligible State Energy Sector Partnerships to enable such Partnerships to coordinate with existing apprenticeship and labor management training programs and implement training programs that lead to the economic self-sufficiency of trainees.

"(II) ELIGIBILITY.—To be eligible to receive a grant under this subparagraph, a State Energy Sector Partnership shall—

"(aa) consist of non-profit organizations that include equal participation from industry, including public or private non-profit employers, and labor organizations, including joint labor-management training programs,

and may include representatives from local governments, worker investment agency one-stop career centers, community based organizations, community colleges, other post-secondary institutions, small businesses, cooperatives, State and local veterans agencies, and veterans service organizations;

"(bb) demonstrate experience in implementing and operating worker skills training and education programs; and

"(cc) demonstrate the ability to identify and involve in training programs, target populations of workers who are, or will be engaged in, activities related to energy efficiency and renewable energy industries.

"(iii) PRIORITY.—In awarding grants under this subparagraph, the Secretary shall give priority to States that dem-

onstrate linkages of activities under the grant with—

"(I) meeting national energy policies associated with energy efficiency, renewable energy, and the reduction of emissions of greenhouse gases; and

"(II) meeting State energy policies associated with energy efficiency, renewable energy, and the reduction of emissions of greenhouse gases.

"(iv) COORDINATION.—A grantee under this subparagraph shall coordinate activities carried out under the grant with existing apprenticeship and labor management training programs and implement training programs that lead to the economic self-sufficiency of trainees, including providing—

"(I) outreach and recruitment services, in coordination with the appropriate State agency;

"(II) occupational skills training, including curriculum development, on-the-job training, and classroom training;

"(III) safety and health training;

"(IV) basic skills, literacy, GED, English as a second language, and job readiness training;

"(V) individual referral and tuition assistance for a community college training program;

"(VI) customized training in conjunction with an existing registered apprenticeship program or labor-management partnership;

"(VII) career ladder and upgrade training; and

"(VIII) services under transitional jobs strategies.

"(4) WORKER PROTECTIONS AND NONDISCRIMINATION REQUIREMENTS.—

"(A) APPLICATION OF WIA.—The provisions of sections 181 and 188 of the Workforce Investment Act of 1998 (29 U.S.C. 2931 and 2938) shall apply to all programs carried out with assistance under this subsection.

"(B) CONSULTATION WITH LABOR ORGANIZATIONS.—If a labor organization represents a substantial number of workers who are engaged

in similar work or training in an area that is the same as the area that is proposed to be funded under this subsection, the labor organization shall be provided an opportunity to be consulted and to submit comments in regard to such a proposal.

"(5) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this subsection, $100,000,000 for each fiscal year, of which—

"(A) not to exceed 20 percent of the amount appropriated in each fiscal year shall be made available for, and shall be equally divided between, national labor market research and information under paragraph (3)(A) and State labor market information and labor exchange research under paragraph (3)(C); and

"(B) the remainder shall be divided equally between National Energy Partnership Training Grants under paragraph (3)(B) and State energy training partnership grants under paragraph (3)(D).

"(6) DEFINITION.—In this subsection, the term 'renewable electric power' has the meaning given the

term 'renewable energy' in section 203(b)(2) of the Energy Policy Act of 2005 (Public Law 109–58).''.

SEC. 278. ASSISTANCE TO STATES TO REDUCE SCHOOL BUS IDLING.

(a) STATEMENT OF POLICY.—Congress encourages each local educational agency (as defined in section 9101(26) of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801(26))) that receives Federal funds under the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6301 et seq.) to develop a policy to reduce the incidence of school bus idling at schools while picking up and unloading students.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary, working in coordination with the Secretary of Education, $5,000,000 for each of fiscal years 2007 through 2012 for use in educating States and local education agencies about—

(1) benefits of reducing school bus idling; and

(2) ways in which school bus idling may be reduced.

SEC. 279. DEFINITION OF STATE.

Section 412 of the Energy Conservation and Production Act (42 U.S.C. 6862) is amended by striking paragraph (8) and inserting the following:

"(8) STATE.—The term 'State' means—

"(A) a State;

"(B) the District of Columbia; and

"(C) the Commonwealth of Puerto Rico.".

SEC. 280. COORDINATION OF PLANNED REFINERY OUTAGES.

(a) DEFINITIONS.—In this section:

(1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Energy Information Administration.

(2) PLANNED REFINERY OUTAGE.—

(A) IN GENERAL.—The term "planned refinery outage" means a removal, scheduled before the date on which the removal occurs, of a refinery, or any unit of a refinery, from service for maintenance, repair, or modification.

(B) EXCLUSION.—The term "planned refinery outage" does not include any necessary and unplanned removal of a refinery, or any unit of a refinery, from service as a result of a component failure, safety hazard, emergency, or action reasonably anticipated to be necessary to prevent such events.

(3) REFINED PETROLEUM PRODUCT.—The term "refined petroleum product" means any gaso-

line, diesel fuel, fuel oil, lubricating oil, liquid petroleum gas, or other petroleum distillate that is produced through the refining or processing of crude oil or an oil derived from tar sands, shale, or coal.

(4) REFINERY.—The term ''refinery'' means a facility used in the production of a refined petroleum product through distillation, cracking, or any other process.

(5) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(b) REVIEW AND ANALYSIS OF AVAILABLE INFORMATION.—The Administrator shall, on an ongoing basis—

(1) review information on planned refinery outages that is available from commercial reporting services;

(2) analyze that information to determine whether the scheduling of a planned refinery outage may nationally or regionally affect the price or supply of any refined petroleum product by—

(A) decreasing the production of the refined petroleum product; and

(B) causing or contributing to a retail or wholesale supply shortage or disruption;

(3) not less frequently than twice each year, submit to the Secretary a report describing the re-

sults of the review and analysis under paragraphs (1) and (2); and

(4) specifically alert the Secretary of any planned refinery outage that the Administrator determines may nationally or regionally affect the price or supply of a refined petroleum product.

(c) ACTION BY SECRETARY.—On a determination by the Secretary, based on a report or alert under paragraph (3) or (4) of subsection (b), that a planned refinery outage may affect the price or supply of a refined petroleum product, the Secretary shall make available to refinery operators information on planned refinery outages to encourage reductions of the quantity of refinery capacity that is out of service at any time.

(d) LIMITATION.—Nothing in this section shall alter any existing legal obligation or responsibility of a refinery operator, or create any legal right of action, nor shall this section authoirze the Secretary—

(1) to prohibit a refinery operator from conducting a planned refinery outage; or

(2) to require a refinery operator to continue to operate a refinery.

SEC. 281. TECHNICAL CRITERIA FOR CLEAN COAL POWER INITIATIVE.

Section 402(b)(1)(B)(ii) of the Energy Policy Act of 2005 (42 U.S.C. 15962(b)(1)(B)(ii)) is amended by striking subclause (I) and inserting the following:

"(I)(aa) to remove at least 99 percent of sulfur dioxide; or

"(bb) to emit not more than 0.04 pound SO_2 per million Btu, based on a 30-day average;".

SEC. 282. ADMINISTRATION.

Section 106 of the Alaska Natural Gas Pipeline Act (15 U.S.C. 720d) is amended by adding at the end the following:

"(h) ADMINISTRATION.—

"(1) PERSONNEL APPOINTMENTS.—

"(A) IN GENERAL.—The Federal Coordinator may appoint and terminate such personnel as the Federal Coordinator determines to be appropriate.

"(B) AUTHORITY OF FEDERAL COORDINATOR.—Personnel appointed by the Federal Coordinator under subparagraph (A) shall be appointed without regard to the provisions of title 5, United States Code, governing appointments in the competitive service.

"(2) COMPENSATION.—

"(A) IN GENERAL.—Subject to subparagraph (B), personnel appointed by the Federal Coordinator under paragraph (1)(A) shall be paid without regard to the provisions of chapter 51 and subchapter III of chapter 53 of title 5, United States Code (relating to classification and General Schedule pay rates).

"(B) MAXIMUM LEVEL OF COMPENSATION.—The rate of pay for personnel appointed by the Federal Coordinator under paragraph (1)(A) shall not exceed the maximum level of rate payable for level III of the Executive Schedule.

"(C) APPLICABILITY OF SECTION 5941.—Section 5941 of title 5, United States Code, shall apply to personnel appointed by the Federal Coordinator under paragraph (1)(A).

"(3) TEMPORARY SERVICES.—

"(A) IN GENERAL.—The Federal Coordinator may procure temporary and intermittent services in accordance with section 3109(b) of title 5, United States Code.

"(B) MAXIMUM LEVEL OF COMPENSATION.—The level of compensation of an indi-

vidual employed on a temporary or intermittent basis under subparagraph (A) shall not exceed the maximum level of rate payable for level III of the Executive Schedule.

"(4) FEES, CHARGES, AND COMMISSIONS.—

"(A) IN GENERAL.—The Federal Coordinator shall have the authority to establish, change, and abolish reasonable filing and service fees, charges, and commissions, require deposits of payments, and provide refunds as provided to the Secretary of the Interior in section 304 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1734), except that the authority shall be with respect to the duties of the Federal Coordinator, as delineated in the Alaska Natural Gas Pipeline Act (15 U.S.C. 720 et seq.), as amended.

"(B) AUTHORITY OF SECRETARY OF THE INTERIOR.—Subparagraph (A) shall not affect the authority of the Secretary of the Interior to establish, change, and abolish reasonable filing and service fees, charges, and commissions, require deposits of payments, and provide refunds under section 304 of the Federal Land Policy

and Management Act of 1976 (43 U.S.C. 1734).

"(C) USE OF FUNDS.—The Federal Coordinator is authorized to use, without further appropriation, amounts collected under subparagraph (A) to carry out this section.".

SEC. 283. OFFSHORE RENEWABLE ENERGY.

(a) LEASES, EASEMENTS, OR RIGHTS-OF-WAY FOR ENERGY AND RELATED PURPOSES.—Section 8(p) of the Outer Continental Shelf Lands Act (43 U.S.C. 1337(p)) is amended—

(1) by inserting after "Secretary of the Department in which the Coast Guard is operating" the following: ", the Secretary of Commerce,";

(2) by striking paragraph (3) and inserting the following:

"(3) COMPETITIVE OR NONCOMPETITIVE BASIS.—Any lease, easement, or right-of-way under paragraph (1) shall be issued on a competitive basis, unless—

"(A) the lease, easement, or right-of-way relates to a project that meets the criteria established under section 388(d) of the Energy Policy Act of 2005 (43 U.S.C. 1337 note; Public Law 109–58);

"(B) the lease, easement, or right-of-way—

"(i) is for the placement and operation of a meteorological or marine data collection facility; and

"(ii) has a term of not more than 5 years; or

"(C) the Secretary determines, after providing public notice of a proposed lease, easement, or right-of-way, that no competitive interest exists."; and

(3) by adding at the end the following:

"(11) CLARIFICATION.—

"(A) IN GENERAL.—Subject to subparagraph (B), the Federal Energy Regulatory Commission shall not have authority to approve or license a wave or current energy project on the outer Continental Shelf under part I of the Federal Power Act (16 U.S.C. 792 et seq.)

"(B) TRANSMISSION OF POWER.—Subparagraph (A) shall not affect any authority of the Commission with respect to the transmission of power generated from a project described in subparagraph (A).".

(b) CONSIDERATION OF CERTAIN REQUESTS FOR AUTHORIZATION.—In considering a request for authoriza-

tion of a project pending before the Commission on the outer Continental Shelf as of the date of enactment of this Act, the Secretary of the Interior shall rely, to the maximum extent practicable, on the materials submitted to the Commission before that date.

(c) SAVINGS PROVISION.—Nothing in this section or an amendment made by this section requires the resubmission of any document that was previously submitted, or the reauthorization of any action that was previously authorized, with respect to a project on the outer Continental Shelf, for which a preliminary permit was issued by the Commission before the date of enactment of this Act.

Subtitle G—Marine and Hydrokinetic Renewable Energy Promotion

SEC. 291. DEFINITION OF MARINE AND HYDROKINETIC RENEWABLE ENERGY.

(a) IN GENERAL.—In this subtitle, the term ''marine and hydrokinetic renewable energy'' means electrical energy from—

(1) waves, tides, and currents in oceans, estuaries, and tidal areas;

(2) free flowing water in rivers, lakes, and streams;

(3) free flowing water in man-made channels, including projects that utilize nonmechanical structures to accelerate the flow of water for electric power production purposes; and

(4) differentials in ocean temperature (ocean thermal energy conversion).

(b) EXCLUSION.—Except as provided in subsection (a)(3), the term ''marine and hydrokinetic renewable energy'' does not include energy from any source that uses a dam, diversionary structure, or impoundment for electric power purposes.

SEC. 292. RESEARCH AND DEVELOPMENT.

(a) PROGRAM.—The Secretary, in consultation with the Secretary of Commerce and the Secretary of the Interior, shall establish a program of marine and hydrokinetic renewable energy research, including—

(1) developing and demonstrating marine and hydrokinetic renewable energy technologies;

(2) reducing the manufacturing and operation costs of marine and hydrokinetic renewable energy technologies;

(3) increasing the reliability and survivability of marine and hydrokinetic renewable energy facilities;

(4) integrating marine and hydrokinetic renewable energy into electric grids;

(5) identifying opportunities for cross fertilization and development of economies of scale between offshore wind and marine and hydrokinetic renewable energy sources;

(6) identifying, in conjunction with the Secretary of Commerce and the Secretary of the Interior, the potential environmental impacts of marine and hydrokinetic renewable energy technologies and measures to minimize or prevent adverse impacts, and technologies and other means available for monitoring and determining environmental impacts;

(7) identifying, in conjunction with the Commandant of the United States Coast Guard, the potential navigational impacts of marine and hydrokinetic renewable energy technologies and measures to minimize or prevent adverse impacts;

(8) standards development, demonstration, and technology transfer for advanced systems engineering and system integration methods to identify critical interfaces; and

(9) providing public information and opportunity for public comment concerning all technologies.

(b) REPORT.—Not later than 18 months after the date of enactment of this Act, the Secretary, in consulta-

tion with the Secretary of Commerce and the Secretary of the Interior, shall provide to the appropriate committees of Congress a report that addresses—

(1) the potential environmental impacts of hydrokinetic renewable energy technologies in free-flowing water in rivers, lakes, and streams;

(2) the means by which to minimize or prevent any adverse environmental impacts;

(3) the potential role of monitoring and adaptive management in addressing any adverse environmental impacts; and

(4) the necessary components of such an adaptive management program.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section $50,000,000 for each of the fiscal years 2008 through 2017.

SEC. 293. NATIONAL OCEAN ENERGY RESEARCH CENTERS.

(a) IN GENERAL.—Subject to the availability of appropriations under subsection (e), the Secretary shall establish not less than 1, and not more than 6, national ocean energy research centers at institutions of higher education for the purpose of conducting research, development, demonstration, and testing of ocean energy technologies and associated equipment.

(b) EVALUATIONS.—Each Center shall (in consultation with developers, utilities, and manufacturers) conduct evaluations of technologies and equipment described in subsection (a).

(c) LOCATION.—In establishing centers under this section, the Secretary shall locate the centers in coastal regions of the United State in a manner that, to the maximum extent practicable, is geographically dispersed.

(d) COORDINATION.—Prior to carrying out any activity under this section in waters subject to the jurisdiction of the United States, the Secretary shall identify, in conjunction with the Secretary of Commerce and the Secretary of Interior, the potential environmental impacts of such activity and measures to minimize or prevent adverse impacts.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriate such sums as are necessary to carry out this section.

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

SEC. 301. SHORT TITLE.

This title may be cited as the ''Carbon Capture and Sequestration Act of 2007''.

SEC. 302. CARBON CAPTURE AND STORAGE RESEARCH, DEVELOPMENT, AND DEMONSTRATION PROGRAM.

Section 963 of the Energy Policy Act of 2005 (42 U.S.C. 16293) is amended—

(1) in the section heading, by striking ''**RESEARCH AND DEVELOPMENT**'' and inserting ''**AND STORAGE RESEARCH, DEVELOPMENT, AND DEMONSTRATION**'';

(2) in subsection (a)—

(A) by striking ''research and development'' and inserting ''and storage research, development, and demonstration''; and

(B) by striking ''capture technologies on combustion-based systems'' and inserting ''capture and storage technologies related to energy systems'';

(3) in subsection (b)—

(A) in paragraph (3), by striking ''and'' at the end;

(B) in paragraph (4), by striking the period at the end and inserting ''; and''; and

(C) by adding at the end the following:

''(5) to expedite and carry out large-scale testing of carbon sequestration systems in a range of geological formations that will provide information on

the cost and feasibility of deployment of sequestration technologies.''; and

(4) by striking subsection (c) and inserting the following:

''(c) PROGRAMMATIC ACTIVITIES.—

''(1) ENERGY RESEARCH AND DEVELOPMENT UNDERLYING CARBON CAPTURE AND STORAGE TECHNOLOGIES AND CARBON USE ACTIVITIES.—

''(A) IN GENERAL.—The Secretary shall carry out fundamental science and engineering research (including laboratory-scale experiments, numeric modeling, and simulations) to develop and document the performance of new approaches to capture and store, recycle, or reuse carbon dioxide.

''(B) PROGRAM INTEGRATION.—The Secretary shall ensure that fundamental research carried out under this paragraph is appropriately applied to energy technology development activities, the field testing of carbon sequestration, and carbon use activities, including—

''(i) development of new or improved technologies for the capture and storage of carbon dioxide;

"(ii) development of new or improved technologies that reduce the cost and increase the efficacy of advanced compression of carbon dioxide required for the storage of carbon dioxide;

"(iii) modeling and simulation of geological sequestration field demonstrations;

"(iv) quantitative assessment of risks relating to specific field sites for testing of sequestration technologies;

"(v) research and development of new and improved technologies for—

"(I) carbon use, including recycling and reuse of carbon dioxide; and

"(II) the containment of carbon dioxide in the form of solid materials or products derived from a gasification technology that does not involve geologic containment or injection; and

"(vi) research and development of new and improved technologies for oxygen separation from air.

"(2) FIELD VALIDATION TESTING ACTIVITIES.—

"(A) IN GENERAL.—The Secretary shall promote, to the maximum extent practicable, regional carbon sequestration partnerships to conduct geologic sequestration tests involving carbon dioxide injection and monitoring, mitigation, and verification operations in a variety of candidate geological settings, including—

"(i) operating oil and gas fields;

"(ii) depleted oil and gas fields;

"(iii) unmineable coal seams;

"(iv) deep saline formations;

"(v) deep geological systems that may be used as engineered reservoirs to extract economical quantities of heat from geothermal resources of low permeability or porosity;

"(vi) deep geologic systems containing basalt formations; and

"(vii) coal-bed methane recovery.

"(B) OBJECTIVES.—The objectives of tests conducted under this paragraph shall be—

"(i) to develop and validate geophysical tools, analysis, and modeling to monitor, predict, and verify carbon dioxide containment;

"(ii) to validate modeling of geological formations;

"(iii) to refine storage capacity estimated for particular geological formations;

"(iv) to determine the fate of carbon dioxide concurrent with and following injection into geological formations;

"(v) to develop and implement best practices for operations relating to, and monitoring of, injection and storage of carbon dioxide in geologic formations;

"(vi) to assess and ensure the safety of operations related to geological storage of carbon dioxide; and

"(vii) to allow the Secretary to promulgate policies, procedures, requirements, and guidance to ensure that the objectives of this subparagraph are met in large-scale testing and deployment activities for carbon capture and storage that are funded by the Department of Energy.

"(3) LARGE-SCALE TESTING AND DEPLOYMENT.—

"(A) IN GENERAL.—The Secretary shall 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).

"(6) PROGRAM REVIEW AND REPORT.—During fiscal year 2011, the Secretary shall—

"(A) conduct a review of programmatic activities carried out under this subsection; and

"(B) make recommendations with respect to continuation of the activities.

"(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

"(1) $150,000,000 for fiscal year 2008;

"(2) $200,000,000 for fiscal year 2009;

"(3) $200,000,000 for fiscal year 2010;

"(4) $180,000,000 for fiscal year 2011; and

"(5) $165,000,000 for fiscal year 2012.".

SEC. 303. CARBON DIOXIDE STORAGE CAPACITY ASSESSMENT.

(a) DEFINITIONS.—In this section

(1) ASSESSMENT.—The term "assessment" means the national assessment of capacity for carbon dioxide completed under subsection (f).

(2) CAPACITY.—The term "capacity" means the portion of a storage formation that can retain carbon dioxide in accordance with the requirements (including physical, geological, and economic require-

ments) established under the methodology developed under subsection (b).

(3) ENGINEERED HAZARD.—The term ''engineered hazard'' includes the location and completion history of any well that could affect potential storage.

(4) RISK.—The term ''risk'' includes any risk posed by geomechanical, geochemical, hydrogeological, structural, and engineered hazards.

(5) SECRETARY.—The term ''Secretary'' means the Secretary of the Interior, acting through the Director of the United States Geological Survey.

(6) STORAGE FORMATION.—The term ''storage formation'' means a deep saline formation, unmineable coal seam, or oil or gas reservoir that is capable of accommodating a volume of industrial carbon dioxide.

