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S. 1321

[Report No. 110–65]

To enhance the energy security of the United States by promoting biofuels, energy efficiency, and carbon capture and storage, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 7, 2007

Mr. BINGAMAN, from the Committee on Energy and Natural Resources, reported the following original bill; which was read twice and placed on the calendar

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A BILL

To enhance the energy security of the United States by promoting biofuels, energy efficiency, and carbon capture and storage, and for other purposes.

Be it enacted by the Senate and House of Representatives 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 ''Energy Savings Act of 2007''.

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

SEC. 2. DEFINITION OF SECRETARY.

In this Act, the term ''Secretary'' means the Secretary of Energy.

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 produced through the conversion of organic matter from renewable biomass; and

(vi) butanol or higher alcohols produced through the conversion of organic matter from renewable biomass.

(2) CELLULOSIC BIOMASS ETHANOL.—The term ''cellulosic biomass ethanol'' means ethanol derived 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) biomass (as defined by section 210 of the Energy Policy Act of 2005 (42 U.S.C. 15855)) (excluding the bole of old-growth trees of a forest from the late successional state of forest development) that is harvested where permitted by law and in accordance with applicable land management plans from—

(i) National Forest System land; or

(ii) public lands (as defined in section 103 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702)); 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, boiler 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, boiler, or furnace.

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

(i) conventional biofuel; and

(ii) advanced biofuel.

(6) 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, home heating oil, and boiler fuel 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 built 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

considered to be the equivalent of 2.5 gallons of renewable fuel.

(d) CREDIT PROGRAM.—

(1) IN GENERAL.—The President, in consultation with the Secretary and the Administrator of the Environmental Protection Agency, shall implement a credit program to manage the renewable fuel requirement of this section in a manner consistent with the credit 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) MARKET TRANSPARENCY.—In carrying out the credit program under this subsection, the President shall facilitate price transparency in markets for the sale and trade of credits, with due regard for the public interest, the integrity of those markets, fair competition, and the protection of consumers and agricultural producers.

(e) SEASONAL VARIATIONS IN RENEWABLE FUEL USE.—

(1) STUDY.—For each of calendar years 2008 through 2022, the Administrator of the Energy Information Administration shall conduct a study of renewable fuel blending to determine whether there

are excessive seasonal variations in the use of renewable fuel.

(2) REGULATION OF EXCESSIVE SEASONAL 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 90 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.

(4) REPORT TO CONGRESS.—If the Secretary makes a determination under paragraph (1)(B) that railroad transportation of domestically-produced renewable fuel is inadequate, based on either the service provided by, or the price of, the railroad trans-

portation, the President shall submit to Congress a report that describes—

(A) the actions the Federal Government is taking, or will take, to address the inadequacy, including a description of the specific powers of the applicable Federal agencies; and

(B) if the President finds that there are inadequate Federal powers to address the railroad service or pricing inadequacies, recommendations for legislation to provide appropriate powers to Federal agencies to address the inadequacies.

(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) EFFECTIVE DATE.—Except as otherwise specifically provided in this section, this section takes effect on January 1, 2008.

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 sec-

tion 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).

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 es-

tablish 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 esti-

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

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

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

rived 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.

(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.

(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 manufactured 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.—Within 180 days following the date of enactment of this Act, the President shall promulgate regulations to ensure that only biodiesel that is tested and certified to comply with the American Society for Testing and Materials (ASTM) 6751 standard is introduced into interstate commerce.

(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.

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 Department 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, identifying 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 elec-

tricity 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 THE ADEQUACY OF RAILROAD TRANSPORTATION OF DOMESTICALLY-PRODUCED RENEWABLE FUEL.

(a) STUDY.—

(1) IN GENERAL.—The Secretary, in consultation with the Secretary of Transportation, shall conduct a study of the adequacy of railroad transportation of domestically-produced renewable fuel.

(2) COMPONENTS.—In conducting the study under paragraph (1), the Secretary shall consider—

(A) the adequacy of, and appropriate location for, tracks that have sufficient capacity, and are in the appropriate condition, to move the necessary quantities of domestically-produced renewable fuel within the timeframes required by section 111;

(B) the adequacy of the supply of railroad tank cars, locomotives, and rail crews to move the necessary quantities of domestically-produced renewable fuel in a timely fashion;

(C)(i) the projected costs of moving the domestically-produced renewable fuel using railroad transportation; and

(ii) the impact of the projected costs on the marketability of the domestically-produced renewable fuel;

(D) whether there is adequate railroad competition to ensure—

(i) a fair price for the railroad transportation of domestically-produced renewable fuel; and