(b) METHODOLOGY.—Not later than 1 year after the date of enactment of this Act, the Secretary shall develop a methodology for conducting an assessment under subsection (f), taking into consideration—

(1) the geographical extent of all potential storage formations in all States;

(2) the capacity of the potential storage formations;

(3) the injectivity of the potential storage formations;

(4) an estimate of potential volumes of oil and gas recoverable by injection and storage of industrial carbon dioxide in potential storage formations;

(5) the risk associated with the potential storage formations; and

(6) the work done to develop the Carbon Sequestration Atlas of the United States and Canada that was completed by the Department of Energy.

(c) COORDINATION.—

(1) FEDERAL COORDINATION.—

(A) CONSULTATION.—The Secretary shall consult with the Secretary of Energy and the Administrator of the Environmental Protection Agency on issues of data sharing, format, development of the methodology, and content of the assessment required under this title to ensure the maximum usefulness and success of the assessment.

(B) COOPERATION.—The Secretary of Energy and the Administrator shall cooperate with the Secretary to ensure, to the maximum extent practicable, the usefulness and success of the assessment.

(2) STATE COORDINATION.—The Secretary shall consult with State geological surveys and other relevant entities to ensure, to the maximum extent practicable, the usefulness and success of the assessment.

(d) EXTERNAL REVIEW AND PUBLICATION.—On completion of the methodology under subsection (b), the Secretary shall—

(1) publish the methodology and solicit comments from the public and the heads of affected Federal and State agencies;

(2) establish a panel of individuals with expertise in the matters described in paragraphs (1) through (5) of subsection (b) composed, as appropriate, of representatives of Federal agencies, institutions of higher education, nongovernmental organizations, State organizations, industry, and international geoscience organizations to review the methodology and comments received under paragraph (1); and

(3) on completion of the review under paragraph (2), publish in the Federal Register the revised final methodology.

(e) PERIODIC UPDATES.—The methodology developed under this section shall be updated periodically (in-

cluding at least once every 5 years) to incorporate new data as the data becomes available.

(f) NATIONAL ASSESSMENT.—

(1) IN GENERAL.—Not later than 2 years after the date of publication of the methodology under subsection (d)(1), the Secretary, in consultation with the Secretary of Energy and State geological surveys, shall complete a national assessment of capacity for carbon dioxide in accordance with the methodology.

(2) GEOLOGICAL VERIFICATION.—As part of the assessment under this subsection, the Secretary shall carry out a drilling program to supplement the geological data relevant to determining storage capacity of carbon dioxide in geological storage formations, including—

(A) well log data;

(B) core data; and

(C) fluid sample data.

(3) PARTNERSHIP WITH OTHER DRILLING PROGRAMS.—As part of the drilling program under paragraph (2), the Secretary shall enter, as appropriate, into partnerships with other entities to collect and integrate data from other drilling programs rel-

evant to the storage of carbon dioxide in geologic formations.

(4) INCORPORATION INTO NATCARB.—

(A) IN GENERAL.—On completion of the assessment, the Secretary of Energy and the Secretary of the Interior shall incorporate the results of the assessment using—

(i) the NatCarb database, to the maximum extent practicable; or

(ii) a new database developed by the Secretary of Energy, as the Secretary of Energy determines to be necessary.

(B) RANKING.—The database shall include the data necessary to rank potential storage sites for capacity and risk, across the United States, within each State, by formation, and within each basin.

(5) REPORT.—Not later than 180 days after the date on which the assessment is completed, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science and Technology of the House of Representatives a report describing the findings under the assessment.

(6) PERIODIC UPDATES.—The national assessment developed under this section shall be updated periodically (including at least once every 5 years) to support public and private sector decisionmaking.

(g) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $30,000,000 for the period of fiscal years 2008 through 2012.

SEC. 304. CARBON CAPTURE AND STORAGE INITIATIVE.

(a) DEFINITIONS.—In this section:

(1) INDUSTRIAL SOURCES OF CARBON DIOXIDE.—The term ''industrial sources of carbon dioxide'' means one or more facilities to—

(A) generate electric energy from fossil fuels;

(B) refine petroleum;

(C) manufacture iron or steel;

(D) manufacture cement or cement clinker;

(E) manufacture commodity chemicals (including from coal gasification);

(F) manufacture transportation fuels from coal; or

(G) manufacture biofuels.

(2) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(b) PROGRAM ESTABLISHMENT.—

(1) IN GENERAL.—The Secretary shall carry out a program to demonstrate technologies for the large-scale capture of carbon dioxide from industrial sources of carbon dioxide.

(2) SCOPE OF AWARD.—An award under this section shall be only for the portion of the project that—

(A) carries out the large-scale capture (including purification and compression) of carbon dioxide;

(B) provides for the cost of transportation and injection of carbon dioxide; and

(C) incorporates a comprehensive measurement, monitoring, and validation program.

(3) QUALIFICATIONS FOR AWARD.—To be eligible for an award under this section, a project proposal must include the following:

(A) CAPACITY.—The capture of not less than eighty-five percent of the produced carbon dioxide at the facility, and not less than 500,000 short tons of carbon dioxide per year.

(B) STORAGE AGREEMENT.—A binding agreement for the storage of all of the captured carbon dioxide in—

(i) a field testing validation activity under section 963 of the Energy Policy Act of 2005, as amended by this Act; or

(ii) other geological storage projects approved by the Secretary.

(C) PURITY LEVEL.—A purity level of at least 95 percent carbon dioxide by volume for the captured carbon dioxide delivered for storage.

(D) COMMITMENT TO CONTINUED OPERATION OF SUCCESSFUL UNIT.—If the project successfully demonstrates capture and storage of carbon dioxide, a commitment to continued capture and storage of carbon dioxide after the conclusion of the demonstration.

(4) COST-SHARING.—The cost-sharing requirements of section 988 of the Energy Policy Act of 2005 shall apply to this section.

(c) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary to carry out this section $100,000,000 per year for fiscal years 2009 through 2013.

SEC. 305. CAPITOL POWER PLANT CARBON DIOXIDE EMISSIONS DEMONSTRATION PROGRAM.

The first section of the Act of March 4, 1911 (2 U.S.C. 2162; 36 Stat. 1414, chapter 285), is amended in the seventh undesignated paragraph (relating to the Capitol power plant), under the heading ''PUBLIC BUILDINGS'', under the heading ''UNDER THE DEPARTMENT OF THE INTERIOR''—

(1) by striking ''ninety thousand dollars:'' and inserting ''$90,000.''; and

(2) by striking ''*Provided*, That hereafter the'' and all that follows through the end of the proviso and inserting the following:

''(a) DESIGNATION.—The heating, lighting, and power plant constructed under the terms of the Act approved April 28, 1904 (33 Stat. 479, chapter 1762), shall be known as the 'Capitol power plant', and all vacancies occurring in the force operating that plant and the substations in connection with the plant shall be filled by the Architect of the Capitol, with the approval of the commission in control of the House Office Building appointed under the first section of the Act of March 4, 1907 (2 U.S.C. 2001).

''(b) CAPITOL POWER PLANT CARBON DIOXIDE EMISSIONS DEMONSTRATION PROGRAM.—

''(1) DEFINITIONS.—In this subsection:

"(A) ADMINISTRATOR.—The term 'Administrator' means the Administrator of the Environmental Protection Agency.

"(B) CARBON DIOXIDE ENERGY EFFICIENCY.—The term 'carbon dioxide energy efficiency', with respect to a project, means the quantity of electricity used to power equipment for carbon dioxide capture and storage or use.

"(C) PROGRAM.—The term 'program' means the competitive grant demonstration program established under paragraph (2)(B).

"(2) ESTABLISHMENT OF PROGRAM.—

"(A) FEASIBILITY STUDY.—Not later than 180 days after the date of enactment of this section, the Architect of the Capitol, in cooperation with the Administrator, shall complete a feasibility study evaluating the available methods to proceed with the project and program established under this section, taking into consideration—

"(i) the availability of carbon capture technologies;

"(ii) energy conservation and carbon reduction strategies; and

"(iii) security of operations at the Capitol power plant.

"(B) COMPETITIVE GRANT PROGRAM.—The Architect of the Capitol, in cooperation with the Administrator, shall establish a competitive grant demonstration program under which the Architect of the Capitol shall, subject to the availability of appropriations, provide to eligible entities, as determined by the Architect of the Capitol, in cooperation with the Administrator, grants to carry out projects to demonstrate, during the 2-year period beginning on the date of enactment of this subsection, the capture and storage or use of carbon dioxide emitted from the Capitol power plant as a result of burning coal.

"(3) REQUIREMENTS.—

"(A) PROVISION OF GRANTS.—

"(i) IN GENERAL.—The Architect of the Capitol, in cooperation with the Administrator, shall provide the grants under the program on a competitive basis.

"(ii) FACTORS FOR CONSIDERATION.—In providing grants under the program, the Architect of the Capitol, in

cooperation with the Administrator, shall take into consideration—

"(I) the practicability of conversion by the proposed project of carbon dioxide into useful products, such as transportation fuel;

"(II) the carbon dioxide energy efficiency of the proposed project; and

"(III) whether the proposed project is able to reduce more than 1 air pollutant regulated under this Act.

"(B) REQUIREMENTS FOR ENTITIES.—An entity that receives a grant under the program shall—

"(i) use to carry out the project of the entity a technology designed to reduce or eliminate emission of carbon dioxide that is in existence on the date of enactment of this subsection that has been used—

"(I) by not less than 3 other facilities (including a coal-fired power plant); and

"(II) on a scale of not less than 5 times the size of the proposed

project of the entity at the Capitol power plant; and

"(ii) carry out the project of the entity in consultation with, and with the concurrence of, the Architect of the Capitol and the Administrator.

"(C) CONSISTENCY WITH CAPITOL POWER PLANT MODIFICATIONS.—The Architect of the Capitol may require changes to a project under the program that are necessary to carry out any modifications to be made to the Capitol power plant.

"(4) INCENTIVE.—In addition to the grant under this subsection, the Architect of the Capitol may provide to an entity that receives such a grant an incentive award in an amount equal to not more than $50,000, of which—

"(A) $15,000 shall be provided after the project of the entity has sustained operation for a period of 100 days, as determined by the Architect of the Capitol;

"(B) $15,000 shall be provided after the project of the entity has sustained operation for a period of 200 days, as determined by the Architect of the Capitol; and

"(C) $20,000 shall be provided after the project of the entity has sustained operation for a period of 300 days, as determined by the Architect of the Capitol.

"(5) TERMINATION.—The program shall terminate on the date that is 2 years after the date of enactment of this subsection.

"(6) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out the program $3,000,000.".

SEC. 306. ASSESSMENT OF CARBON SEQUESTRATION AND METHANE AND NITROUS OXIDE EMISSIONS FROM TERRESTRIAL ECOSYSTEMS.

(a) DEFINITIONS.—In this section:

(1) ADAPTATION STRATEGY.—The term "adaptation strategy" means a land use and management strategy that can be used to increase the sequestration capabilities of any terrestrial ecosystem.

(2) ASSESSMENT.—The term "assessment" means the national assessment authorized under subsection (b).

(3) COVERED GREENHOUSE GAS.—The term "covered greenhouse gas" means carbon dioxide, nitrous oxide, and methane gas.

(4) NATIVE PLANT SPECIES.—The term ''native plant species'' means any noninvasive, naturally occurring plant species within a terrestrial ecosystem.

(5) SECRETARY.—The term ''Secretary'' means the Secretary of the Interior.

(6) FEDERAL LAND.—The term ''Federal land'' means—

(A) land of the National Forest System (as defined in section 11(a) of the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1609(a))) administered by the Secretary of Agriculture, acting through the Chief of the Forest Service; and

(B) public lands (as defined in section 103 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702)), the surface of which is administered by the Secretary of the Interior, acting through the Director of the Bureau of Land Management.

(7) TERRESTRIAL ECOSYSTEM.—

(A) IN GENERAL.—The term ''terrestrial ecosystem'' means any ecological and surficial geological system on Federal land.

(B) INCLUSIONS.—The term ''terrestrial ecosystem'' includes—

(i) forest land;

(ii) grassland; and

(iii) freshwater aquatic ecosystems.

(b) AUTHORIZATION OF ASSESSMENT.—Not later than 2 years after the date on which the final methodology is published under subsection (f)(3)(D), the Secretary shall complete a national assessment of—

(1) the quantity of carbon stored in and released from terrestrial ecosystems; including from man-caused and natural fires; and

(2) the annual flux of covered greenhouse gases in and out of terrestrial ecosystems.

(c) COMPONENTS.—In conducting the assessment under subsection (b), the Secretary shall—

(1) determine the processes that control the flux of covered greenhouse gases in and out of each terrestrial ecosystem;

(2) estimate the technical and economic potential for increasing carbon sequestration in natural and managed terrestrial ecosystems through management activities or restoration activities in each terrestrial ecosystem;

(3) develop near-term and long-term adaptation strategies or mitigation strategies that can be employed—

(A) to enhance the sequestration of carbon in each terrestrial ecosystem;

(B) to reduce emissions of covered greenhouse gases; and

(C) to adapt to climate change; and

(4) estimate annual carbon sequestration capacity of terrestrial ecosystems under a range of policies in support of management activities to optimize sequestration.

(d) USE OF NATIVE PLANT SPECIES.—In developing restoration activities under subsection (c)(2) and management strategies and adaptation strategies under subsection (c)(3), the Secretary shall emphasize the use of native plant species (including mixtures of many native plant species) for sequestering covered greenhouse gas in each terrestrial ecosystem.

(e) CONSULTATION.—In conducting the assessment under subsection (b) and developing the methodology under subsection (f), the Secretary shall consult with—

(1) the Secretary of Energy;

(2) the Secretary of Agriculture;

(3) the Administrator of the Environmental Protection Agency;

(4) the heads of other relevant agencies;

(5) consortia based at institutions of higher education and with research corporations; and

(6) Federal forest and grassland managers.

(f) METHODOLOGY.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall develop a methodology for conducting the assessment.

(2) REQUIREMENTS.—The methodology developed under paragraph (1)—

(A) shall—

(i) determine the method for measuring, monitoring, quantifying, and monetizing covered greenhouse gas emissions and reductions, including methods for allocating and managing offsets or credits; and

(ii) estimate the total capacity of each terrestrial ecosystem to—

(I) sequester carbon; and

(II) reduce emissions of covered greenhouse gases; and

(B) may employ economic and other systems 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

(D) on completion of the review under subparagraph (C), publish in the Federal register the revised final methodology.

(g) ESTIMATE; REVIEW.—The Secretary shall—

(1) based on the assessment, prescribe the data, information, and analysis needed to establish a scientifically sound estimate of—

(A) the carbon sequestration capacity of relevant terrestrial ecosystems;

(B) a national inventory of covered greenhouse gas sources that is consistent with the inventory prepared by the Environmental Protection Agency entitled the ''Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2005''; and

(C) the willingness of covered greenhouse gas emitters to pay to sequester the covered greenhouse gases emitted by the applicable emitters in designated terrestrial ecosystems; and

(2) not later than 180 days after the date on which the assessment is completed, submit to the heads of applicable Federal agencies and the appropriate committees of Congress a report that describes the results of the assessment.

(h) DATA AND REPORT AVAILABILITY.—On completion of the assessment, the Secretary shall incorporate the results of the assessment into a web-accessible database for public use.

SEC. 307. ABRUPT CLIMATE CHANGE RESEARCH PROGRAM.

(a) ESTABLISHMENT OF PROGRAM.—The Secretary of Commerce shall establish within the Office of Oceanic and Atmospheric Research of the National Oceanic and Atmospheric Administration, and shall carry out, a program of scientific research on abrupt climate change.

(b) PURPOSES OF PROGRAM.—The purposes of the program are as follows:

(1) To develop a global array of terrestrial and oceanographic indicators of paleoclimate in order to sufficiently identify and describe past instances of abrupt climate change.

(2) To improve understanding of thresholds and nonlinearities in geophysical systems related to the mechanisms of abrupt climate change.

(3) To incorporate such mechanisms into advanced geophysical models of climate change.

(4) To test the output of such models against an improved global array of records of past abrupt climate changes.

(c) ABRUPT CLIMATE CHANGE DEFINED.—In this section, the term ''abrupt climate change'' means a change in the climate that occurs so rapidly or unexpectedly that human or natural systems have difficulty adapting to the climate as changed.

(d) AUTHORIZATION OF APPROPRIATIONS.—Of such sums previously authorized, there is authorized to be appropriated to the Department of Commerce for each of fiscal years 2009 through 2014, to remain available until expended, such sums as are necessary, not to exceed $10,000,000, to carry out the research program required under this section.

TITLE IV—COST-EFFECTIVE AND ENVIRONMENTALLY SUSTAINABLE PUBLIC BUILDINGS

Subtitle A—Public Buildings Cost Reduction

SEC. 401. SHORT TITLE.

This subtitle may be cited as the ''Public Buildings Cost Reduction Act of 2007''.

SEC. 402. COST-EFFECTIVE AND GEOTHERMAL HEAT PUMP TECHNOLOGY ACCELERATION PROGRAM.

(a) DEFINITION OF ADMINISTRATOR.—In this section, the term ''Administrator'' means the Administrator of General Services.

(b) ESTABLISHMENT.—

(1) IN GENERAL.—The Administrator shall establish a program to accelerate the use of more cost-effective technologies and practices and geothermal heat pumps at GSA facilities.

(2) REQUIREMENTS.—The program established under this subsection shall—

(A) ensure centralized responsibility for the coordination of cost reduction-related and geothermal heat pump-related recommendations, practices, and activities of all relevant Federal agencies;

(B) provide technical assistance and operational guidance to applicable tenants to achieve the goal identified in subsection (c)(2)(B)(ii); and

(C) establish methods to track the success of Federal departments and agencies with respect to that goal.

(c) ACCELERATED USE OF TECHNOLOGIES.—

(1) REVIEW.—

(A) IN GENERAL.—As part of the program under this section, not later than 90 days after the date of enactment of this Act, the Administrator shall conduct a review of—

(i) current use of cost-effective lighting technologies and geothermal heat pumps in GSA facilities; and

(ii) the availability to managers of GSA facilities of cost-effective lighting technologies and geothermal heat pumps.

(B) REQUIREMENTS.—The review under subparagraph (A) shall—

(i) examine the use of cost-effective lighting technologies, geothermal heat pumps, and other cost-effective technologies and practices by Federal agencies in GSA facilities; and

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

(2) REPLACEMENT.—

(A) IN GENERAL.—As part of the program under this section, not later than 180 days after the date of enactment of this Act, the Administrator shall establish, using available appropriations, a cost-effective lighting technology

and geothermal heat pump technology acceleration program to achieve maximum feasible replacement of existing lighting, heating, cooling technologies with cost-effective lighting technologies and geothermal heat pump technologies in each GSA facility.

(B) ACCELERATION PLAN TIMETABLE.—

(i) IN GENERAL.—To implement the program established under subparagraph (A), not later than 1 year after the date of enactment of this Act, the Administrator shall establish a timetable, including milestones for specific activities needed to replace existing lighting, heating, cooling technologies with cost-effective lighting technologies and geothermal heat pump technologies, to the maximum extent feasible (including at the maximum rate feasible), at each GSA facility.

(ii) GOAL.—The goal of the timetable under clause (i) shall be to complete, using available appropriations, maximum feasible replacement of existing lighting, heating, and cooling technologies with cost-effective lighting technologies and geothermal heat

pump technologies by not later than the date that is 5 years after the date of enactment of this Act.

(d) GSA FACILITY TECHNOLOGIES AND PRACTICES.—Not later than 180 days after the date of enactment of this Act, and annually thereafter, the Administrator shall—

(1) ensure that a manager responsible for accelerating the use of cost-effective technologies and practices and geothermal heat pump technologies is designated for each GSA facility; and

(2) submit to Congress a plan, to be implemented to the maximum extent feasible (including at the maximum rate feasible) using available appropriations, by not later than the date that is 5 years after the date of enactment of this Act, that—

(A) with respect to cost-effective technologies and practices—

(i) identifies the specific activities needed to achieve a 20-percent reduction in operational costs through the application of cost-effective technologies and practices from 2003 levels at GSA facilities by not later than 5 years after the date of enactment of this Act;

(ii) describes activities required and carried out to estimate the funds necessary to achieve the reduction described in clause (i);

(B) includes an estimate of the funds necessary to carry out this section;

(C) describes the status of the implementation of cost-effective technologies and practices and geothermal heat pump technologies and practices at GSA facilities, including—

(i) the extent to which programs, including the program established under subsection (b), are being carried out in accordance with this subtitle; and

(ii) the status of funding requests and appropriations for those programs;

(D) identifies within the planning, budgeting, and construction processes, all types of GSA facility-related procedures that inhibit new and existing GSA facilities from implementing cost-effective technologies or geothermal heat pump technologies;

(E) recommends language for uniform standards for use by Federal agencies in implementing cost-effective technologies and prac-

tices and geothermal heat pump technologies and practices;

(F) in coordination with the Office of Management and Budget, reviews the budget process for capital programs with respect to alternatives for—

(i) permitting Federal agencies to retain all identified savings accrued as a result of the use of cost-effective technologies and geothermal heat pump technologies; and

(ii) identifying short- and long-term cost savings that accrue from the use of cost-effective technologies and practices and geothermal heat pump technologies and practices;

(G)(i) with respect to geothermal heat pump technologies, achieves substantial operational cost savings through the application of the technologies; and

(ii) with respect to cost-effective technologies and practices, achieves cost savings through the application of cost-effective technologies and practices sufficient to pay the incremental additional costs of installing the cost-

effective technologies and practices by not later than the date that is 5 years after the date of installation; and

(H) includes recommendations to address each of the matters, and a plan for implementation of each recommendation, described in subparagraphs (A) through (G).

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section, to remain available until expended.

SEC. 403. ENVIRONMENTAL PROTECTION AGENCY DEMONSTRATION GRANT PROGRAM FOR LOCAL GOVERNMENTS.

(a) GRANT PROGRAM.—

(1) IN GENERAL.—The Administrator of the Environmental Protection Agency (referred to in this section as the ''Administrator'') shall establish a demonstration program under which the Administrator shall provide competitive grants to assist local governments (such as municipalities and counties), with respect to local government buildings—

(A) to deploy cost-effective technologies and practices; and

(B) to achieve operational cost savings, through the application of cost-effective technologies and practices, as verified by the Administrator.

(2) COST SHARING.—

(A) IN GENERAL.—The Federal share of the cost of an activity carried out using a grant provided under this section shall be 40 percent.

(B) WAIVER OF NON-FEDERAL SHARE.—The Administrator may waive up to 100 percent of the local share of the cost of any grant under this section should the Administrator determine that the community is economically distressed, pursuant to objective economic criteria established by the Administrator in published guidelines.

(3) MAXIMUM AMOUNT.—The amount of a grant provided under this subsection shall not exceed $1,000,000.

(b) GUIDELINES.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator shall issue guidelines to implement the grant program established under subsection (a).

(2) REQUIREMENTS.—The guidelines under paragraph (1) shall establish—

(A) standards for monitoring and verification of operational cost savings through the application of cost-effective technologies and practices reported by grantees under this section;

(B) standards for grantees to implement training programs, and to provide technical assistance and education, relating to the retrofit of buildings using cost-effective technologies and practices; and

(C) a requirement that each local government that receives a grant under this section shall achieve facility-wide cost savings, through renovation of existing local government buildings using cost-effective technologies and practices, of at least 40 percent as compared to the baseline operational costs of the buildings before the renovation (as calculated assuming a 3-year, weather-normalized average).

(c) COMPLIANCE WITH STATE AND LOCAL LAW.—Nothing in this section or any program carried out using a grant provided under this section supersedes or otherwise affects any State or local law, to the extent that the

State or local law contains a requirement that is more stringent than the relevant requirement of this section.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $20,000,000 for each of fiscal years 2007 through 2012.

(e) REPORTS.—

(1) IN GENERAL.—The Administrator shall provide annual reports to Congress on cost savings achieved and actions taken and recommendations made under this section, and any recommendations for further action.

(2) FINAL REPORT.—The Administrator shall issue a final report at the conclusion of the program, including findings, a summary of total cost savings achieved, and recommendations for further action.

(f) TERMINATION.—The program under this section shall terminate on September 30, 2012.

SEC. 404. DEFINITIONS.

In this subtitle:

(1) COST-EFFECTIVE LIGHTING TECHNOLOGY.—

(A) IN GENERAL.—The term ''cost-effective lighting technology'' means a lighting technology that—

(i) will result in substantial operational cost savings by ensuring an installed consumption of not more than 1 watt per square foot; or

(ii) is contained in a list under—

(I) section 553 of Public Law 95–619 (42 U.S.C. 8259b); and

(II) Federal acquisition regulation 23–203.

(B) INCLUSIONS.—The term ''cost-effective lighting technology'' includes—

(i) lamps;

(ii) ballasts;

(iii) luminaires;

(iv) lighting controls;

(v) daylighting; and

(vi) early use of other highly cost-effective lighting technologies.

(2) COST-EFFECTIVE TECHNOLOGIES AND PRACTICES.—The term ''cost-effective technologies and practices'' means a technology or practice that—

(A) will result in substantial operational cost savings by reducing utility costs; and

(B) complies with the provisions of section 553 of Public Law 95–619 (42 U.S.C. 8259b) and Federal acquisition regulation 23–203.

(3) OPERATIONAL COST SAVINGS.—

(A) IN GENERAL.—The term ''operational cost savings'' means a reduction in end-use operational costs through the application of cost-effective technologies and practices or geothermal heat pumps, including a reduction in electricity consumption relative to consumption by the same customer or at the same facility in a given year, as defined in guidelines promulgated by the Administrator pursuant to section 403(b), that achieves cost savings sufficient to pay the incremental additional costs of using cost-effective technologies and practices or geothermal heat pumps by not later than—

(i) for cost-effective technologies and practices, the date that is 5 years after the date of installation; and

(ii) for geothermal heat pumps, as soon as practical after the date of installation of the applicable geothermal heat pump.

(B) INCLUSIONS.—The term ''operational cost savings'' includes savings achieved at a facility as a result of—

(i) the installation or use of cost-effective technologies and practices; or

(ii) the planting of vegetation that shades the facility and reduces the heating, cooling, or lighting needs of the facility.

(C) EXCLUSION.—The term ''operational cost savings'' does not include savings from measures that would likely be adopted in the absence of cost-effective technology and practices programs, as determined by the Administrator.

(4) GEOTHERMAL HEAT PUMP.—The term ''geothermal heat pump'' means any heating or air conditioning technology that—

(A) uses the ground or ground water as a thermal energy source to heat, or as a thermal energy sink to cool, a building; and

(B) meets the requirements of the Energy Star program of the Environmental Protection Agency applicable to geothermal heat pumps on the date of purchase of the technology.

(5) GSA FACILITY.—

(A) IN GENERAL.—The term ''GSA facility'' means any building, structure, or facility, in whole or in part (including the associated support systems of the building, structure, or facility) that—

(i) is constructed (including facilities constructed for lease), renovated, or purchased, in whole or in part, by the Administrator for use by the Federal Government; or

(ii) is leased, in whole or in part, by the Administrator for use by the Federal Government—

(I) except as provided in subclause (II), for a term of not less than 5 years; or

(II) for a term of less than 5 years, if the Administrator determines that use of cost-effective technologies and practices would result in the payback of expenses.

(B) INCLUSION.—The term ''GSA facility'' includes any group of buildings, structures, or facilities described in subparagraph (A) (including the associated energy-consuming support

systems of the buildings, structures, and facilities).

(C) EXEMPTION.—The Administrator may exempt from the definition of ''GSA facility'' under this paragraph a building, structure, or facility that meets the requirements of section 543(c) of Public Law 95–619 (42 U.S.C. 8253(c)).

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

SEC. 411. INSTALLATION OF PHOTOVOLTAIC SYSTEM AT DEPARTMENT OF ENERGY HEADQUARTERS BUILDING.

(a) IN GENERAL.—The Administrator of General Services shall install a photovoltaic system, as set forth in the Sun Wall Design Project, for the headquarters building of the Department of Energy located at 1000 Independence Avenue, Southwest, Washington, DC, commonly known as the Forrestal Building.

(b) FUNDING.—There shall be available from the Federal Buildings Fund established by section 592 of title 40, United States Code, $30,000,000 to carry out this section. Such sums shall be derived from the unobligated balance of amounts made available from the Fund for fiscal

year 2007, and prior fiscal years, for repairs and alterations and other activities (excluding amounts made available for the energy program). Such sums shall remain available until expended.

(c) OBLIGATION OF FUNDS.—None of the funds made available pursuant to subsection (b) may be obligated prior to September 30, 2007.

Subtitle C—High-Performance Green Buildings

SEC. 421. SHORT TITLE.

This subtitle may be cited as the ''High-Performance Green Buildings Act of 2007''.

SEC. 422. FINDINGS AND PURPOSES.

(a) FINDINGS.—Congress finds that—

(1) high-performance green buildings—

(A) reduce energy, water, and material resource use and the generation of waste;

(B) improve indoor environmental quality, and protect indoor air quality by, for example, using materials that emit fewer or no toxic chemicals into the indoor air;

(C) improve thermal comfort;

(D) improve lighting and the acoustic environment;

(E) improve the health and productivity of individuals who live and work in the buildings;

(F) improve indoor and outdoor impacts of the buildings on human health and the environment;

(G) increase the use of environmentally preferable products, including biobased, recycled, and nontoxic products with lower lifecycle impacts; and

(H) increase opportunities for reuse of materials and for recycling;

(2) during the planning, design, and construction of a high-performance green building, the environmental and energy impacts of building location and site design, the minimization of energy and materials use, and the environmental impacts of the building are considered;

(3) according to the United States Green Building Council, certified green buildings, as compared to conventional buildings—

(A) use an average of 36 percent less total energy (and in some cases up to 50 to 70 percent less total energy);

(B) use 30 percent less water; and

(C) reduce waste costs, often by 50 to 90 percent;

(4) the benefits of high-performance green buildings are important, because in the United States, buildings are responsible for approximately—

(A) 39 percent of primary energy use;

(B) 12 percent of potable water use;

(C) 136,000,000 tons of building-related construction and demolition debris;

(D) 70 percent of United States resource consumption; and

(E) 70 percent of electricity consumption;

(5) green building certification programs can be highly beneficial by disseminating up-to-date information and expertise regarding high-performance green buildings, and by providing third-party verification of green building design, practices, and materials, and other aspects of buildings; and

(6) a July 2006 study completed for the General Services Administration, entitled ''Sustainable Building Rating Systems Summary,'' concluded that—

(A) green building standards are an important means to encourage better practices;

(B) the Leadership in Energy and Environmental Design (LEED) standard for green building certification is ''currently the dominant system in the United States market and is being adapted to multiple markets worldwide''; and

(C) there are other useful green building certification or rating programs in various stages of development and adoption, including the Green Globes program and other rating systems.

(b) PURPOSES.—The purposes of this subtitle are—

(1) to encourage the Federal Government to act as an example for State and local governments, the private sector, and individuals by building high-performance green buildings that reduce energy use and environmental impacts;

(2) to establish an Office within the General Services Administration, and a Green Building Advisory Committee, to advance the goals of conducting research and development and public outreach, and to move the Federal Government toward construction of high-performance green buildings;

(3) to encourage States, local governments, and school systems to site, build, renovate, and operate

high-performance green schools through the adoption of voluntary guidelines for those schools, the dissemination of grants, and the adoption of environmental health plans and programs;

(4) to strengthen Federal leadership on high-performance green buildings through the adoption of incentives for high-performance green buildings, and improved green procurement by Federal agencies; and

(5) to demonstrate that high-performance green buildings can and do provide significant benefits, in order to encourage wider adoption of green building practices, through the adoption of demonstration projects.

SEC. 423. DEFINITIONS.

In this subtitle:

(1) ADMINISTRATOR.—The term ''Administrator'' means the Administrator of General Services.

(2) COMMITTEE.—The term ''Committee'' means the Green Building Advisory Committee established under section 433(a).

(3) DIRECTOR.—The term ''Director'' means the individual appointed to the position established under section 431(a).

(4) FEDERAL FACILITY.—

(A) IN GENERAL.—The term ''Federal facility'' means any building or facility the intended use of which requires the building or facility to be—

(i) accessible to the public; and

(ii) constructed or altered by or on behalf of the United States.

(B) EXCLUSIONS.—The term ''Federal facility'' does not include a privately-owned residential or commercial structure that is not leased by the Federal Government.

(5) HIGH-PERFORMANCE GREEN BUILDING.—The term ''high-performance green building'' means a building—

(A) that, during its life-cycle—

(i) reduces energy, water, and material resource use and the generation of waste;

(ii) improves indoor environmental quality, including protecting indoor air quality during construction, using low-emitting materials, improving thermal comfort, and improving lighting and acous-

tic environments that affect occupant health and productivity;

(iii) improves indoor and outdoor impacts of the building on human health and the environment;

(iv) increases the use of environmentally preferable products, including biobased, recycled content, and nontoxic products with lower life-cycle impacts;

(v) increases reuse and recycling opportunities; and

(vi) integrates systems in the building; and

(B) for which, during its planning, design, and construction, the environmental and energy impacts of building location and site design are considered.

(6) LIFE CYCLE.—The term ''life cycle'', with respect to a high-performance green building, means all stages of the useful life of the building (including components, equipment, systems, and controls of the building) beginning at conception of a green building project and continuing through site selection, design, construction, landscaping, commissioning, operation,

maintenance, renovation, deconstruction or demolition, removal, and recycling of the green building.

(7) LIFE-CYCLE ASSESSMENT.—The term ''life-cycle assessment'' means a comprehensive system approach for measuring the environmental performance of a product or service over the life of the product or service, beginning at raw materials acquisition and continuing through manufacturing, transportation, installation, use, reuse, and end-of-life waste management.

(8) LIFE-CYCLE COSTING.—The term ''life-cycle costing'', with respect to a high-performance green building, means a technique of economic evaluation that—

(A) sums, over a given study period, the costs of initial investment (less resale value), replacements, operations (including energy use), and maintenance and repair of an investment decision; and

(B) is expressed—

(i) in present value terms, in the case of a study period equivalent to the longest useful life of the building, determined by taking into consideration the typical life of

such a building in the area in which the building is to be located; or

(ii) in annual value terms, in the case of any other study period.

(9) OFFICE.—The term ''Office'' means the Office of High-Performance Green Buildings established under section 432(a).

PART I—OFFICE OF HIGH-PERFORMANCE GREEN BUILDINGS

SEC. 431. OVERSIGHT.

(a) IN GENERAL.—The Administrator shall establish within the General Services Administration, and appoint an individual to serve as Director in, a position in the career-reserved Senior Executive service, to—

(1) establish and manage the Office in accordance with section 432; and

(2) carry out other duties as required under this subtitle.

(b) COMPENSATION.—The compensation of the Director shall not exceed the maximum rate of basic pay for the Senior Executive Service under section 5382 of title 5, United States Code, including any applicable locality-based comparability payment that may be authorized under section 5304(h)(2)(C) of that title.

SEC. 432. OFFICE OF HIGH-PERFORMANCE GREEN BUILDINGS.

(a) ESTABLISHMENT.—The Director shall establish within the General Services Administration an Office of High-Performance Green Buildings.

(b) DUTIES.—The Director shall—

(1) ensure full coordination of high-performance green building information and activities within the General Services Administration and all relevant Federal agencies, including, at a minimum—

(A) the Environmental Protection Agency;

(B) the Office of the Federal Environmental Executive;

(C) the Office of Federal Procurement Policy;

(D) the Department of Energy;

(E) the Department of Health and Human Services;

(F) the Department of Defense; and

(G) such other Federal agencies as the Director considers to be appropriate;

(2) establish a senior-level green building advisory committee, which shall provide advice and recommendations in accordance with section 433;

(3) identify and biennially reassess improved or higher rating standards recommended by the Committee;

(4) establish a national high-performance green building clearinghouse in accordance with section 434, which shall provide green building information through—

(A) outreach;

(B) education; and

(C) the provision of technical assistance;

(5) ensure full coordination of research and development information relating to high-performance green building initiatives under section 435;

(6) identify and develop green building standards that could be used for all types of Federal facilities in accordance with section 435;

(7) establish green practices that can be used throughout the life of a Federal facility;

(8) review and analyze current Federal budget practices and life-cycle costing issues, and make recommendations to Congress, in accordance with section 436; and

(9) complete and submit the report described in subsection (c).

(c) REPORT.—Not later than 2 years after the date of enactment of this Act, and biennially thereafter, the Director shall submit to Congress a report that—

(1) describes the status of the green building initiatives under this subtitle and other Federal programs in effect as of the date of the report, including—

(A) the extent to which the programs are being carried out in accordance with this subtitle; and

(B) the status of funding requests and appropriations for those programs;

(2) identifies within the planning, budgeting, and construction process all types of Federal facility procedures that inhibit new and existing Federal facilities from becoming high-performance green buildings, as measured by the standard for high-performance green buildings identified in accordance with subsection (d);

(3) identifies inconsistencies, as reported to the Committee, in Federal law with respect to product acquisition guidelines and high-performance product guidelines;

(4) recommends language for uniform standards for use by Federal agencies in environmentally responsible acquisition;

(5) in coordination with the Office of Management and Budget, reviews the budget process for capital programs with respect to alternatives for—

(A) restructuring of budgets to require the use of complete energy- and environmental-cost accounting;

(B) using operations expenditures in budget-related decisions while simultaneously incorporating productivity and health measures (as those measures can be quantified by the Office, with the assistance of universities and national laboratories);

(C) permitting Federal agencies to retain all identified savings accrued as a result of the use of life cycle costing; and

(D) identifying short- and long-term cost savings that accrue from high-performance green buildings, including those relating to health and productivity;

(6) identifies green, self-sustaining technologies to address the operational needs of Federal facilities

in times of national security emergencies, natural disasters, or other dire emergencies;

(7) summarizes and highlights development, at the State and local level, of green building initiatives, including Executive orders, policies, or laws adopted promoting green building (including the status of implementation of those initiatives); and

(8) includes, for the 2-year period covered by the report, recommendations to address each of the matters, and a plan for implementation of each recommendation, described in paragraphs (1) through (6).

(d) IDENTIFICATION OF STANDARD.—

(1) IN GENERAL.—For the purpose of subsection (c)(2), not later than 60 days after the date of enactment of this Act, the Director shall identify a standard that the Director determines to be the most likely to encourage a comprehensive and environmentally-sound approach to certification of green buildings.

(2) BASIS.—The standard identified under paragraph (1) shall be based on—

(A) a biennial study, which shall be carried out by the Director to compare and evaluate standards;

(B) the ability and availability of assessors and auditors to independently verify the criteria and measurement of metrics at the scale necessary to implement this subtitle;

(C) the ability of the applicable standard-setting organization to collect and reflect public comment;

(D) the ability of the standard to be developed and revised through a consensus-based process;

(E) an evaluation of the adequacy of the standard, which shall give credit for—

(i) efficient and sustainable use of water, energy, and other natural resources;

(ii) use of renewable energy sources;

(iii) improved indoor environmental quality through enhanced indoor air quality, thermal comfort, acoustics, day lighting, pollutant source control, and use of low-emission materials and building system controls; and

(iv) such other criteria as the Director determines to be appropriate; and

(F) national recognition within the building industry.

(3) BIENNIAL REVIEW.—The Director shall—

(A) conduct a biennial review of the standard identified under paragraph (1); and

(B) include the results of each biennial review in the report required to be submitted under subsection (c).

(e) IMPLEMENTATION.—The Office shall carry out each plan for implementation of recommendations under subsection (c)(7).

SEC. 433. GREEN BUILDING ADVISORY COMMITTEE.

(a) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Director shall establish an advisory committee, to be known as the ''Green Building Advisory Committee''.

(b) MEMBERSHIP.—

(1) IN GENERAL.—The Committee shall be composed of representatives of, at a minimum—

(A) each agency referred to in section 432(b)(1); and

(B) other relevant agencies and entities, as determined by the Director, including at least 1 representative of each of—

(i) State and local governmental green building programs;

(ii) independent green building associations or councils;

(iii) building experts, including architects, material suppliers, and construction contractors;

(iv) security advisors focusing on national security needs, natural disasters, and other dire emergency situations; and

(v) environmental health experts, including those with experience in children's health.

(2) NON-FEDERAL MEMBERS.—The total number of non-Federal members on the Committee at any time shall not exceed 15.

(c) MEETINGS.—The Director shall establish a regular schedule of meetings for the Committee.

(d) DUTIES.—The Committee shall provide advice and expertise for use by the Director in carrying out the duties under this subtitle, including such recommendations relating to Federal activities carried out under sections 434 through 436 as are agreed to by a majority of the members of the Committee.

(e) FACA EXEMPTION.—The Committee shall not be subject to section 14 of the Federal Advisory Committee Act (5 U.S.C. App.).

SEC. 434. PUBLIC OUTREACH.

The Director, in coordination with the Committee, shall carry out public outreach to inform individuals and entities of the information and services available Government-wide by—

(1) establishing and maintaining a national high-performance green building clearinghouse, including on the Internet, that—

(A) identifies existing similar efforts and coordinates activities of common interest; and

(B) provides information relating to high-performance green buildings, including hyperlinks to Internet sites that describe related activities, information, and resources of—

(i) the Federal Government;

(ii) State and local governments;

(iii) the private sector (including non-governmental and nonprofit entities and organizations); and

(iv) other relevant organizations, including those from other countries;

(2) identifying and recommending educational resources for implementing high-performance green building practices, including security and emergency benefits and practices;

(3) providing access to technical assistance on using tools and resources to make more cost-effective, energy-efficient, health-protective, and environmentally beneficial decisions for constructing high-performance green buildings, including tools available to conduct life-cycle costing and life-cycle assessment;

(4) providing information on application processes for certifying a high-performance green building, including certification and commissioning;

(5) providing technical information, market research, or other forms of assistance or advice that would be useful in planning and constructing high-performance green buildings; and

(6) using such other methods as are determined by the Director to be appropriate.

SEC. 435. RESEARCH AND DEVELOPMENT.