(ii) acceptable levels of service for railroad transportation of domestically-produced renewable fuel;

(E) any rail infrastructure capital costs that the railroads indicate should be paid by the producers or distributors of domestically-produced renewable fuel;

(F) whether Federal agencies have adequate legal authority to ensure a fair and reasonable transportation price and acceptable levels of service in cases in which the domestically-produced renewable fuel source does not have access to competitive rail service;

(G) whether Federal agencies have adequate legal authority to address railroad service problems that may be resulting in inadequate supplies of domestically-produced renewable fuel in any area of the United States; and

(H) any recommendations for any additional legal authorities for Federal agencies to ensure the reliable railroad 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 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 conducted under subsection (a).

SEC. 150. 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.

TITLE II—ENERGY EFFICIENCY PROMOTION

SEC. 201. SHORT TITLE.

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

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

Lamp Type	Nominal Lamp Wattage	Minimum CRI	Minimum Average Lamp Efficacy (LPW)	Effective Date (Period of Months)
4-foot medium bi-pin	>35 W	69	75.0	36
	≤35 W	45	75.0	36
2-foot U-shaped	>35 W	69	68.0	36
	≤35 W	45	64.0	36
8-foot slimline	65 W	69	80.0	18
	≤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

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

"(C) EXEMPTIONS.—The standards 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 para-

graph (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) 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).

(i) 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 con-

struction, alteration, or repair that is financed, in whole or in part, by a grant under this section shall be paid wages at rates not less than those prevailing on similar construction in the locality, as determined by the Secretary of Labor in accordance with sections 3141–3144, 3146, and 3147 of title 40, United States Code; and

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

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

(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 prescribe a minimum level of energy efficiency or a maximum quantity of energy use and, in the case of a showerhead, faucet, water closet, urinal, clothes washer, and dishwasher, water use, for a covered product, determined in accordance with test procedures prescribed under section 323.

''(B) INCLUSIONS.—The term 'energy conservation standard' includes—

''(i) 1 or more design requirements, as part of a consensus agreement under section 325(hh); and

''(ii) any other requirements that the Secretary may prescribe under subsections (o) and (r) of section 325.

''(C) EXCLUSION.—The term 'energy conservation standard' does not include a performance standard for a component of a finished covered product.''.

SEC. 222. REGIONAL EFFICIENCY STANDARDS FOR HEATING AND COOLING PRODUCTS.

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

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

(2) by inserting after subsection (d) the following:

''(e) REGIONAL EFFICIENCY STANDARDS FOR HEATING AND COOLING PRODUCTS.—

''(1) IN GENERAL.—

''(A) DETERMINATION.—The Secretary may determine, after notice and comment, that more stringent Federal energy conservation standards are appropriate for furnaces, boilers, or central air conditioning equipment than applicable Federal energy conservation standards.

''(B) FINDING.—The Secretary may determine that more stringent standards are appropriate for up to 2 different regions only after 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.

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

''(hh) EXPEDITED RULEMAKING FOR CONSENSUS STANDARDS.—

''(1) IN GENERAL.—The Secretary shall conduct an expedited rulemaking based on an energy conservation standard or test procedure recommended by interested persons, if—

''(A) the interested persons (demonstrating significant and broad support from manufacturers of a covered product, States, utilities, and environmental, energy efficiency, and consumer advocates) submit a joint comment or petition recommending a consensus energy conservation standard or test procedure; and

''(B) the Secretary determines that the joint comment or petition includes evidence that (assuming no other evidence were considered) provides an adequate basis for determining that the proposed consensus energy conservation standard or test procedure proposed in the joint comment or petition complies with the provisions and criteria of this Act (including subsection (o)) that apply to the type or class of covered products covered by the joint comment or petition.

''(2) PROCEDURE.—

''(A) IN GENERAL.—Notwithstanding subsection (p) or section 336(a), if the Secretary receives a joint comment or petition that meets the criteria described in paragraph (1), the Secretary shall conduct an expedited rulemaking with respect to the standard or test procedure

proposed in the joint comment or petition in accordance with this paragraph.

"(B) ADVANCED NOTICE OF PROPOSED RULEMAKING.—If no advanced notice of proposed rulemaking has been issued under subsection (p)(1) with respect to the rulemaking covered by the joint comment or petition, the requirements of subsection (p) with respect to the issuance of an advanced notice of proposed rulemaking shall not apply.