(a) ESTABLISHMENT.—The Director, in coordination with the Committee, shall—

(1)(A) survey existing research and studies relating to high-performance green buildings; and

(B) coordinate activities of common interest;

(2) develop and recommend a high-performance green building research plan that—

(A) identifies information and research needs, including the relationships between human health, occupant productivity, and each of—

(i) emissions from materials and products in the building;

(ii) natural day lighting;

(iii) ventilation choices and technologies;

(iv) heating, cooling, and system control choices and technologies;

(v) moisture control and mold;

(vi) maintenance, cleaning, and pest control activities;

(vii) acoustics; and

(viii) other issues relating to the health, comfort, productivity, and performance of occupants of the building; and

(B) promotes the development and dissemination of high-performance green building measurement tools that, at a minimum, may be used—

(i) to monitor and assess the life-cycle performance of facilities (including dem-

onstration projects) built as high-performance green buildings; and

(ii) to perform life-cycle assessments;

(3) assist the budget and life-cycle costing functions of the Office under section 436;

(4) study and identify potential benefits of green buildings relating to security, natural disaster, and emergency needs of the Federal Government; and

(5) support other research initiatives determined by the Office.

(b) INDOOR AIR QUALITY.—The Director, in consultation with the Committee, shall develop and carry out a comprehensive indoor air quality program for all Federal facilities to ensure the safety of Federal workers and facility occupants—

(1) during new construction and renovation of facilities; and

(2) in existing facilities.

SEC. 436. BUDGET AND LIFE-CYCLE COSTING AND CONTRACTING.

(a) ESTABLISHMENT.—The Director, in coordination with the Committee, shall—

(1) identify, review, and analyze current budget and contracting practices that affect achievement of

high-performance green buildings, including the identification of barriers to green building life-cycle costing and budgetary issues;

(2) develop guidance and conduct training sessions with budget specialists and contracting personnel from Federal agencies and budget examiners to apply life-cycle cost criteria to actual projects;

(3) identify tools to aid life-cycle cost decision-making; and

(4) explore the feasibility of incorporating the benefits of green buildings, such as security benefits, into a cost-budget analysis to aid in life-cycle costing for budget and decision making processes.

SEC. 437. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated to carry out this part $4,000,000 for each of fiscal years 2008 through 2012, to remain available until expended.

PART II—HEALTHY HIGH-PERFORMANCE SCHOOLS

SEC. 441. DEFINITION OF HIGH-PERFORMANCE SCHOOL.

In this part, the term ''high-performance school'' has the meaning given the term ''healthy, high-performance school building'' in section 5586 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7277e).

SEC. 442. GRANTS FOR HEALTHY SCHOOL ENVIRONMENTS.

The Administrator of the Environmental Protection Agency, in consultation with the Secretary of Education, may provide grants to qualified State agencies for use in—

(1) providing technical assistance for programs of the Environmental Protection Agency (including the Tools for Schools Program and the Healthy School Environmental Assessment Tool) to schools for use in addressing environmental issues; and

(2) development of State school environmental quality plans that include—

(A) standards for school building design, construction, and renovation; and

(B) identification of ongoing school building environmental problems in the State and recommended solutions to address those problems, including assessment of information on the exposure of children to environmental hazards in school facilities.

SEC. 443. MODEL GUIDELINES FOR SITING OF SCHOOL FACILITIES.

The Administrator of the Environmental Protection Agency, in consultation with the Secretary of Education and the Secretary of Health and Human Services, shall develop voluntary school site selection guidelines that account for—

(1) the special vulnerability of children to hazardous substances or pollution exposures in any case in which the potential for contamination at a potential school site exists;

(2) modes of transportation available to students and staff;

(3) the efficient use of energy; and

(4) the potential use of a school at the site as an emergency shelter.

SEC. 444. PUBLIC OUTREACH.

(a) IN GENERAL.—The Administrator of the Environmental Protection Agency shall provide to the Director information relating to all activities carried out under this part, which the Director shall include in the report described in section 432(c).

(b) PUBLIC OUTREACH.—The Director shall ensure, to the maximum extent practicable, that the public clearinghouse established under section 434 receives and makes available information on the exposure of children to environmental hazards in school facilities, as provided by the Administrator of the Environmental Protection Agency.

SEC. 445. ENVIRONMENTAL HEALTH PROGRAM.

(a) IN GENERAL.—The Administrator of the Environmental Protection Agency, in consultation with the Secretary of Education, the Secretary of Health and

Human Services, and other relevant agencies, shall issue voluntary guidelines for use by the State in developing and implementing an environmental health program for schools that—

(1) takes into account the status and findings of Federal research initiatives established under this subtitle and other relevant Federal law with respect to school facilities, including relevant updates on trends in the field, such as the impact of school facility environments on student and staff—

(A) health, safety, and productivity; and

(B) disabilities or special needs;

(2) provides research using relevant tools identified or developed in accordance with section 435(a) to quantify the relationships between—

(A) human health, occupant productivity, and student performance; and

(B) with respect to school facilities, each of—

(i) pollutant emissions from materials and products;

(ii) natural day lighting;

(iii) ventilation choices and technologies;

(iv) heating and cooling choices and technologies;

(v) moisture control and mold;

(vi) maintenance, cleaning, and pest control activities;

(vii) acoustics; and

(viii) other issues relating to the health, comfort, productivity, and performance of occupants of the school facilities;

(3) provides technical assistance on siting, design, management, and operation of school facilities, including facilities used by students with disabilities or special needs;

(4) collaborates with federally funded pediatric environmental health centers to assist in on-site school environmental investigations;

(5) assists States and the public in better understanding and improving the environmental health of children; and

(6) provides to the Office a biennial report of all activities carried out under this part, which the Director shall include in the report described in section 432(c).

(b) PUBLIC OUTREACH.—The Director shall ensure, to the maximum extent practicable, that the public clear-

inghouse established under section 434 receives and makes available—

(1) information from the Administrator of the Environmental Protection Agency that is contained in the report described in subsection (a)(6); and

(2) information on the exposure of children to environmental hazards in school facilities, as provided by the Administrator of the Environmental Protection Agency.

SEC. 446. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated to carry out this part $10,000,000 for the period of fiscal years 2008 through 2012, to remain available until expended.

PART III—STRENGTHENING FEDERAL LEADERSHIP

SEC. 451. INCENTIVES.

As soon as practicable after the date of enactment of this Act, the Director shall identify incentives to encourage the use of green buildings and related technology in the operations of the Federal Government, including through—

(1) the provision of recognition awards; and

(2) the maximum feasible retention of financial savings in the annual budgets of Federal agencies.

SEC. 452. FEDERAL PROCUREMENT.

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Director of the Office of Federal Procurement Policy, in consultation with the Director and the Under Secretary of Defense for Acquisition, Technology, and Logistics, shall promulgate revisions of the applicable acquisition regulations, to take effect as of the date of promulgation of the revisions—

(1) to direct any Federal procurement executives involved in the acquisition, construction, or major renovation (including contracting for the construction or major renovation) of any facility, to the maximum extent practicable—

(A) to employ integrated design principles;

(B) to optimize building and systems energy performance;

(C) to protect and conserve water;

(D) to enhance indoor environmental quality; and

(E) to reduce environmental impacts of materials and waste flows; and

(2) to direct Federal procurement executives involved in leasing buildings, to give preference to the lease of facilities that, to the maximum extent practicable—

(A) are energy-efficient; and

(B) have applied contemporary high-performance and sustainable design principles during construction or renovation.

(b) GUIDANCE.—Not later than 90 days after the date of promulgation of the revised regulations under subsection (a), the Director shall issue guidance to all Federal procurement executives providing direction and the option to renegotiate the design of proposed facilities, renovations for existing facilities, and leased facilities to incorporate improvements that are consistent with this section.

SEC. 453. FEDERAL GREEN BUILDING PERFORMANCE.

(a) IN GENERAL.—Not later than October 31 of each of the 2 fiscal years following the fiscal year in which this Act is enacted, and at such times thereafter as the Comptroller General of the United States determines to be appropriate, the Comptroller General of the United States shall, with respect to the fiscal years that have passed since the preceding report—

(1) conduct an audit of the implementation of this subtitle; and

(2) submit to the Office, the Committee, the Administrator, and Congress a report describing the results of the audit.

(b) CONTENTS.—An audit under subsection (a) shall include a review, with respect to the period covered by the report under subsection (a)(2), of—

(1) budget, life-cycle costing, and contracting issues, using best practices identified by the Comptroller General of the United States and heads of other agencies in accordance with section 436;

(2) the level of coordination among the Office, the Office of Management and Budget, and relevant agencies;

(3) the performance of the Office in carrying out the implementation plan;

(4) the design stage of high-performance green building measures;

(5) high-performance building data that were collected and reported to the Office; and

(6) such other matters as the Comptroller General of the United States determines to be appropriate.

(c) ENVIRONMENTAL STEWARDSHIP SCORECARD.—The Director shall consult with the Committee to enhance, and assist in the implementation of, the Environmental Stewardship Scorecard announced at the White House summit on Federal sustainable buildings in January 2006,

to measure the implementation by each Federal agency of sustainable design and green building initiatives.

SEC. 454. STORM WATER RUNOFF REQUIREMENTS FOR FEDERAL DEVELOPMENT PROJECTS.

The sponsor of any development or redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow.

PART IV—DEMONSTRATION PROJECT

SEC. 461. COORDINATION OF GOALS.

(a) IN GENERAL.—The Director shall establish guidelines to implement a demonstration project to contribute to the research goals of the Office.

(b) PROJECTS.—

(1) IN GENERAL.—In accordance with guidelines established by the Director under subsection (a) and the duties of the Director described in part I, the Director shall carry out 3 demonstration projects.

(2) LOCATION OF PROJECTS.—Each project carried out under paragraph (1) shall be located in

a Federal building in a State recommended by the Director in accordance with subsection (c).

(3) REQUIREMENTS.—Each project carried out under paragraph (1) shall—

(A) provide for the evaluation of the information obtained through the conduct of projects and activities under this subtitle; and

(B) achieve the highest available rating under the standard identified pursuant to section 432(d).

(c) CRITERIA.—With respect to the existing or proposed Federal facility at which a demonstration project under this section is conducted, the Federal facility shall—

(1) be an appropriate model for a project relating to—

(A) the effectiveness of high-performance technologies;

(B) analysis of materials, components, and systems, including the impact on the health of building occupants;

(C) life-cycle costing and life-cycle assessment of building materials and systems; and

(D) location and design that promote access to the Federal facility through walking, biking, and mass transit; and

(2) possess sufficient technological and organizational adaptability.

(d) REPORT.—Not later than 1 year after the date of enactment of this Act, and annually thereafter through September 30, 2013, the Director shall submit to the Administrator a report that describes the status of and findings regarding the demonstration project.

SEC. 462. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated to carry out the Federal demonstration project described in section 461(b) $10,000,000 for the period of fiscal years 2008 through 2012, to remain available until expended.

TITLE V—CORPORATE AVERAGE FUEL ECONOMY STANDARDS

SEC. 501. SHORT TITLE.

This title may be cited as the ''Ten-in-Ten Fuel Economy Act''.

SEC. 502. AVERAGE FUEL ECONOMY STANDARDS FOR AUTOMOBILES AND CERTAIN OTHER VEHICLES.

(a) INCREASED STANDARDS.—Section 32902 of title 49, United States Code, is amended—

(1) by striking "NON-PASSENGER AUTOMOBILES.—" in subsection (a) and inserting "PRESCRIPTION OF STANDARDS BY REGULATION.—";

(2) by striking "(except passenger automobiles)" in subsection (a); and

(3) by striking subsection (b) and inserting the following:

"(b) STANDARDS FOR AUTOMOBILES AND CERTAIN OTHER VEHICLES.—

"(1) IN GENERAL.—The Secretary of Transportation, after consultation with the Administrator of the Environmental Protection Agency, shall prescribe average fuel economy standards for—

"(A) automobiles manufactured by manufacturers in each model year beginning with model year 2011 in accordance with subsection (c); and

"(B) commercial medium-duty or heavy-duty on-highway vehicles in accordance with subsection (k).

"(2) FUEL ECONOMY TARGET FOR AUTOMOBILES.—

"(A) AUTOMOBILE FUEL ECONOMY AVERAGE FOR MODEL YEARS 2011 THROUGH 2020.—The Secretary shall prescribe average fuel econ-

omy standards for automobiles in each model year beginning with model year 2011 to achieve a combined fuel economy average for model year 2020 of at least 35 miles per gallon for the fleet of automobiles manufactured or sold in the United States. The average fuel economy standards prescribed by the Secretary shall be the maximum feasible average fuel economy standards for model years 2011 through 2019.

"(B) AUTOMOBILE FUEL ECONOMY AVERAGE FOR MODEL YEARS 2021 THROUGH 2030.—For model years 2021 through 2030, the average fuel economy required to be attained by the fleet of automobiles manufactured or sold in the United States shall be the maximum feasible average fuel economy standard for the fleet.

"(C) PROGRESS TOWARD STANDARD REQUIRED.—In prescribing average fuel economy standards under subparagraph (A), the Secretary shall prescribe annual fuel economy standard increases that increase the applicable average fuel economy standard ratably beginning with model year 2011 and ending with model year 2020.".

(b) FUEL ECONOMY TARGET FOR COMMERCIAL MEDIUM-DUTY AND HEAVY-DUTY ON-HIGHWAY VEHICLES.—Section 32902 of title 49, United States Code, is amended by adding at the end thereof the following:

"(k) COMMERCIAL MEDIUM- AND HEAVY-DUTY ON-HIGHWAY VEHICLES.—

"(1) STUDY.—No later than 18 months after the date of enactment of the Ten-in-Ten Fuel Economy Act, the Secretary of Transportation, in consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency, shall examine the fuel efficiency of commercial medium- and heavy-duty on-highway vehicles and determine—

"(A) the appropriate test procedures and methodologies for measuring commercial medium- and heavy-duty on-highway vehicle fuel efficiency;

"(B) the appropriate metric for measuring and expressing commercial medium- and heavy-duty on-highway vehicle fuel efficiency performance, taking into consideration, among other things, the work performed by such on-highway vehicles and types of operations in which they are used;

"(C) the range of factors, including, without limitation, design, functionality, use, duty cycle, infrastructure, and total overall energy consumption and operating costs that effect commercial medium- and heavy-duty on-highway vehicle fuel efficiency; and

"(D) such other factors and conditions that could have an impact on a program to improve commercial medium- and heavy-duty on-highway vehicle fuel efficiency.

"(2) RULEMAKING.—No later than 24 months after completion of the study required by paragraph (1), the Secretary, in consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency, by regulation, shall determine in a rulemaking procedure how to implement a commercial medium- and heavy-duty on-highway vehicle fuel efficiency improvement program designed to achieve the maximum feasible improvement, and shall adopt appropriate test methods, measurement metrics, fuel economy standards, and compliance and enforcement protocols that are appropriate, cost-effective, and technologically feasible for commercial medium- and heavy-duty on-highway vehicles.

"(3) LEAD-TIME; REGULATORY STABILITY.—Any commercial medium- and heavy-duty on-highway vehicle fuel efficiency regulatory program adopted pursuant to this subsection shall provide no less than 4 full model years of regulatory lead-time and 3 full model years of regulatory stability.

"(4) COMMERCIAL MEDIUM- AND HEAVY-DUTY ON-HIGHWAY VEHICLE DEFINED.—In this subsection, the term 'commercial medium- and heavy-duty on-highway vehicle' means an on-highway vehicle with a gross vehicle weight rating of more than 8,500 pounds, and that, in the case of a vehicle with a gross vehicle weight rating of less than 10,000 pounds, is not an automobile.".

(c) AUTHORITY OF SECRETARY.—Section 32902 of title 49, United States Code, as amended by subsection (b), is further amended by adding at the end thereof the following:

"(l) AUTHORITY OF THE SECRETARY.—

"(1) VEHICLE ATTRIBUTES; MODEL YEARS COVERED.—The Secretary shall—

"(A) prescribe by regulation average fuel economy standards for automobiles based on vehicle attributes related to fuel economy and to

express the standards in the form of a mathematical function; and

"(B) issue regulations under this title prescribing average fuel economy standards for 1 or more model years.

"(2) PROHIBITION OF UNIFORM PERCENTAGE INCREASE.—When the Secretary prescribes a standard, or prescribes an amendment under this section that changes a standard, the standard may not be expressed as a uniform percentage increase from the fuel-economy performance of attribute classes or categories already achieved in a model year by a manufacturer.".

SEC. 503. AMENDING FUEL ECONOMY STANDARDS.

(a) IN GENERAL.—Section 32902(c) of title 49, United States Code, is amended to read as follows:

"(c) AMENDING FUEL ECONOMY STANDARDS.—Notwithstanding subsections (a) and (b), the Secretary of Transportation—

"(1) may prescribe a standard higher than that required under subsection (b); or

"(2) may prescribe an average fuel economy standard for automobiles that is the maximum feasible level for the model year, despite being lower than the standard required under subsection (b), if

the Secretary determines, based on clear and convincing evidence, that the average fuel economy standard prescribed in accordance with subsections (a) and (b) for automobiles in that model year is shown not to be cost-effective.''.

(b) FEASIBILITY CRITERIA.—Section 32902(f) of title 49, United States Code, is amended to read as follows:

''(f) DECISIONS ON MAXIMUM FEASIBLE AVERAGE FUEL ECONOMY.—

''(1) IN GENERAL.—When deciding maximum feasible average fuel economy under this section, the Secretary shall consider—

''(A) economic practicability;

''(B) the effect of other motor vehicle standards of the Government on fuel economy;

''(C) environmental impacts; and

''(D) the need of the United States to conserve energy.

''(2) LIMITATIONS.—In setting any standard under subsection (b), (c), or (d), the Secretary shall ensure that each standard is the highest standard that—

''(A) is technologically achievable;

"(B) can be achieved without materially reducing the overall safety of automobiles manufactured or sold in the United States;

"(C) is not less than the standard for that class of vehicles from any prior year; and

"(D) is cost-effective.

"(3) COST-EFFECTIVE DEFINED.—In this subsection, the term 'cost-effective' means that the value to the United States of reduced fuel use from a proposed fuel economy standard is greater than or equal to the cost to the United States of such standard. In determining cost-effectiveness, the Secretary shall give priority to those technologies and packages of technologies that offer the largest reduction in fuel use relative to their costs.

"(4) FACTORS FOR CONSIDERATION BY SECRETARY IN DETERMINING COST-EFFECTIVENESS.—The Secretary shall consult with the Administrator of the Environmental Protection Agency, and may consult with such other departments and agencies as the Secretary deems appropriate, and shall consider in the analysis the following factors:

"(A) Economic security.

"(B) The impact of the oil or energy intensity of the United States economy on the sensi-

tivity of the economy to oil and other fuel price changes, including the magnitude of gross domestic product losses in response to short term price shocks or long term price increases.

"(C) National security, including the impact of United States payments for oil and other fuel imports on political, economic, and military developments in unstable or unfriendly oil-exporting countries.

"(D) The uninternalized costs of pipeline and storage oil seepage, and for risk of oil spills from production, handling, and transport, and related landscape damage.

"(E) The emissions of pollutants including greenhouse gases over the lifecycle of the fuel and the resulting costs to human health, the economy, and the environment.

"(F) Such additional factors as the Secretary deems relevant.

"(5) MINIMUM VALUATION.—When considering the value to consumers of a gallon of gasoline saved, the Secretary of Transportation shall use as a minimum value the greater of—

"(A) the average value of gasoline prices projected by the Energy Information Adminis-

tration over the period covered by the standard; or

"(B) the average value of gasoline prices for the 5-year period immediately preceding the year in which the standard is established.".

(c) CONSULTATION REQUIREMENT.—Section 32902(i) of title 49, United States Code, is amended by inserting "and the Administrator of the Environmental Protection Agency" after "Energy".

(d) COMMENTS.—Section 32902(j) of title 49, United States Code, is amended—

(1) by striking paragraph (1) and inserting "(1) Before issuing a notice proposing to prescribe or amend an average fuel economy standard under subsection (b), (c), or (g) of this section, the Secretary of Transportation shall give the Secretary of Energy and Administrator of the Environmental Protection Agency at least 30 days after the receipt of the notice during which the Secretary of Energy and Administrator may, if the Secretary of Energy or Administrator concludes that the proposed standard would adversely affect the conservation goals of the Secretary of Energy or environmental protection goals of the Administrator, provide written comments to the Secretary of Transportation about the

impact of the standard on those goals. To the extent the Secretary of Transportation does not revise a proposed standard to take into account comments of the Secretary of Energy or Administrator on any adverse impact of the standard, the Secretary of Transportation shall include those comments in the notice.''; and

(2) by inserting ''and the Administrator'' after ''Energy'' each place it appears in paragraph (2).

(e) ALTERNATIVE FUEL ECONOMY STANDARDS FOR LOW VOLUME MANUFACTURERS AND NEW ENTRANTS.—Section 32902(d) of title 49, United States Code, is amended to read as follows:

''(d) ALTERNATIVE AVERAGE FUEL ECONOMY STANDARD.—

''(1) IN GENERAL.—Upon the application of an eligible manufacturer, the Secretary of Transportation may prescribe an alternative average fuel economy standard for automobiles manufactured by that manufacturer if the Secretary determines that—

''(A) the applicable standard prescribed under subsection (a), (b), or (c) is more stringent than the maximum feasible average fuel

economy level that manufacturer can achieve; and

"(B) the alternative average fuel economy standard prescribed under this subsection is the maximum feasible average fuel economy level that manufacturer can achieve.

"(2) APPLICATION OF ALTERNATIVE STANDARD.—The Secretary may provide for the application of an alternative average fuel economy standard prescribed under paragraph (1) to—

"(A) the manufacturer that applied for the alternative average fuel economy standard;

"(B) all automobiles to which this subsection applies; or

"(C) classes of automobiles manufactured by eligible manufacturers.

"(3) IMPORTERS.—Notwithstanding paragraph (1), an importer registered under section 30141(c) may not be exempted as a manufacturer under paragraph (1) for an automobile that the importer—

"(A) imports; or

"(B) brings into compliance with applicable motor vehicle safety standards prescribed under chapter 301 for an individual described in section 30142.

"(4) APPLICATION.—The Secretary of Transportation may prescribe the contents of an application for an alternative average fuel economy standard.

"(5) ELIGIBLE MANUFACTURER DEFINED.—In this section, the term 'eligible manufacturer' means a manufacturer that—

"(A) is not owned in whole or in part by another manufacturer that sold greater than 0.5 percent of the number of automobiles sold in the United States in the model year prior to the model year to which the application relates;

"(B) sold in the United States fewer than 0.4 percent of the number of automobiles sold in the United States in the model year that is 2 years before the model year to which the application relates; and

"(C) will sell in the United States fewer than 0.4 percent of the automobiles sold in the United States for the model year for which the alternative average fuel economy standard will apply.

"(6) LIMITATION.—For purposes of this subsection, notwithstanding section 32901(a)(4), the term 'automobile manufactured by a manufacturer'

includes every automobile manufactuered by a person that controls, is controlled by, or is under common control with the manufacturer.''

(f) TECHNICAL AND CONFORMING AMENDMENTS.—

(1) Section 32902(d) of title 49, United States Code, is amended by striking ''passenger'' each place it appears.

(2) Section 32902(g) of title 49, United States Code, is amended—

(A) by striking ''subsection (a) or (d)'' each place it appears in paragraph (1) and inserting ''subsection (b), (c), or (d)''; and

(B) striking ''(and submit the amendment to Congress when required under subsection (c)(2) of this section)'' in paragraph (2).

SEC. 504. DEFINITIONS.

(a) IN GENERAL.—Section 32901(a) of title 49, United States Code, is amended—

(1) by striking paragraph (3) and inserting the following:

''(3) except as provided in section 32908 of this title, 'automobile' means a 4-wheeled vehicle that is propelled by fuel, or by alternative fuel, manufactured primarily for use on public streets, roads, and

highways and rated at not more than 10,000 pounds gross vehicle weight, except—

"(A) a vehicle operated only on a rail line;

"(B) a vehicle manufactured by 2 or more manufacturers in different stages and less than 10,000 of which are manufactured per year; or

"(C) a work truck."; and

(2) by adding at the end the following:

"(17) 'work truck' means an automobile that the Secretary determines by regulation—

"(A) is rated at between 8,500 and 10,000 pounds gross vehicle weight; and

"(B) is not a medium-duty passenger vehicle (as defined in section 86.1803–01 of title 40, Code of Federal Regulations).".

(b) DEADLINE FOR REGULATIONS.—The Secretary of Transportation—

(1) shall issue proposed regulations implementing the amendments made by subsection (a) not later than 1 year after the date of enactment of this Act; and

(2) shall issue final regulations implementing the amendments not later than 18 months after the date of the enactment of this Act.

(c) EFFECTIVE DATE.—Regulations prescribed under subsection (b) shall apply beginning with model year 2010.

SEC. 505. ENSURING SAFETY OF AUTOMOBILES.

(a) IN GENERAL.—Subchapter II of chapter 301 of title 49, United States Code, is amended by adding at the end the following:

"§ 30129. Vehicle compatibility standard

''(a) STANDARDS.—The Secretary of Transportation shall issue a motor vehicle safety standard to reduce automobile incompatibility. The standard shall address characteristics necessary to ensure better management of crash forces in multiple vehicle frontal and side impact crashes between different types, sizes, and weights of automobiles with a gross vehicle weight of 10,000 pounds or less in order to decrease occupant deaths and injuries.

''(b) CONSUMER INFORMATION.—The Secretary shall develop and implement a public information side and frontal compatibility crash test program with vehicle ratings based on risks to occupants, risks to other motorists, and combined risks by vehicle make and model.''.

(b) RULEMAKING DEADLINES.—

(1) RULEMAKING.—The Secretary of Transportation shall issue—

(A) a notice of a proposed rulemaking under section 30129 of title 49, United States Code, not later than January 1, 2012; and

(B) a final rule under such section not later than December 31, 2014.

(2) EFFECTIVE DATE OF REQUIREMENTS.—Any requirement imposed under the final rule issued under paragraph (1) shall become fully effective not later than September 1, 2018.

(c) CONFORMING AMENDMENT.—The chapter analysis for chapter 301 is amended by inserting after the item relating to section 30128 the following:

"30129. Vehicle compatibility standard.".

SEC. 506. CREDIT TRADING PROGRAM.

Section 32903 of title 49, United States Code, is amended—

(1) by striking "passenger" each place it appears;

(2) by striking "section 32902(b)–(d) of this title" each place it appears and inserting "subsection (a), (c), or (d) of section 32902";

(3) by striking "3 consecutive model years" in subsection (a)(2) and inserting "5 consecutive model years";

(4) in subsection (a)(2), by striking ''clause (1) of this subsection,'' and inserting ''paragraph (1)''; and

(5) by striking subsection (e) and inserting the following:

''(e) CREDIT TRADING AMONG MANUFACTURERS.—The Secretary of Transportation may establish, by regulation, a corporate average fuel economy credit trading program to allow manufacturers whose automobiles exceed the average fuel economy standards prescribed under section 32902 to earn credits to be sold to manufacturers whose automobiles fail to achieve the prescribed standards such that the total oil savings associated with manufacturers that exceed the prescribed standards are preserved when transferring credits to manufacturers that fail to achieve the prescribed standards.''.

SEC. 507. LABELS FOR FUEL ECONOMY AND GREENHOUSE GAS EMISSIONS.

Section 32908 of title 49, United States Code, is amended—

(1) by redesignating subparagraph (F) of subsection (b)(1) as subparagraph (H) and inserting after subparagraph (E) the following:

''(F) a label (or a logo imprinted on a label required by this paragraph) that—

"(i) reflects an automobile's performance on the basis of criteria developed by the Administrator to reflect the fuel economy and greenhouse gas and other emissions consequences of operating the automobile over its likely useful life;

"(ii) permits consumers to compare performance results under clause (i) among all automobiles; and

"(iii) is designed to encourage the manufacture and sale of automobiles that meet or exceed applicable fuel economy standards under section 32902.

"(G) a fuelstar under paragraph (5)."; and

(2) by adding at the end of subsection (b) the following:

"(4) GREEN LABEL PROGRAM.—

"(A) MARKETING ANALYSIS.—Not later than 2 years after the date of the enactment of the Ten-in-Ten Fuel Economy Act, the Administrator shall implement a consumer education program and execute marketing strategies to improve consumer understanding of automobile performance described in paragraph (1)(F).

"(B) ELIGIBILITY.—Not later than 3 years after the date described in subparagraph (A), the Administrator shall issue requirements for the label or logo required under paragraph (1)(F) to ensure that an automobile is not eligible for the label or logo unless it—

"(i) meets or exceeds the applicable fuel economy standard; or

"(ii) will have the lowest greenhouse gas emissions over the useful life of the vehicle of all vehicles in the vehicle attribute class to which it belongs in that model year.

"(5) FUELSTAR PROGRAM.—

"(A) IN GENERAL.—The Secretary shall establish a program, to be known as the 'Fuelstar Program', under which stars shall be imprinted on or attached to the label required by paragraph (1).

"(B) GREEN STARS.—Under the Fuelstar Program, a manufacturer may include on the label maintained on an automobile under paragraph (1)—

"(i) 1 green star for any automobile that meets the average fuel economy standard for the model year under section 32902; and

"(ii) 1 additional green star for each 2 miles per gallon by which the automobile exceeds such standard.

"(C) GOLD STARS.—Under the Fuelstar Program, a manufacturer may include a gold star on the label maintained on an automobile under paragraph (1) if the automobile attains a fuel economy of at least 50 miles per gallon.".

SEC. 508. CONTINUED APPLICABILITY OF EXISTING STANDARDS.

Nothing in this title, or the amendments made by this title, shall be construed to affect the application of section 32902 of title 49, United States Code, to passenger automobiles or non-passenger automobiles manufactured before model year 2011.

SEC. 509. NATIONAL ACADEMY OF SCIENCES STUDIES.

(a) IN GENERAL.—As soon as practicable after the date of enactment of this Act, the Secretary of Transportation shall execute an agreement with the National Academy of Sciences to develop a report evaluating vehicle fuel economy standards, including—

(1) an assessment of automotive technologies and costs to reflect developments since the Academy's 2002 report evaluating the corporate average fuel economy standards was conducted;

(2) an analysis of existing and potential technologies that may be used practically to improve automobile and medium-duty and heavy-duty truck fuel economy;

(3) an analysis of how such technologies may be practically integrated into the automotive and medium-duty and heavy-duty truck manufacturing process; and

(4) an assessment of how such technologies may be used to meet the new fuel economy standards under chapter 329 of title 49, United States Code, as amended by this title.

(b) QUINQUENNIAL UPDATES.—After submitting the initial report, the Academy shall update the report at 5 year intervals thereafter through 2025.

(c) REPORT.—The Academy shall submit the report to the Secretary, the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Energy and Commerce, with its findings and recommendations no later than 18 months after the date on which the Secretary executes the agreement with the Academy.

SEC. 510. STANDARDS FOR EXECUTIVE AGENCY AUTOMOBILES.

(a) IN GENERAL.—Section 32917 of title 49, United States Code, is amended to read as follows:

"§ 32917. Standards for Executive Agency automobiles

''(a) FUEL EFFICIENCY.—The head of an Executive agency shall ensure that each new automobile procured by the Executive agency is as fuel efficient as practicable.

''(b) DEFINITIONS.—In this section:

''(1) EXECUTIVE AGENCY.—The term 'Executive agency' has the meaning given that term in section 105 of title 5.

''(2) NEW AUTOMOBILE.—The term 'new automobile', with respect to the fleet of automobiles of an executive agency, means an automobile that is leased for at least 60 consecutive days or bought, by or for the Executive agency, after September 30, 2008. The term does not include any vehicle designed for combat-related missions, law enforcement work, or emergency rescue work.''.

(b) REPORT.—The Administrator of the General Services Administration shall develop a report describing and evaluating the efforts of the heads of the Executive agencies to comply with section 32917 of title 49, United States Code, for fiscal year 2009. The Administrator shall

submit the report to Congress no later than December 31, 2009.

SEC. 511. INCREASING CONSUMER AWARENESS OF FLEXIBLE FUEL AUTOMOBILES.

Section 32908 of title 49, United States Code, is amended by adding at the end the following:

"(g) INCREASING CONSUMER AWARENESS OF FLEXIBLE FUEL AUTOMOBILES.—(1) The Secretary of Energy, in consultation with the Secretary of Transportation, shall prescribe regulations that require the manufacturer of automobiles distributed in interstate commerce for sale in the United States—

"(A) to prominently display a permanent badge or emblem on the quarter panel or tailgate of each such automobile that indicates such vehicle is capable of operating on alternative fuel; and

"(B) to include information in the owner's manual of each such automobile information that describes—

"(i) the capability of the automobile to operate using alternative fuel;

"(ii) the benefits of using alternative fuel, including the renewable nature, and the environmental 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

(2) submit a report to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Energy and Commerce that describes the results of the reevaluation process.

SEC. 513. TIRE FUEL EFFICIENCY CONSUMER INFORMATION.

(a) IN GENERAL.—Chapter 301 of title 49, United States Code, is amended by inserting after section 30123 the following new section:

"§ 30123A. Tire fuel efficiency consumer information

''(a) RULEMAKING.—

''(1) IN GENERAL.—Not later than 18 months after the date of enactment of the Ten-in-Ten Fuel Economy Act, the Secretary of Transportation shall, after notice and opportunity for comment, promulgate rules establishing a national tire fuel efficiency consumer information program for tires designed for use on motor vehicles to educate consumers about the effect of tires on automobile fuel efficiency.

''(2) ITEMS INCLUDED IN RULE.—The rulemaking shall include—

''(A) a national tire fuel efficiency rating system for motor vehicle tires to assist con-

sumers in making more educated tire purchasing decisions;

"(B) requirements for providing information to consumers, including information at the point of sale and other potential information dissemination methods, including the Internet;

"(C) specifications for test methods for manufacturers to use in assessing and rating tires to avoid variation among test equipment and manufacturers; and

"(D) a national tire maintenance consumer education program including, information on tire inflation pressure, alignment, rotation, and tread wear to maximize fuel efficiency.

"(3) APPLICABILITY.—This section shall not apply to tires excluded from coverage under section 575.104(c)(2) of title 49, Code of Federal Regulations, as in effect on date of enactment of the Ten-in-Ten Fuel Economy Act.

"(b) CONSULTATION.—The Secretary shall consult with the Secretary of Energy and the Administrator of the Environmental Protection Agency on the means of conveying tire fuel efficiency consumer information.

"(c) REPORT TO CONGRESS.—The Secretary shall 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

liable to the United States Government for a civil penalty of not more than $50,000 for each violation.''.

(c) Conforming Amendment.—The chapter analysis for chapter 301 of title 49, United States Code, is amended by inserting after the item relating to section 30123 the following:

''30123A. Tire fuel efficiency consumer information.''.

SEC. 514. ADVANCED BATTERY INITIATIVE.

(a) IN GENERAL.—The Secretary of Energy, in consultation with the Secretary of Transportation, shall establish and carry out an Advanced Battery Initiative in accordance with this section to support research, development, demonstration, and commercial application of battery technologies.

(b) INDUSTRY ALLIANCE.—Not later than 180 days after the date of enactment of this Act, the Secretary shall competitively select an Industry Alliance to represent participants who are private, for-profit firms headquartered in the United States, the primary business of which is the manufacturing of batteries.

(c) RESEARCH.—

(1) GRANTS.—The Secretary shall carry out research activities of the Initiative through competitively-awarded grants to—

(A) researchers, including Industry Alliance participants;

(B) small businesses;

(C) National Laboratories; and

(D) institutions of higher education.

(2) INDUSTRY ALLIANCE.—The Secretary shall annually solicit from the Industry Alliance—

(A) comments to identify advanced battery technology and battery systems needs relevant to—

(i) electric drive technology; and

(ii) other applications the Secretary deems appropriate;

(B) an assessment of the progress of research activities of the Initiative; and

(C) assistance in annually updating advanced battery technology and battery systems roadmaps.

(d) AVAILABILITY TO THE PUBLIC.—The information and roadmaps developed under this section shall be available to the public.

(e) PREFERENCE.—In making awards under this subsection, the Secretary shall give preference to participants in the Industry Alliance.

(f) COST SHARING.—In carrying out this section, the Secretary shall require cost sharing in accordance with section 120(b) of title 23, United States Code.

(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section such sums as may be necessary for each of fiscal years 2008 through 2012.

SEC. 515. BIODIESEL STANDARDS.

(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Administrator of the Environmental Protection Agency, in consultation with the Secretary of Transportation and the Secretary of Energy, shall promulgate regulations to ensure that all diesel-equivalent fuels derived from renewable biomass that are introduced into interstate commerce are tested and certified to comply with appropriate American Society for Testing and Materials standards.

(b) DEFINITIONS.—In this section:

(1) BIODIESEL.—

(A) IN GENERAL.—The term ''biodiesel'' means the monoalkyl esters of long chain fatty acids derived from plant or animal matter that meet—

(i) the registration requirements for fuels and fuel additives established by the

Environmental Protection Agency under section 211 of the Clean Air Act (42 U.S.C. 7545); and

(ii) the requirements of the American Society of Testing and Materials D6751.

(B) INCLUSIONS.—The term ''biodiesel'' includes esters described in subparagraph (A) derived from—

(i) animal waste, including poultry fat, poultry waste, and other waste material; and

(ii) municipal solid waste, sludge, and oil derived from wastewater or the treatment of wastewater.

(2) BIODIESEL BLEND.—The term ''biodiesel blend'' means a mixture of biodiesel and diesel fuel, including—

(A) a blend of biodiesel and diesel fuel approximately 5 percent of the content of which is biodiesel (commonly known as ''B5''); and

(B) a blend of biodiesel and diesel fuel approximately 20 percent of the content of which is biodiesel (commonly known as ''B20'').

SEC. 516. USE OF CIVIL PENALTIES FOR RESEARCH AND DEVELOPMENT.

Section 32912 of title 49, United States Code, is amended by adding at the end thereof the following:

''(e) USE OF CIVIL PENALTIES.—For fiscal year 2008 and each fiscal year thereafter, from the total amount deposited in the general fund of the Treasury during the preceding fiscal year from fines, penalties, and other funds obtained through enforcement actions conducted pursuant to this section (including funds obtained under consent decrees), the Secretary of the Treasury, subject to the availability of appropriations, shall—

''(1) transfer 50 percent of such total amount to the account providing appropriations to the Secretary of Transportation for the administration of this chapter, which shall be used by the Secretary to carry out a program of research and development into fuel saving automotive technologies and to support rulemaking under this chapter; and

''(2) transfer 50 percent of such total amount to the Energy Security Fund established by section 517(a) of the Ten-in-Ten Fuel Economy Act.''.

SEC. 517. ENERGY SECURITY FUND AND ALTERNATIVE FUEL GRANT PROGRAM.

(a) ESTABLISHMENT OF FUND.—

(1) IN GENERAL.—There is established in the Treasury a fund, to be known as the ''Energy Security Fund'' (referred to in this section as the ''Fund''), consisting of—

(A) amounts transferred to the Fund under section 32912(e)(2) of title 49, United States Code; and

(B) amounts credited to the Fund under paragraph (2)(C).

(2) INVESTMENT OF AMOUNTS.—

(A) IN GENERAL.—The Secretary of the Treasury shall invest in interest-bearing obligations of the United States such portion of the Fund as is not, in the judgment of the Secretary of the Treasury, required to meet current withdrawals.

(B) SALE OF OBLIGATIONS.—Any obligation acquired by the Fund may be sold by the Secretary of the Treasury at the market price.

(C) CREDITS TO FUND.—The interest on, and the proceeds from the sale or redemption of, any obligations held in the Fund shall be credited to, and form a part of, the Fund in accordance with section 9602 of the Internal Revenue Code of 1986.

(3) USE OF AMOUNTS IN FUND.—Amounts in the Fund shall be made available to the Secretary of Energy, subject to the availability of appropriations, to carry out the grant program under subsection (b).

(b) ALTERNATIVE FUELS GRANT PROGRAM.—

(1) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Secretary of Energy, acting through the Clean Cities Program of the Department of Energy, shall establish and carry out a program under which the Secretary shall provide grants to expand the availability to consumers of alternative fuels (as defined in section 32901(a) of title 49, United States Code).

(2) ELIGIBILITY.—

(A) IN GENERAL.—Except as provided in subparagraph (B), any entity that is eligible to receive assistance under the Clean Cities Program shall be eligible to receive a grant under this subsection.

(B) EXCEPTIONS.—

(i) CERTAIN OIL COMPANIES.—A large, vertically-integrated oil company shall not be eligible to receive a grant under this subsection.

(ii) PROHIBITION OF DUAL BENEFITS.—An entity that receives any other Federal funds for the construction or expansion of alternative refueling infrastructure shall not be eligible to receive a grant under this subsection for the construction or expansion of the same alternative refueling infrastructure.

(C) ENSURING COMPLIANCE.—Not later than 30 days after the date of enactment of this Act, the Secretary of Energy shall promulgate regulations to ensure that, before receiving a grant under this subsection, an eligible entity meets applicable standards relating to the installation, construction, and expansion of infrastructure necessary to increase the availability to consumers of alternative fuels (as defined in section 32901(a) of title 49, United States Code).

(3) MAXIMUM AMOUNT.—

(A) GRANTS.—The amount of a grant provided under this subsection shall not exceed $30,000.

(B) AMOUNT PER STATION.—An eligible entity shall receive not more than $90,000

under this subsection for any station of the eligible entity during a fiscal year.

(4) USE OF FUNDS.—

(A) IN GENERAL.—A grant provided under this subsection shall be used for the construction or expansion of alternative fueling infrastructure.

(B) ADMINISTRATIVE EXPENSES.—Not more than 3 percent of the amount of a grant provided under this subsection shall be used for administrative expenses.

SEC. 518. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary of Transportation $25,000,000 for each of fiscal years 2009 through 2021 to carry out the provisions of chapter 329 of title 49, United States Code.

SEC. 519. APPLICATION WITH CLEAN AIR ACT.

Nothing in this title shall be construed to conflict with the authority provided by sections 202 and 209 of the Clean Air Act (42 U.S.C. 7521 and 7543, respectively).

SEC. 520. ALTERNATIVE FUEL VEHICLE ACTION PLAN.

(a) IN GENERAL.—The Secretary of Transportation shall, establish and implement an action plan which takes 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(c)(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

175 percent of the model year 2002 city fuel economy, as determined by the Secretary of Transportation, by regulation.

(2) OTHER TERMS.—Any term used in this section that is defined in section 32901 of title 49, United States Code, has the meaning given that term in that section.

SEC. 521. STUDY OF THE ADEQUACY OF TRANSPORTATION OF DOMESTICALLY-PRODUCED RENEWABLE FUEL BY RAILROADS AND OTHER MODES OF TRANSPORTATION.

(a) STUDY.—

(1) IN GENERAL.—The Secretary of Transportation and the Secretary of Energy shall jointly conduct a study of the adequacy of transportation of domestically-produced renewable fuels by railroad and other modes of transportation as designated by the Secretaries.

(2) COMPONENTS.—In conducting the study under paragraph (1), the Secretaries shall—

(A) consider the adequacy of existing railroad and other transportation infrastructure, equipment, service and capacity to move the 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-

stances of inadequate competition when inadequate competition is found to prevent domestic producers for renewable fuels from obtaining a fair and reasonable transportation price or acceptable service for the transportation of domestically-produced renewable fuels;

(F) consider whether Federal agencies have adequate legal authority to address railroad and transportation service problems that may be resulting in inadequate supplies of domestically-produced renewable fuel in any area of the United States;

(G) consider what transportation infrastructure capital expenditures may be necessary to ensure the reliable transportation of adequate supplies of domestically-produced renewable fuel at reasonable prices within the United States and which public and private entities should be responsible for making such expenditures; and

(K) provide recommendations on ways to facilitate the reliable transportation of adequate supplies of domestically-produced renewable fuel at reasonable prices.

(b) REPORT.—Not later than 180 days after the date of enactment of this Act, the Secretaries shall jointly submit to the Committee on Commerce, Science and Transportation, the Committee on Energy and Natural Resources, and the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure and the Committee on Energy and Commerce of the House of Representatives a report that describes the results of the study conducted under subsection (a).

TITLE VI—PRICE GOUGING

SEC. 601. SHORT TITLE.

This title may be cited as the ''Petroleum Consumer Price Gouging Protection Act''.

SEC. 602. DEFINITIONS.

In this title:

(1) AFFECTED AREA.—The term ''affected area'' means an area covered by a Presidential declaration of energy emergency.

(2) SUPPLIER.—The term ''supplier'' means any person engaged in the trade or business of selling or reselling, at retail or wholesale, or distributing crude oil, gasoline, or petroleum distillates.

(3) PRICE GOUGING.—The term ''price gouging'' means the charging of an unconscionably excessive price by a supplier in an affected area.

(4) UNCONSCIONABLY EXCESSIVE PRICE.—The term ''unconscionably excessive price'' means an average price charged during an energy emergency declared by the President in an area and for a product subject to the declaration, that—

(A)(i)(I) constitutes a gross disparity from the average price at which it was offered for sale in the usual course of the supplier's business during the 30 days prior to the President's declaration of an energy emergency; and

(II) grossly exceeds the prices at which the same or similar crude oil gasoline or petroleum distillate was readily obtainable by purchasers from other suppliers in the same relevant geographic market within the affected area; or

(ii) represents an exercise of unfair leverage or unconscionable means on the part of the supplier, during a period of declared energy emergency; and

(B) is not attributable to increased wholesale or operational costs, including replacement costs, outside the control of the supplier, in-

curred in connection with the sale of crude oil, gasoline, or petroleum distillates; and is not attributable to local, regional, national, or international market conditions.

(5) COMMISSION.—The term ''Commission'' means the Federal Trade Commission.

SEC. 603. PROHIBITION ON PRICE GOUGING DURING ENERGY EMERGENCIES.

(a) IN GENERAL.—During any energy emergency declared by the President under section 606 of this Act, it is unlawful for any supplier to sell, or offer to sell crude oil, gasoline or petroleum distillates subject to that declaration in, or for use in, the area to which that declaration applies at an unconscionably excessive price.

(b) FACTORS CONSIDERED.—In determining whether a violation of subsection (a) has occurred, there shall be taken into account, among other factors, whether—

(1) the price charged was a price that would reasonably exist in a competitive and freely functioning market; and

(2) the amount of gasoline or other petroleum distillate the seller produced, distributed, or sold during the period the Proclamation was in effect increased over the average amount during the preceding 30 days.

SEC. 604. PROHIBITION ON MARKET MANIPULATION.

It is unlawful for any person, directly or indirectly, to use or employ, in connection with the purchase or sale of crude oil gasoline or petroleum distillates at wholesale, any manipulative or deceptive device or contrivance, in contravention of such rules and regulations as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of United States citizens.

SEC. 605. PROHIBITION ON FALSE INFORMATION.

(a) IN GENERAL.—It is unlawful for any person to report information related to the wholesale price of crude oil gasoline or petroleum distillates to a Federal department or agency if—

(1) that person knew, or reasonably should have known, the information to be false or misleading;

(2) the information was required by law to be reported; and

(3) the person intended the false or misleading data to affect data compiled by the department or agency for statistical or analytical purposes with respect to the market for crude oil, gasoline, or petroleum distillates.

SEC. 606. PRESIDENTIAL DECLARATION OF ENERGY EMERGENCY.

(a) IN GENERAL.—If the President finds that the health, safety, welfare, or economic well-being of the citizens of the United States is at risk because of a shortage or imminent shortage of adequate supplies of crude oil, gasoline or petroleum distillates due to a disruption in the national distribution system for crude oil, gasoline or petroleum distillates (including such a shortage related to a major disaster (as defined in section 102(2) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5122(2))), or significant pricing anomalies in national energy markets for crude oil, gasoline, or petroleum distillates, the President may declare that a Federal energy emergency exists.

(b) SCOPE AND DURATION.—The emergency declaration shall specify—

(1) the period, not to exceed 30 days, for which the declaration applies;

(2) the circumstance or condition necessitating the declaration; and

(3) the area or region to which it applies which may not be limited to a single State; and

(4) the product or products to which it applies.

(c) EXTENSIONS.—The President may—

(1) extend a declaration under subsection (a) for a period of not more than 30 days;

(2) extend such a declaration more than once; and

(3) discontinue such a declaration before its expiration.

SEC. 607. ENFORCEMENT BY THE FEDERAL TRADE COMMISSION.

(a) ENFORCEMENT.—This title shall be enforced by the Federal Trade Commission in the same manner, by the same means, and with the same jurisdiction as though all applicable terms of the Federal Trade Commission Act were incorporated into and made a part of this title. In enforcing section 603 of this Act, the Commission shall give priority to enforcement actions concerning companies with total United States wholesale or retail sales of crude oil, gasoline, and petroleum distillates in excess of $500,000,000 per year but shall not exclude enforcement actions against companies with total United States wholesale sales of $500,000,000 or less per year.

(b) VIOLATION IS TREATED AS UNFAIR OR DECEPTIVE ACT OR PRACTICE.—The violation of any provision of this title shall be treated as an unfair or deceptive act or practice proscribed under a rule issued under section

18(a)(1)(B) of the Federal Trade Commission Act (15 U.S.C. 57a(a)(1)(B)).

(c) COMMISSION ACTIONS.—Following the declaration of an energy emergency by the President under section 606 of this Act, the Commission shall—

(1) maintain within the Commission—

(A) a toll-free hotline that a consumer may call to report an incident of price gouging in the affected area; and

(B) a program to develop and distribute to the public informational materials to assist residents of the affected area in detecting, avoiding, and reporting price gouging;

(2) consult with the Attorney General, the United States Attorney for the districts in which a disaster occurred (if the declaration is related to a major disaster), and State and local law enforcement officials to determine whether any supplier in the affected area is charging or has charged an unconscionably excessive price for crude oil, gasoline, or petroleum distillates in the affected area; and

(3) conduct investigations as appropriate to determine whether any supplier in the affected area has violated section 603 of this Act, and upon such

finding, take any action the Commission determines to be appropriate to remedy the violation.

SEC. 608. ENFORCEMENT BY STATE ATTORNEYS GENERAL.

(a) IN GENERAL.—A State, as parens patriae, may bring a civil action on behalf of its residents in an appropriate district court of the United States to enforce the provisions of section 603 of this Act, or to impose the civil penalties authorized by section 609 for violations of section 603, whenever the attorney general of the State has reason to believe that the interests of the residents of the State have been or are being threatened or adversely affected by a supplier engaged in the sale or resale, at retail or wholesale, or distribution of crude oil, gasoline or petroleum distillates in violation of section 603 of this Act.

(b) NOTICE.—The State shall serve written notice to the Commission of any civil action under subsection (a) prior to initiating the action. The notice shall include a copy of the complaint to be filed to initiate the civil action, except that if it is not feasible for the State to provide such prior notice, the State shall provide such notice immediately upon instituting the civil action.

(c) AUTHORITY TO INTERVENE.—Upon receiving the notice required by subsection (b), the Commission may intervene in the civil action and, upon intervening—

(1) may be heard on all matters arising in such civil action; and

(2) may file petitions for appeal of a decision in such civil action.

(d) CONSTRUCTION.—For purposes of bringing any civil action under subsection (a), nothing in this section shall prevent the attorney general of a State from exercising the powers conferred on the Attorney General by the laws of such State to conduct investigations or to administer oaths or affirmations or to compel the attendance of witnesses or the production of documentary and other evidence.

(e) VENUE; SERVICE OF PROCESS.—In a civil action brought under subsection (a)—

(1) the venue shall be a judicial district in which—

(A) the defendant operates;

(B) the defendant was authorized to do business; or

(C) where the defendant in the civil action is found;

(2) process may be served without regard to the territorial limits of the district or of the State in which the civil action is instituted; and

(3) a person who participated with the defendant in an alleged violation that is being litigated in the civil action may be joined in the civil action without regard to the residence of the person.

(f) LIMITATION ON STATE ACTION WHILE FEDERAL ACTION IS PENDING.—If the Commission has instituted a civil action or an administrative action for violation of this title, a State attorney general, or official or agency of a State, may not bring an action under this section during the pendency of that action against any defendant named in the complaint of the Commission or the other agency for any violation of this title alleged in the Commission's civil or administrative action.

(g) NO PREEMPTION.—Nothing contained in this section shall prohibit an authorized State official from proceeding in State court to enforce a civil or criminal statute of that State.

SEC. 609. PENALTIES.

(a) CIVIL PENALTY.—

(1) IN GENERAL.—In addition to any penalty applicable under the Federal Trade Commission Act, any supplier—

(A) that violates section 604 or section 605 of this Act is punishable by a civil penalty of not more than $1,000,000; and

(B) that violates section 603 of this Act is punishable by a civil penalty of—

(i) not more than $500,000, in the case of an independent small business marketer of gasoline (within the meaning of section 324(c) of the Clean Air Act (42 U.S.C. 7625(c))); and

(ii) not more than $5,000,000 in the case of any other supplier.

(2) METHOD.—The penalties provided by paragraph (1) shall be obtained in the same manner as civil penalties imposed under section 5 of the Federal Trade Commission Act (15 U.S.C. 45).

(3) MULTIPLE OFFENSES; MITIGATING FACTORS.—In assessing the penalty provided by subsection (a)—

(A) each day of a continuing violation shall be considered a separate violation; and

(B) the court shall take into consideration, among other factors, the seriousness of the violation and the efforts of the person committing the violation to remedy the harm caused by the violation in a timely manner.

(b) CRIMINAL PENALTY.—Violation of section 603 of this Act is punishable by a fine of not more than

$5,000,000, imprisonment for not more than 5 years, or both.

SEC. 610. EFFECT ON OTHER LAWS.

(a) OTHER AUTHORITY OF THE COMMISSION.—Nothing in this title shall be construed to limit or affect in any way the Commission's authority to bring enforcement actions or take any other measure under the Federal Trade Commission Act (15 U.S.C. 41 et seq.) or any other provision of law.

(b) STATE LAW.—Nothing in this title preempts any State law.

TITLE VII—ENERGY DIPLOMACY AND SECURITY

SEC. 701. SHORT TITLE.

This title may be cited as the ''Energy Diplomacy and Security Act of 2007''.

SEC. 702. DEFINITIONS.

In this title:

(1) MAJOR ENERGY PRODUCER.—The term ''major energy producer'' means a country that—

(A) had crude oil, oil sands, or natural gas to liquids production of 1,000,000 barrels per day or greater average in the previous year;

(B) has crude oil, shale oil, or oil sands reserves of 6,000,000,000 barrels or greater, as recognized by the Department of Energy;

(C) had natural gas production of 30,000,000,000 cubic meters or greater in the previous year;

(D) has natural gas reserves of 1,250,000,000,000 cubic meters or greater, as recognized by the Department of Energy; or

(E) is a direct supplier of natural gas or liquefied natural gas to the United States.

(2) MAJOR ENERGY CONSUMER.—The term ''major energy consumer'' means a country that—

(A) had an oil consumption average of 1,000,000 barrels per day or greater in the previous year;

(B) had an oil consumption growth rate of 8 percent or greater in the previous year;

(C) had a natural gas consumption of 30,000,000,000 cubic meters or greater in the previous year; or

(D) had a natural gas consumption growth rate of 15 percent or greater in the previous year.

SEC. 703. SENSE OF CONGRESS ON ENERGY DIPLOMACY AND SECURITY.

(a) FINDINGS.—Congress makes the following findings:

(1) It is imperative to the national security and prosperity of the United States to have reliable, affordable, clean, sufficient, and sustainable sources of energy.

(2) United States dependence on oil imports causes tremendous costs to the United States national security, economy, foreign policy, military, and environmental sustainability.

(3) Energy security is a priority for the governments of many foreign countries and increasingly plays a central role in the relations of the United States Government with foreign governments. Global reserves of oil and natural gas are concentrated in a small number of countries. Access to these oil and natural gas supplies depends on the political will of these producing states. Competition between governments for access to oil and natural gas reserves can lead to economic, political, and armed conflict. Oil exporting states have received dramatically increased revenues due to high global prices, enhancing the ability of some of these states to act in a manner threatening to global stability.

(4) Efforts to combat poverty and protect the environment are hindered by the continued predominance of oil and natural gas in meeting global energy needs. Development of renewable energy through sustainable practices will help lead to a reduction in greenhouse gas emissions and enhance international development.

(5) Cooperation on energy issues between the United States Government and the governments of foreign countries is critical for securing the strategic and economic interests of the United States and of partner governments. In the current global energy situation, the energy policies and activities of the governments of foreign countries can have dramatic impacts on United States energy security.

(b) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) United States national security requires that the United States Government have an energy policy that pursues the strategic goal of achieving energy security through access to clean, affordable, sufficient, reliable, and sustainable sources of energy;

(2) achieving energy security is a priority for United States foreign policy and requires continued

and enhanced engagement with foreign governments and entities in a variety of areas, including activities relating to the promotion of alternative and renewable fuels, trade and investment in oil, coal, and natural gas, energy efficiency, climate and environmental protection, data transparency, advanced scientific research, public-private partnerships, and energy activities in international development;

(3) the President should ensure that the international energy activities of the United States Government are given clear focus to support the national security needs of the United States, and to this end, there should be established a mechanism to coordinate the implementation of United States international energy policy among the Federal agencies engaged in relevant agreements and activities; and

(4) the Secretary of State should ensure that energy security is integrated into the core mission of the Department of State, and to this end, there should be established within the Office of the Secretary of State a Coordinator for International Energy Affairs with responsibility for—

(A) developing United States international energy policy in coordination with the Depart-

ment of Energy and other relevant Federal agencies;

(B) working with appropriate United States Government officials to develop and update analyses of the national security implications of global energy developments;

(C) incorporating energy security priorities into the activities of the Department;

(D) coordinating activities with relevant Federal agencies; and

(E) coordinating energy security and other relevant functions currently undertaken by offices within the Bureau of Economic, Business, and Agricultural Affairs, the Bureau of Democracy and Global Affairs, and other offices within the Department of State.

(5) the Department of Energy should be designated as the lead United States Government agency in charge of formulating and coordinating the national energy security policy of the United States, and in furtherance of these goals, there should be established within the Department of Energy an Assistant Secretary of Energy for Energy Security whose responsibilities should include—

(A) directing the development of the national energy security strategy of the United States;

(B) coordinating the national energy security policy of the United States with the Department of Defense, the Department of State, and the National Security Council, as appropriate, to address the impact of, and integrate national security and foreign policy on, the national energy security policy of the United States;

(C) monitoring international and domestic energy developments to gauge their impact on the national energy security policy of the United States and implementing changes in such policy as necessary to maintain the national security and energy security of the United States;

(D) identifying foreign sources of energy critical to the national energy security of the United States and developing strategies in conjunction with the Department of State for ensuring United States access to critical foreign energy resources;

(E) developing strategies for reducing United States dependence on foreign sources of energy, including demand reduction, efficiency improvement, and development of alternative and new sources of domestic energy; and

(F) developing strategies in conjunction with the Department of State for working with major international producers and consumers, including China, Russia, the European Union, and Africa, to minimize politicization of global energy resources while ensuring access through global energy markets.

SEC. 704. STRATEGIC ENERGY PARTNERSHIPS.

(a) FINDINGS.—Congress makes the following findings:

(1) United States Government partnership with foreign governments and entities, including partnership with the private sector, for securing reliable and sustainable energy is imperative to ensuring United States security and economic interests, promoting international peace and security, expanding international development, supporting democratic reform, fostering economic growth, and safeguarding the environment.

(2) Democracy and freedom should be promoted globally by partnership with foreign governments, including in particular governments of emerging democracies such as those of Ukraine and Georgia, in their efforts to reduce their dependency on oil and natural gas imports.

(3) The United States Government and the governments of foreign countries have common needs for adequate, reliable, affordable, clean, and sustainable energy in order to ensure national security, economic growth, and high standards of living in their countries. Cooperation by the United States Government with foreign governments on meeting energy security needs is mutually beneficial. United States Government partnership with foreign governments should include cooperation with major energy consuming countries, major energy producing countries, and other governments seeking to advance global energy security through reliable and sustainable means.

(4) The United States Government participates in hundreds of bilateral and multilateral energy agreements and activities with foreign governments and entities. These agreements and activities should reflect the strategic need for energy security.

(b) STATEMENT OF POLICY.—It is the policy of the United States—

(1) to advance global energy security through cooperation with foreign governments and entities;

(2) to promote reliable, diverse, and sustainable sources of all types of energy;

(3) to increase global availability of renewable and clean sources of energy;

(4) to decrease global dependence on oil and natural gas energy sources; and

(5) to engage in energy cooperation to strengthen strategic partnerships that advance peace, security, and democratic prosperity.

(c) AUTHORITY.—The Secretary of State, in coordination with the Secretary of Energy, should immediately seek to establish and expand strategic energy partnerships with the governments of major energy producers and major energy consumers, and with governments of other countries (but excluding any countries that are ineligible to receive United States economic or military assistance).

(d) PURPOSES.—The purposes of the strategic energy partnerships established pursuant to subsection (c) are—

(1) to strengthen global relationships to promote international peace and security through fostering cooperation in the energy sector on a mutu-

ally beneficial basis in accordance with respective national energy policies;

(2) to promote the policy set forth in subsection (b), including activities to advance—

(A) the mutual understanding of each country's energy needs, priorities, and policies, including interparliamentary understanding;

(B) measures to respond to acute energy supply disruptions, particularly in regard to petroleum and natural gas resources;

(C) long-term reliability and sustainability in energy supply;

(D) the safeguarding and safe handling of nuclear fuel;

(E) human and environmental protection;

(F) renewable energy production;

(G) access to reliable and affordable energy for underdeveloped areas, in particular energy access for the poor;

(H) appropriate commercial cooperation;

(I) information reliability and transparency; and

(J) research and training collaboration;

(3) to advance the national security priority of developing sustainable and clean energy sources, in-

cluding through research and development related to, and deployment of—

(A) renewable electrical energy sources, including biomass, wind, and solar;

(B) renewable transportation fuels, including biofuels;

(C) clean coal technologies;

(D) carbon sequestration, including in conjunction with power generation, agriculture, and forestry; and

(E) energy and fuel efficiency, including hybrids and plug-in hybrids, flexible fuel, advanced composites, hydrogen, and other transportation technologies; and

(4) to provide strategic focus for current and future United States Government activities in energy cooperation to meet the global need for energy security.

(e) DETERMINATION OF AGENDAS.—In general, the specific agenda with respect to a particular strategic energy partnership, and the Federal agencies designated to implement related activities, shall be determined by the Secretary of State and the Secretary of Energy.

(f) USE OF CURRENT AGREEMENTS TO ESTABLISH PARTNERSHIPS.—Some or all of the purposes of the stra-

tegic energy partnerships established under subsection (c) may be pursued through existing bilateral or multilateral agreements and activities. Such agreements and activities shall be subject to the reporting requirements in subsection (g).

(g) REPORTS REQUIRED.—

(1) INITIAL PROGRESS REPORT.—Not later than 180 days after the date of the enactment of this Act, the Secretary of State shall submit to the appropriate congressional committees a report on progress made in developing the strategic energy partnerships authorized under this section.

(2) ANNUAL PROGRESS REPORTS.—

(A) IN GENERAL.—Not later than one year after the date of the enactment of this Act, and annually thereafter for 20 years, the Secretary of State shall submit to the appropriate congressional committees an annual report on agreements entered into and activities undertaken pursuant to this section, including international environment activities.

(B) CONTENT.—Each report submitted under this paragraph shall include details on—

(i) agreements and activities pursued by the United States Government with for-

eign governments and entities, the implementation plans for such agreements and progress measurement benchmarks, United States Government resources used in pursuit of such agreements and activities, and legislative changes recommended for improved partnership; and

(ii) polices and actions in the energy sector of partnership countries pertinent to United States economic, security, and environmental interests.

SEC. 705. INTERNATIONAL ENERGY CRISIS RESPONSE MECHANISMS.

(a) FINDINGS.—Congress makes the following findings:

(1) Cooperation between the United States Government and governments of other countries during energy crises promotes the national security of the United States.

(2) The participation of the United States in the International Energy Program established under the Agreement on an International Energy Program, done at Paris November 18, 1974 (27 UST 1685), including in the coordination of national strategic

petroleum reserves, is a national security asset that—

(A) protects the consumers and the economy of the United States in the event of a major disruption in petroleum supply;

(B) maximizes the effectiveness of the United States strategic petroleum reserve through cooperation in accessing global reserves of various petroleum products;

(C) provides market reassurance in countries that are members of the International Energy Program; and

(D) strengthens United States Government relationships with members of the International Energy Program.

(3) The International Energy Agency projects that the largest growth in demand for petroleum products, other than demand from the United States, will come from China and India, which are not members of the International Energy Program. The Governments of China and India vigorously pursue access to global oil reserves and are attempting to develop national petroleum reserves. Participation of the Governments of China and India in an international petroleum reserve mechanism would

promote global energy security, but such participation should be conditional on the Governments of China and India abiding by customary petroleum reserve management practices.

(4) In the Western Hemisphere, only the United States and Canada are members of the International Energy Program. The vulnerability of most Western Hemisphere countries to supply disruptions from political, natural, or terrorism causes may introduce instability in the hemisphere and can be a source of conflict, despite the existence of major oil reserves in the hemisphere.

(5) Countries that are not members of the International Energy Program and are unable to maintain their own national strategic reserves are vulnerable to petroleum supply disruption. Disruption in petroleum supply and spikes in petroleum costs could devastate the economies of developing countries and could cause internal or interstate conflict.

(6) The involvement of the United States Government in the extension of international mechanisms to coordinate strategic petroleum reserves and 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.

(3) USE OF EXISTING AGREEMENTS TO ESTABLISH MECHANISM.—The Secretary may, after consultation with Congress and in accordance with existing international agreements, including the International Energy Program, include China and India in a petroleum crisis response mechanism through existing or new agreements.

(c) ENERGY CRISIS RESPONSE MECHANISM FOR THE WESTERN HEMISPHERE.—

(1) AUTHORITY.—The Secretary of State, in coordination with the Secretary of Energy, should immediately seek to establish a Western Hemisphere energy crisis response mechanism.

(2) SCOPE.—The mechanism established under paragraph (1) should include—

(A) an information sharing and coordinating mechanism in case of energy supply emergencies;

(B) technical assistance in the development and management of national strategic petroleum reserves within countries of the Western Hemisphere;

(C) technical assistance in developing national programs to meet the requirements of membership in a future international energy ap-

plication procedure as described in subsection (d);

(D) emergency demand restraint measures;

(E) energy switching preparedness and alternative energy production capacity; and

(F) ongoing demand intensity reduction programs.

(3) MEMBERSHIP.—The Secretary should seek to include in the Western Hemisphere energy crisis response mechanism membership for each major energy producer and major energy consumer in the Western Hemisphere and other members of the Hemisphere Energy Cooperation Forum authorized under section 706.

(d) INTERNATIONAL ENERGY PROGRAM APPLICATION PROCEDURE.—

(1) AUTHORITY.—The President should place on the agenda for discussion at the Governing Board of the International Energy Agency, as soon as practicable, the merits of establishing an international energy program application procedure.

(2) PURPOSE.—The purpose of such procedure is to allow countries that are not members of the International Energy Program to apply to the Governing Board of the International Energy Agency

for allocation of petroleum reserve stocks in times of emergency on a grant or loan basis. Such countries should also receive technical assistance for, and be subject to, conditions requiring development and management of national programs for energy emergency preparedness, including demand restraint, fuel switching preparedness, and development of alternative fuels production capacity.

(e) REPORTS REQUIRED.—

(1) PETROLEUM RESERVES.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Energy shall submit to the appropriate congressional committees a report that evaluates the options for adapting the United States national strategic petroleum reserve and the international petroleum reserve coordinating mechanism in order to carry out this section.

(2) CRISIS RESPONSE MECHANISMS.—Not later than 180 days after the date of the enactment of this Act, the Secretary of State, in coordination with the Secretary of Energy, shall submit to the appropriate congressional committees a report on the status of the establishment of the international petroleum crisis response mechanisms described in subsections (b) and (c). The report shall include rec-

ommendations of the Secretary of State and the Secretary of Energy for any legislation necessary to establish or carry out such mechanisms.

(3) EMERGENCY APPLICATION PROCEDURE.—Not later than 60 days after a discussion by the Governing Board of the International Energy Agency of the application procedure described under subsection (d), the President should submit to Congress a report that describes—

(A) the actions the United States Government has taken pursuant to such subsection; and

(B) a summary of the debate on the matter before the Governing Board of the International Energy Agency, including any decision that has been reached by the Governing Board with respect to the matter.

SEC. 706. HEMISPHERE ENERGY COOPERATION FORUM.

(a) FINDINGS.—Congress makes the following findings:

(1) The engagement of the United States Government with governments of countries in the Western Hemisphere is a strategic priority for reducing the potential for tension over energy resources, maintaining and expanding reliable energy supplies,

expanding use of renewable energy, and reducing the detrimental effects of energy import dependence within the hemisphere. Current energy dialogues should be expanded and refocused as needed to meet this challenge.

(2) Countries of the Western Hemisphere can most effectively meet their common needs for energy security and sustainability through partnership and cooperation. Cooperation between governments on energy issues will enhance bilateral relationships among countries of the hemisphere. The Western Hemisphere is rich in natural resources, including biomass, oil, natural gas, coal, and has significant opportunity for production of renewable hydro, solar, wind, and other energies. Countries of the Western Hemisphere can provide convenient and reliable markets for trade in energy goods and services.

(3) Development of sustainable energy alternatives in the countries of the Western Hemisphere can improve energy security, balance of trade, and environmental quality and provide markets for energy technology and agricultural products. Brazil and the United States have led the world in the production of ethanol, and deeper cooperation on

biofuels with other countries of the hemisphere would extend economic and security benefits.

(4) Private sector partnership and investment in all sources of energy is critical to providing energy security in the Western Hemisphere.

(b) HEMISPHERE ENERGY COOPERATION FORUM.—

(1) ESTABLISHMENT.—The Secretary of State, in coordination with the Secretary of Energy, should immediately seek to establish a regional-based ministerial forum to be known as the Hemisphere Energy Cooperation Forum.

(2) PURPOSES.—The Hemisphere Energy Cooperation Forum should seek—

(A) to strengthen relationships between the United States and other countries of the Western Hemisphere through cooperation on energy issues;

(B) to enhance cooperation between major energy producers and major energy consumers in the Western Hemisphere, particularly among the governments of Brazil, Canada, Mexico, the United States, and Venezuela;

(C) to ensure that energy contributes to the economic, social, and environmental en-

hancement of the countries of the Western Hemisphere;

(D) to provide an opportunity for open dialogue and joint commitments between member governments and with private industry; and

(E) to provide participating countries the flexibility necessary to cooperatively address broad challenges posed to the energy supply of the Western Hemisphere that are practical in policy terms and politically acceptable.

(3) ACTIVITIES.—The Hemisphere Energy Cooperation Forum should implement the following activities:

(A) An Energy Crisis Initiative that will establish measures to respond to temporary energy supply disruptions, including through—

(i) strengthening sea-lane and infrastructure security;

(ii) implementing a real-time emergency information sharing system;

(iii) encouraging members to have emergency mechanisms and contingency plans in place; and

(iv) establishing a Western Hemisphere energy crisis response mechanism as authorized under section 705(c).

(B) An Energy Sustainability Initiative to facilitate long-term supply security through fostering reliable supply sources of fuels, including development, deployment, and commercialization of technologies for sustainable renewable fuels within the region, including activities that—

(i) promote production and trade in sustainable energy, including energy from biomass;

(ii) facilitate investment, trade, and technology cooperation in energy infrastructure, petroleum products, natural gas (including liquefied natural gas), energy efficiency (including automotive efficiency), clean fossil energy, renewable energy, and carbon sequestration;

(iii) promote regional infrastructure and market integration;

(iv) develop effective and stable regulatory frameworks;

(v) develop renewable fuels standards and renewable portfolio standards;

(vi) establish educational training and exchange programs between member countries; and

(vii) identify and remove barriers to trade in technology, services, and commodities.

(C) An Energy for Development Initiative to promote energy access for underdeveloped areas through energy policy and infrastructure development, including activities that—

(i) increase access to energy services for the poor;

(ii) improve energy sector market conditions;

(iii) promote rural development though biomass energy production and use;

(iv) increase transparency of, and participation in, energy infrastructure projects;

(v) promote development and deployment of technology for clean and sustainable energy development, including biofuel and clean coal technologies; and

(vi) facilitate use of carbon sequestration methods in agriculture and forestry and linking greenhouse gas emissions reduction programs to international carbon markets.

(c) HEMISPHERE ENERGY INDUSTRY GROUP.—

(1) AUTHORITY.—The Secretary of State, in coordination with the Secretary of Commerce and the Secretary of Energy, should approach the governments of other countries in the Western Hemisphere to seek cooperation in establishing a Hemisphere Energy Industry Group, to be coordinated by the United States Government, involving industry representatives and government representatives from the Western Hemisphere.

(2) PURPOSE.—The purpose of the forum should be to increase public-private partnerships, foster private investment, and enable countries of the Western Hemisphere to devise energy agendas compatible with industry capacity and cognizant of industry goals.

(3) TOPICS OF DIALOGUES.—Topics for the forum should include—

(A) promotion of a secure investment climate;

(B) development and deployment of biofuels and other alternative fuels and clean electrical production facilities, including clean coal and carbon sequestration;

(C) development and deployment of energy efficient technologies and practices, including in the industrial, residential, and transportation sectors;

(D) investment in oil and natural gas production and distribution;

(E) transparency of energy production and reserves data;

(F) research promotion; and

(G) training and education exchange programs.

(d) ANNUAL REPORT.—The Secretary of State, in coordination with the Secretary of Energy, shall submit to the appropriate congressional committees an annual report on the implementation of this section, including the strategy and benchmarks for measurement of progress developed under this section.

SEC. 707. NATIONAL SECURITY COUNCIL REORGANIZATION.

Section 101(a) of the National Security Act of 1947 (50 U.S.C. 402(a)) is amended—

(1) by redesignating paragraphs (5), (6), and (7) as paragraphs (6), (7), and (8), respectively; and

(2) by inserting after paragraph (4) the following:

"(5) the Secretary of Energy;".

SEC. 708. ANNUAL NATIONAL ENERGY SECURITY STRATEGY REPORT.

(a) REPORTS.—

(1) IN GENERAL.—Subject to paragraph (2), on the date on which the President submits to Congress the budget for the following fiscal year under section 1105 of title 31, United States Code, the President shall submit to Congress a comprehensive report on the national energy security of the United States.

(2) NEW PRESIDENTS.—In addition to the reports required under paragraph (1), the President shall submit a comprehensive report on the national energy security of the United States by not later than 150 days after the date on which the President assumes the office of President after a presidential election.

(b) CONTENTS.—Each report under this section shall describe the national energy security strategy of the United States, including a comprehensive description of—

(1) the worldwide interests, goals, and objectives of the United States that are vital to the national energy security of the United States;

(2) the foreign policy, worldwide commitments, and national defense capabilities of the United States necessary—

(A) to deter political manipulation of world energy resources; and

(B) to implement the national energy security strategy of the United States;

(3) the proposed short-term and long-term uses of the political, economic, military, and other authorities of the United States—

(A) to protect or promote energy security; and

(B) to achieve the goals and objectives described in paragraph (1);

(4) the adequacy of the capabilities of the United States to protect the national energy security of the United States, including an evaluation of the balance among the capabilities of all elements of the national authority of the United States to support the implementation of the national energy security strategy; and

(5) such other information as the President determines to be necessary to inform Congress on matters relating to the national energy security of the United States.

(c) CLASSIFIED AND UNCLASSIFIED FORM.—Each national energy security strategy report shall be submitted to Congress in—

(1) a classified form; and

(2) an unclassified form.

SEC. 709. APPROPRIATE CONGRESSIONAL COMMITTEES DEFINED.

In this title, the term ''appropriate congressional committees'' means the Committee on Foreign Relations and the Committee on Energy and Natural Resources of the Senate and the Committee on Foreign Affairs and the Committee on Energy and Commerce of the House of Representatives.

SEC. 710. NO OIL PRODUCING AND EXPORTING CARTELS ACT OF 2007.

(a) SHORT TITLE.—This section may be cited as the ''No Oil Producing and Exporting Cartels Act of 2007'' or ''NOPEC''.

(b) SHERMAN ACT.—The Sherman Act (15 U.S.C. 1 et seq.) is amended by adding after section 7 the following:

"SEC. 7A. OIL PRODUCING CARTELS.

"(a) IN GENERAL.—It shall be illegal and a violation of this Act for any foreign state, or any instrumentality or agent of any foreign state, to act collectively or in combination with any other foreign state, any instrumentality or agent of any other foreign state, or any other person, whether by cartel or any other association or form of cooperation or joint action—

"(1) to limit the production or distribution of oil, natural gas, or any other petroleum product;

"(2) to set or maintain the price of oil, natural gas, or any petroleum product; or

"(3) to otherwise take any action in restraint of trade for oil, natural gas, or any petroleum product;

when such action, combination, or collective action has a direct, substantial, and reasonably foreseeable effect on the market, supply, price, or distribution of oil, natural gas, or other petroleum product in the United States.

"(b) SOVEREIGN IMMUNITY.—A foreign state engaged in conduct in violation of subsection (a) shall not be immune under the doctrine of sovereign immunity from the jurisdiction or judgments of the courts of the United States in any action brought to enforce this section.

"(c) INAPPLICABILITY OF ACT OF STATE DOCTRINE.—No court of the United States shall decline,

based on the act of state doctrine, to make a determination on the merits in an action brought under this section.

"(d) ENFORCEMENT.—The Attorney General of the United States may bring an action to enforce this section in any district court of the United States as provided under the antitrust laws.".

(c) SOVEREIGN IMMUNITY.—Section 1605(a) of title 28, United States Code, is amended—

(1) in paragraph (6), by striking "or" after the semicolon;

(2) in paragraph (7), by striking the period and inserting "; or"; and

(3) by adding at the end the following:

"(8) in which the action is brought under section 7A of the Sherman Act.".

SEC. 711. CONVENTION ON SUPPLEMENTARY COMPENSATION FOR NUCLEAR DAMAGE CONTINGENT COST ALLOCATION.

(a) FINDINGS AND PURPOSE.—

(1) FINDINGS.—Congress finds that—

(A) section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) (commonly known as the "Price-Anderson Act")—

(i) provides a predictable legal framework necessary for nuclear projects; and

(ii) ensures prompt and equitable compensation in the event of a nuclear incident in the United States;

(B) section 170 of that Act, in effect, provides operators of nuclear powerplants with insurance for damage arising out of a nuclear incident and funds the insurance primarily through the assessment of a retrospective premium from each operator after the occurrence of a nuclear incident;

(C) the Convention on Supplementary Compensation for Nuclear Damage, done at Vienna on September 12, 1997, will establish a global system—

(i) to provide a predictable legal framework necessary for nuclear energy projects; and

(ii) to ensure prompt and equitable compensation in the event of a nuclear incident;

(D) the Convention benefits United States nuclear suppliers that face potentially unlimited liability for a nuclear incidents outside the coverage of section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) by replacing a poten-

tially open-ended liability with a predictable liability regime that, in effect, provides nuclear suppliers with insurance for damage arising out of such an incident;

(E) the Convention also benefits United States nuclear facility operators that may be publicly liable for a Price-Anderson incident by providing an additional early source for a Price-Anderson incident by providing an additional early source of funds to compensate damage arising out of the Price-Anderson incident;

(F) the combined operation of the Convention, section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210), and this section will augment the quantity of assured funds available for victims in a wider variety of nuclear incidents while reducing the potential liability of United States suppliers without increasing potential costs to United States operators;

(G) the cost of those benefits is the obligation of the United States to contribute to the supplementary compensation fund established by the Convention;

(H) any such contribution should be funded in a manner that neither upsets settled ex-

pectations based on the liability regime established under section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) nor shifts to Federal taxpayers liability risks for nuclear incidents at foreign installations;

(I) with respect to a Price-Anderson incident, funds already available under section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) should be used; and

(J) with respect to a nuclear incident outside the United States not covered by section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210), a retrospective premium should be prorated among nuclear suppliers relieved from potential liability for which insurance is not available.

(2) PURPOSE.—The purpose of this section is to allocate the contingent costs associated with participation by the United States in the international nuclear liability compensation system established by the Convention on Supplementary Compensation for Nuclear Damage, done at Vienna on September 12, 1997—

(A) with respect to a Price-Anderson incident, by using funds made available under sec-

tion 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) to cover the contingent costs in a manner that neither increases the burdens nor decreases the benefits under section 170 of that Act; and

(B) with respect to a covered incident outside the United States that is not a Price-Anderson incident, by allocating the contingent costs equitably, on the basis of risk, among the class of nuclear suppliers relieved by the Convention from the risk of potential liability resulting from any covered incident outside the United States.

(b) DEFINITIONS.—In this section:

(1) COMMISSION.—The term ''Commission'' means the Nuclear Regulatory Commission.

(2) CONTINGENT COST.—The term ''contingent cost'' means the cost to the United States in the event of a covered incident the amount of which is equal to the amount of funds the United States is obligated to make available under paragraph 1(b) of Article III of the Convention.

(3) CONVENTION.—The term ''Convention'' means the Convention on Supplementary Compensa-

tion for Nuclear Damage, done at Vienna on September 12, 1997.

(4) COVERED INCIDENT.—The term ''covered incident'' means a nuclear incident the occurrence of which results in a request for funds pursuant to Article VII of the Convention.

(5) COVERED INSTALLATION.—The term ''covered installation'' means a nuclear installation at which the occurrence of a nuclear incident could result in a request for funds under Article VII of the Convention.

(6) COVERED PERSON.—

(A) IN GENERAL.—The term ''covered person'' means—

(i) a United States person; and

(ii) an individual or entity (including an agency or instrumentality of a foreign country) that—

(I) is located in the United States; or

(II) carries out an activity in the United States.

(B) EXCLUSIONS.—The term ''covered person'' does not include—

(i) the United States; or

(ii) any agency or instrumentality of the United States.

(7) NUCLEAR SUPPLIER.—The term ''nuclear supplier'' means a covered person (or a successor in interest of a covered person) that—

(A) supplies facilities, equipment, fuel, services, or technology pertaining to the design, construction, operation, or decommissioning of a covered installation; or

(B) transports nuclear materials that could result in a covered incident.

(8) PRICE-ANDERSON INCIDENT.—The term ''Price-Anderson incident'' means a covered incident for which section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) would make funds available to compensate for public liability (as defined in section 11 of that Act (42 U.S.C. 2014)).

(9) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(10) UNITED STATES.—

(A) IN GENERAL.—The term ''United States'' has the meaning given the term in section 11 of the Atomic Energy Act of 1954 (42 U.S.C. 2014).

(B) INCLUSIONS.—The term ''United States'' includes—

(i) the Commonwealth of Puerto Rico;

(ii) any other territory or possession of the United States;

(iii) the Canal Zone; and

(iv) the waters of the United States territorial sea under Presidential Proclamation Number 5928, dated December 27, 1988 (43 U.S.C. 1331 note).

(11) UNITED STATES PERSON.—The term ''United States person'' means—

(A) any individual who is a resident, national, or citizen of the United States (other than an individual residing outside of the United States and employed by a person who is not a United States person); and

(B) any corporation, partnership, association, joint stock company, business trust, unincorporated organization, or sole proprietorship that is organized under the laws of the United States.

(c) USE OF PRICE-ANDERSON FUNDS.—

(1) IN GENERAL.—Funds made available under section 170 of the Atomic Energy Act of 1954 (42

U.S.C. 2210) shall be used to cover the contingent cost resulting from any Price-Anderson incident.

(2) EFFECT.—The use of funds pursuant to paragraph (1) shall not reduce the limitation on public liability established under section 170 e. of the Atomic Energy Act of 1954 (42 U.S.C. 2210(e)).

(d) EFFECT ON AMOUNT OF PUBLIC LIABILITY.—

(1) IN GENERAL.—Funds made available to the United States under Article VII of the Convention with respect to a Price-Anderson incident shall be used to satisfy public liability resulting from the Price-Anderson incident.

(2) AMOUNT.—The amount of public liability allowable under section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) relating to a Price-Anderson incident under paragraph (1) shall be increased by an amount equal to the difference between—

(A) the amount of funds made available for the Price-Anderson incident under Article VII of the Convention; and

(B) the amount of funds used under subsection (c) to cover the contingent cost resulting from the Price-Anderson incident.

(e) RETROSPECTIVE RISK POOLING PROGRAM.—

(1) IN GENERAL.—Except as provided in paragraph (2), each nuclear supplier shall participate in a retrospective risk pooling program in accordance with this section to cover the contingent cost resulting from a covered incident outside the United States that is not a Price-Anderson incident.

(2) DEFERRED PAYMENT.—

(A) IN GENERAL.—The obligation of a nuclear supplier to participate in the retrospective risk pooling program shall be deferred until the United States is called on to provide funds pursuant to Article VII of the Convention with respect to a covered incident that is not a Price-Anderson incident.

(B) AMOUNT OF DEFERRED PAYMENT.—The amount of a deferred payment of a nuclear supplier under subparagraph (A) shall be based on the risk-informed assessment formula determined under subparagraph (C).

(C) RISK-INFORMED ASSESSMENT FORMULA.—

(i) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, and every 5 years thereafter, the Sec-

retary shall, by regulation, determine the risk-informed assessment formula for the allocation among nuclear suppliers of the contingent cost resulting from a covered incident that is not a Price-Anderson incident, taking into account risk factors such as—

(I) the nature and intended purpose of the goods and services supplied by each nuclear supplier to each covered installation outside the United States;

(II) the quantity of the goods and services supplied by each nuclear supplier to each covered installation outside the United States;

(III) the hazards associated with the supplied goods and services if the goods and services fail to achieve the intended purposes;

(IV) the hazards associated with the covered installation outside the United States to which the goods and services are supplied;

(V) the legal, regulatory, and financial infrastructure associated with the covered installation outside the United States to which the goods and services are supplied; and

(VI) the hazards associated with particular forms of transportation.

(ii) FACTORS FOR CONSIDERATION.—In determining the formula, the Secretary may—

(I) exclude—

(aa) goods and services with negligible risk;

(bb) classes of goods and services not intended specifically for use in a nuclear installation;

(cc) a nuclear supplier with a de minimis share of the contingent cost; and

(dd) a nuclear supplier no longer in existence for which there is no identifiable successor; and

(II) establish the period on which the risk assessment is based.

(iii) APPLICATION.—In applying the formula, the Secretary shall not consider any covered installation or transportation for which funds would be available under section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210).

(iv) REPORT.—Not later than 5 years after the date of enactment of this Act and every 5 years thereafter, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on whether there is a need for continuation or amendment of this section, taking into account the effects of the implementation of the Convention on the United States nuclear industry and suppliers.

(f) REPORTING.—

(1) COLLECTION OF INFORMATION.—

(A) IN GENERAL.—The Secretary may collect information necessary for developing and implementing the formula for calculating the deferred payment of a nuclear supplier under subsection (e)(2).

(B) PROVISION OF INFORMATION.—Each nuclear supplier and other appropriate persons shall make available to the Secretary such information, reports, records, documents, and other data as the Secretary determines, by regulation, to be necessary or appropriate to develop and implement the formula under subsection (e)(2)(C).

(2) PRIVATE INSURANCE.—The Secretary shall make available to nuclear suppliers, and insurers of nuclear suppliers, information to support the voluntary establishment and maintenance of private insurance against any risk for which nuclear suppliers may be required to pay deferred payments under this section.

(g) EFFECT ON LIABILITY.—Nothing in any other law (including regulations) limits liability for a covered incident to an amount equal to less than the amount prescribed in paragraph 1(a) of Article IV of the Convention, unless the law—

(1) specifically refers to this section; and

(2) explicitly repeals, alters, amends, modifies, impairs, displaces, or supersedes the effect of this subsection.

(h) PAYMENTS TO AND BY THE UNITED STATES.—

(1) ACTION BY NUCLEAR SUPPLIERS.—

(A) NOTIFICATION.—In the case of a request for funds under Article VII of the Convention resulting from a covered incident that is not a Price-Anderson incident, the Secretary shall notify each nuclear supplier of the amount of the deferred payment required to be made by the nuclear supplier.

(B) PAYMENTS.—

(i) IN GENERAL.—Except as provided in clause (ii), not later than 60 days after receipt of a notification under subparagraph (A), a nuclear supplier shall pay to the general fund of the Treasury the deferred payment of the nuclear supplier required under subparagraph (A).

(ii) ANNUAL PAYMENTS.—A nuclear supplier may elect to prorate payment of the deferred payment required under subparagraph (A) in 5 equal annual payments (including interest on the unpaid balance at the prime rate prevailing at the time the first payment is due).

(C) VOUCHERS.—A nuclear supplier shall submit payment certification vouchers to the

Secretary of the Treasury in accordance with section 3325 of title 31, United States Code.

(2) USE OF FUNDS.—

(A) IN GENERAL.—Amounts paid into the Treasury under paragraph (1) shall be available to the Secretary of the Treasury, without further appropriation and without fiscal year limitation, for the purpose of making the contributions of public funds required to be made by the United States under the Convention.

(B) ACTION BY SECRETARY OF TREASURY.—The Secretary of the Treasury shall pay the contribution required under the Convention to the court of competent jurisdiction under Article XIII of the Convention with respect to the applicable covered incident.

(3) FAILURE TO PAY.—If a nuclear supplier fails to make a payment required under this subsection, the Secretary may take appropriate action to recover from the nuclear supplier—

(A) the amount of the payment due from the nuclear supplier;

(B) any applicable interest on the payment; and

(C) a penalty of not more than twice the amount of the deferred payment due from the nuclear supplier.

(i) LIMITATION ON JUDICIAL REVIEW; CAUSE OF ACTION.—

(1) LIMITATION ON JUDICIAL REVIEW.—

(A) IN GENERAL.—In any civil action arising under the Convention over which Article XIII of the Convention grants jurisdiction to the courts of the United States, any appeal or review by writ of mandamus or otherwise with respect to a nuclear incident that is not a Price-Anderson incident shall be in accordance with chapter 83 of title 28, United States Code, except that the appeal or review shall occur in the United States Court of Appeals for the District of Columbia Circuit.

(B) SUPREME COURT JURISDICTION.—Nothing in this paragraph affects the jurisdiction of the Supreme Court of the United States under chapter 81 of title 28, United States Code.

(2) CAUSE OF ACTION.—

(A) IN GENERAL.—Subject to subparagraph (B), in any civil action arising under the

Convention over which Article XIII of the Convention grants jurisdiction to the courts of the United States, in addition to any other cause of action that may exist, an individual or entity shall have a cause of action against the operator to recover for nuclear damage suffered by the individual or entity.

(B) REQUIREMENT.—Subparagraph (A) shall apply only if the individual or entity seeks a remedy for nuclear damage (as defined in Article I of the Convention) that was caused by a nuclear incident (as defined in Article I of the Convention) that is not a Price-Anderson incident.

(C) EFFECT OF PARAGRAPH.—Nothing in this paragraph limits, modifies, extinguishes, or otherwise affects any cause of action that would have existed in the absence of enactment of this paragraph.

(j) RIGHT OF RECOURSE.—This section does not provide to an operator of a covered installation any right of recourse under the Convention.

(k) PROTECTION OF SENSITIVE UNITED STATES INFORMATION.—Nothing in the Convention or this section requires the disclosure of—

(1) any data that, at any time, was Restricted Data (as defined in section 11 of the Atomic Energy Act of 1954 (42 U.S.C. 2014));

(2) information relating to intelligence sources or methods protected by section 102A(i) of the National Security Act of 1947 (50 U.S.C. 403–1(i)); or

(3) national security information classified under Executive Order 12958 (50 U.S.C. 435 note; relating to classified national security information) (or a successor regulation).

(l) REGULATIONS.—

(1) IN GENERAL.—The Secretary or the Commission, as appropriate, may prescribe regulations to carry out section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) and this section.

(2) REQUIREMENT.—Rules prescribed under this subsection shall ensure, to the maximum extent practicable, that—

(A) the implementation of section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) and this section is consistent and equitable; and

(B) the financial and operational burden on a Commission licensee in complying with

section 170 of that Act is not greater as a result of the enactment of this section.

(3) APPLICABILITY OF PROVISION.—Section 553 of title 5, United States Code, shall apply with respect to the promulgation of regulations under this subsection.

(4) EFFECT OF SUBSECTION.—The authority provided under this subsection is in addition to, and does not impair or otherwise affect, any other authority of the Secretary or the Commission to prescribe regulations.

(m) EFFECTIVE DATE.—This section takes effect on the date of enactment of this Act.

TITLE VIII—MISCELLANEOUS

SEC. 801. STUDY OF THE EFFECT OF PRIVATE WIRE LAWS ON THE DEVELOPMENT OF COMBINED HEAT AND POWER FACILITIES.

(a) STUDY.—

(1) IN GENERAL.—The Secretary, in consultation with the States and other appropriate entities, shall conduct a study of the laws (including regulations) affecting the siting of privately owned electric distribution wires on and across public rights-of-way.

(2) REQUIREMENTS.—The study under paragraph (1) shall include—

(A) an evaluation of—

(i) the purposes of the laws; and

(ii) the effect the laws have on the development of combined heat and power facilities;

(B) a determination of whether a change in the laws would have any operating, reliability, cost, or other impacts on electric utilities and the customers of the electric utilities; and

(C) an assessment of—

(i) whether privately owned electric distribution wires would result in duplicative facilities; and

(ii) whether duplicative facilities are necessary or desirable.

(b) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report that describes the results of the study conducted under subsection (a).

TITLE IX—RENEWABLE PORTFOLIO STANDARD

SEC. 901. RENEWABLE PORTFOLIO STANDARD.

(a) IN GENERAL.—Title VI of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.) is amended by adding at the end the following:

"SEC. 610. FEDERAL RENEWABLE PORTFOLIO STANDARD.

"(a) RENEWABLE ENERGY REQUIREMENT.—

"(1) IN GENERAL.—Each retail electric supplier that sells electricity to electric consumers shall obtain a percentage of the base amount of electricity it sells to electric consumers in any calendar year from new renewable energy or existing renewable energy. The percentage obtained in a calendar year shall not be less than the amount specified in the 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

"(2) MEANS OF COMPLIANCE.—An electric utility shall meet the requirements of paragraph (1) by—

"(A) submitting to the Secretary renewable energy credits issued under subsection (b);

"(B) making alternative compliance payments to the Secretary at the rate of 2 cents per kilowatt hour (as adjusted for inflation under subsection (g)); or

"(C) a combination of activities described in subparagraphs (A) and (B).

"(3) SPECIAL RULE.—Nothing in this section authorizes or requires the Tennessee Valley Authority to make any capital expenditure on new generating capacity, except to the extent that budget authority for the expenditure is provided in advance in an appropriations Act.

"(b) FEDERAL RENEWABLE ENERGY CREDIT TRADING PROGRAM.—

"(1) IN GENERAL.—Not later than July 1, 2009, the Secretary shall establish a Federal renewable energy credit trading program under which electric utilities shall submit to the Secretary renewable energy credits to certify the compliance of the electric utilities with respect to obligations under subsection (a)(1).

"(2) ADMINISTRATION.—As part of the program, the Secretary shall—

"(A) issue tradeable renewable energy credits to generators of electric energy from new renewable energy;

"(B) issue nontradeable renewable energy credits to generators of electric energy from existing renewable energy;

"(C) issue renewable energy credits to electric utilities associated with State renewable portfolio standard compliance mechanisms pursuant to subsection (h);

"(D) ensure that a kilowatt hour, including the associated renewable energy credit, shall be used only once for purposes of compliance with this Act;

"(E) allow double credits for generation from facilities on Indian land, and triple credits for generation from small renewable distributed generators (meaning those no larger than 1 megawatt); and

"(F) ensure that, with respect to a purchaser that, as of the date of enactment of this section, has a purchase agreement from a renewable energy facility placed in service before that date, the credit associated with the generation of renewable energy under the contract is

issued to the purchaser of the electric energy to the extent that the contract does not already provide for the allocation of the Federal credit.

"(3) DURATION.—A credit described in subparagraph (A), (B), or (C) of paragraph (2) may only be used for compliance with this section during the 3-year period beginning on the date of issuance of the credit.

"(4) TRANSFERS.—An electric utility that holds credits in excess of the quantity of credits needed to comply with subsection (a) may transfer the credits to another electric utility in the same utility holding company system.

"(5) DELEGATION OF MARKET FUNCTION.—The Secretary may delegate to an appropriate market-making entity the administration of a national tradeable renewable energy credit market for purposes of creating a transparent national market for the sale or trade of renewable energy credits.

"(c) ENFORCEMENT.—

"(1) CIVIL PENALTIES.—Any electric utility that fails to meet the compliance requirements of subsection (a) shall be subject to a civil penalty.

"(2) AMOUNT OF PENALTY.—The amount of the civil penalty shall be determined by multiplying

the number of kilowatt-hours of electric energy sold to electric consumers in violation of subsection (a) by the greater of—

"(A) the value of the alternative compliance payment, as adjusted to reflect changes for the 12-month period ending the preceding November 30 in the Consumer Price Index for All Urban Consumers published by the Bureau of Labor Statistics of the Department of Labor; or

"(B) 200 percent of the average market value of renewable energy credits during the year in which the violation occurred.

"(3) MITIGATION OR WAIVER.—

"(A) PENALTY.—

"(i) IN GENERAL.—The Secretary may mitigate or waive a civil penalty under this subsection if the electric utility is unable to comply with subsection (a) for a reason outside of the reasonable control of the utility.

"(ii) AMOUNT.—The Secretary shall reduce the amount of any penalty determined under paragraph (2) by the amount paid by the electric utility to a State for

failure to comply with the requirement of a State renewable energy program if the State requirement is greater than the applicable requirement of subsection (a).

"(B) REQUIREMENT.—The Secretary may waive the requirements of subsection (a) for a period of up to 5 years with respect to an electric utility if the Secretary determines that the electric utility cannot meet the requirements because of a hurricane, tornado, fire, flood, earthquake, ice storm, or other natural disaster or act of God beyond the reasonable control of the utility.

"(4) PROCEDURE FOR ASSESSING PENALTY.—The Secretary shall assess a civil penalty under this subsection in accordance with the procedures prescribed by section 333(d) of the Energy Policy and Conservation Act of 1954 (42 U.S.C. 6303).

"(d) STATE RENEWABLE ENERGY ACCOUNT PROGRAM.—

"(1) IN GENERAL.—There is established in the Treasury a State renewable energy account program.

"(2) DEPOSITS.—All money collected by the Secretary from alternative compliance payments and the assessment of civil penalties under this section

shall be deposited into the renewable energy account established pursuant to this subsection.

"(3) USE.—Proceeds deposited in the State renewable energy account shall be used by the Secretary, subject to appropriations, for a program to provide grants to the State agency responsible for developing State energy conservation plans under section 362 of the Energy Policy and Conservation Act (42 U.S.C. 6322) for the purposes of promoting renewable energy production, including programs that promote technologies that reduce the use of electricity at customer sites such as solar water heating.

"(4) ADMINISTRATION.—The Secretary may issue guidelines and criteria for grants awarded under this subsection. State energy offices receiving grants under this section shall maintain such records and evidence of compliance as the Secretary may require.

"(5) PREFERENCE.—In allocating funds under this program, the Secretary shall give preference—

"(A) to States in regions which have a disproportionately small share of economically sustainable renewable energy generation capacity; and

"(B) to State programs to stimulate or enhance innovative renewable energy technologies.

"(e) RULES.—The Secretary shall issue rules implementing this section not later than 1 year after the date of enactment of this section.

"(f) EXEMPTIONS.—This section shall not apply in any calendar year to an electric utility—

"(1) that sold less than 4,000,000 megawatt-hours of electric energy to electric consumers during the preceding calendar year; or

"(2) in Hawaii.

"(g) INFLATION ADJUSTMENT.—Not later than December 31 of each year beginning in 2008, the Secretary shall adjust for inflation the rate of the alternative compliance payment under subsection (a)(2)(B) and the amount of the civil penalty per kilowatt-hour under subsection (c)(2).

"(h) STATE PROGRAMS.—

"(1) IN GENERAL.—Nothing in this section diminishes any authority of a State or political subdivision of a State to adopt or enforce any law or regulation respecting renewable energy or the regulation of electric utilities, but, except as provided in subsection (c)(3), no such law or regulation shall relieve any person of any requirement otherwise appli-

cable under this section. The Secretary, in consultation with States having such renewable energy programs, shall, to the maximum extent practicable, facilitate coordination between the Federal program and State programs.

"(2) REGULATIONS.—

"(A) IN GENERAL.—The Secretary, in consultation with States, shall promulgate regulations to ensure that an electric utility that is subject to the requirements of this section and is subject to a State renewable energy standard receives renewable energy credits if—

"(i) the electric utility complies with State standard by generating or purchasing renewable electric energy or renewable energy certificates or credits; or

"(ii) the State imposes or allows other mechanisms for achieving the State standard, including the payment of taxes, fees, surcharges, or other financial obligations.

"(B) AMOUNT OF CREDITS.—The amount of credits received by an electric utility under this subsection shall equal—

"(i) in the case of subparagraph (A)(i), the renewable energy resulting from

the generation or purchase by the electric utility of existing renewable energy or new renewable energy; and

"(ii) in the case of subparagraph (A)(ii), the pro rata share of the electric utility, based on the contributions to the mechanism made by the electric utility or customers of the electric utility, in the State, of the renewable energy resulting from those mechanisms.

"(C) PROHIBITION ON DOUBLE COUNTING.—The regulations promulgated under this paragraph shall ensure that a kilowatt-hour associated with a renewable energy credit issued pursuant to this subsection shall not be used for compliance with this section more than once.

"(i) DEFINITIONS.—In this section:

"(1) BASE AMOUNT OF ELECTRICITY.—The term 'base amount of electricity' means the total amount of electricity sold by an electric utility to electric consumers in a calendar year, excluding—

"(A) electricity generated by a hydroelectric facility (including a pumped storage fa-

cility but excluding incremental hydropower); and

"(2) DISTRIBUTED GENERATION FACILITY.—The term 'distributed generation facility' means a facility at a customer site.

"(3) EXISTING RENEWABLE ENERGY.—The term 'existing renewable energy' means, except as provided in paragraph (7)(B), electric energy generated at a facility (including a distributed generation facility) placed in service prior to January 1, 2001, from solar, wind, or geothermal energy, ocean energy, biomass (as defined in section 203(a) of the Energy Policy Act of 2005), or landfill gas.

"(4) GEOTHERMAL ENERGY.—The term 'geothermal energy' means energy derived from a geothermal deposit (within the meaning of section 613(e)(2) of the Internal Revenue Code of 1986).

"(5) INCREMENTAL GEOTHERMAL PRODUCTION.—

"(A) IN GENERAL.—The term 'incremental geothermal production' means for any year the excess of—

"(i) the total kilowatt hours of electricity produced from a facility (including a

distributed generation facility) using geothermal energy; over

"(ii) the average annual kilowatt hours produced at such facility for 5 of the previous 7 calendar years before the date of enactment of this section after eliminating the highest and the lowest kilowatt hour production years in such 7-year period.

"(B) SPECIAL RULE.—A facility described in subparagraph (A) that was placed in service at least 7 years before the date of enactment of this section shall, commencing with the year in which such date of enactment occurs, reduce the amount calculated under subparagraph (A)(ii) each year, on a cumulative basis, by the average percentage decrease in the annual kilowatt hour production for the 7-year period described in subparagraph (A)(ii) with such cumulative sum not to exceed 30 percent.

"(6) INCREMENTAL HYDROPOWER.—The term 'incremental hydropower' means additional energy generated as a result of efficiency improvements or capacity additions made on or after January 1, 2001, or the effective date of an existing applicable State renewable portfolio standard program at a hy-

droelectric facility that was placed in service before that date. The term does not include additional energy generated as a result of operational changes not directly associated with efficiency improvements or capacity additions. Efficiency improvements and capacity additions shall be measured on the basis of the same water flow information used to determine a historic average annual generation baseline for the hydroelectric facility and certified by the Secretary or the Federal Energy Regulatory Commission.

"(7) NEW RENEWABLE ENERGY.—The term 'new renewable energy' means—

"(A) electric energy generated at a facility (including a distributed generation facility) placed in service on or after January 1, 2001, from—

"(i) solar, wind, or geothermal energy or ocean energy;

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

"(iii) landfill gas; or

"(iv) incremental hydropower; and

"(B) for electric energy generated at a facility (including a distributed generation facility) placed in service before January 1, 2001—

"(i) the additional energy above the average generation during the period beginning on January 1, 1998, and ending on January 1, 2001, at the facility from—

"(I) solar or wind energy or ocean energy;

"(II) biomass (as defined in section 203(b) of the Energy Policy Act of 2005 (42 U.S.C. 15852(b));

"(III) landfill gas; or

"(IV) incremental hydropower; and

"(ii) incremental geothermal production.

"(8) OCEAN ENERGY.—The term 'ocean energy' includes current, wave, tidal, and thermal energy.

"(9) RETAIL ELECTRIC SUPPLIER.—The term 'retail electric supplier' means a person that sells electric energy to electric consumers and sold not less than 1,000,000 megawatt-hours of electric energy to electric consumers for purposes other than resale during the preceding calendar year; except

that such term does not include the United States, a State or any political subdivision of a State, or any agency, authority, or instrumentality of any one or more of the foregoing, or a rural electric cooperative.

"(j) SUNSET.—This section expires on December 31, 2030.".

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. prec. 2601) is amended by adding at the end of the items relating to title VI the following:

"Sec. 610. Renewable portfolio standard.".

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