"(C) PUBLICATION OF DETERMINATION.—Not later than 60 days after receipt of a joint comment or petition described in paragraph (1)(A), the Secretary shall publish a description of a determination as to whether the proposed standard or test procedure covered by the joint comment or petition meets the criteria described in paragraph (1).

"(D) PROPOSED RULE.—

"(i) PUBLICATION.—If the Secretary determines that the proposed consensus standard or test procedure covered by the joint comment or petition meets the criteria described in paragraph (1), not later than 30 days after the determination, the

Secretary shall publish a proposed rule proposing the consensus standard or test procedure covered by the joint comment or petition.

''(ii) PUBLIC COMMENT PERIOD.—Notwithstanding paragraphs (2) and (3) of subsection (p), the public comment period for the proposed rule shall be the 30–day period beginning on the date of the publication of the proposed rule in the Federal Register.

''(iii) PUBLIC HEARING.—Notwithstanding section 336(a), the Secretary may waive the holding of a public hearing with respect to the proposed rule.

''(E) FINAL RULE.—Notwithstanding subsection (p)(4), the Secretary—

''(i) may publish a final rule at any time after the 60-day period beginning on the date of publication of the proposed rule in the Federal Register; and

''(ii) shall publish a final rule not later than 120 days after the date of publication of the proposed rule in the Federal Register.''.

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 of the Energy Policy and Conservation Act (42 U.S.C. 6295) is amended by striking subsection (m) and inserting the following:

''(m) FURTHER RULEMAKING.—

''(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 be amended based on the criteria described 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.

''(4) APPLICATION OF AMENDMENT.—An amendment prescribed under this subsection shall apply to a product manufactured after a date that is 5 years after—

''(A) the effective date of the previous amendment made pursuant to this part; or

''(B) if the previous final rule published under this part did not amend the standard, the earliest date by which a previous amendment could have been in effect, except that in no case may an amended standard apply to products

manufactured within 3 years after publication of the final rule establishing a standard.''.

(c) STANDARDS.—Section 342(a) of the Energy Policy and Conservation Act (42 U.S.C. 6313(a)) is amended by striking paragraph (6) and inserting the following:

''(6) AMENDED ENERGY EFFICIENCY STANDARDS.—

''(A) 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, packaged terminal central and commercial 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.

''(B) AMENDED UNIFORM NATIONAL STANDARD FOR PRODUCTS.—

"(i) IN GENERAL.—Except as provided in clause (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 subparagraph (A), the Secretary shall establish an amended uniform national standard for the product at the minimum level for the applicable effective date specified in the amended ASHRAE/IES Standard 90.1.

"(ii) MORE STRINGENT STANDARD.—Clause (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.

"(C) RULE.—If the Secretary makes a determination described in subparagraph (B)(ii) for a product described in subparagraph (A), not later than 30 months after the date of pub-

lication of the amendment to the ASHRAE/IES Standard 90.1 for the product, the Secretary shall issue the rule establishing the amended standard.

''(D) AMENDMENT OF STANDARDS.—

''(i) IN GENERAL.—After issuance of the most recent final rule for a product under this subsection, 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, the Secretary shall publish a final rule to determine whether standards for the product should be amended based on the criteria described in subparagraph (A).

''(ii) 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.

''(iii) FINAL RULE.—Not later than 3 years after a positive determination under clause (i), the Secretary shall publish a final rule amending the standard for the product.''.

(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 PRODUCTS.

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act or not later than 18 months

after test procedures have been developed for a consumer electronics product category described in subsection (b), whichever is later, the Federal Trade Commission, in consultation with the Secretary and the Administrator of the Environmental Protection Agency shall promulgate regulations, in accordance with the Energy Star program and in a manner that minimizes, to the maximum extent practicable, duplication with respect to the requirements of that program and other national and international energy labeling programs, to add the consumer electronics product categories described in subsection (b) to the Energy Guide labeling program of the Commission.

(b) CONSUMER ELECTRONICS PRODUCT CATEGORIES.—The consumer electronics product categories referred to in subsection (a) are the following:

(1) Televisions.

(2) Personal computers.

(3) Cable or satellite set-top boxes.

(4) Stand-alone digital video recorder boxes.

(5) Computer monitors.

(c) LABEL PLACEMENT.—The regulations shall include specific requirements for each product on the placement of Energy Guide labels.

(d) DEADLINE FOR LABELING.—Not later than 1 year after the date of promulgation of regulations under

subsection (a), the Commission shall require labeling electronic products described in subsection (b) in accordance with this section (including the regulations).

(e) AUTHORITY TO INCLUDE ADDITIONAL PRODUCT CATEGORIES.—The Commission may add additional product categories to the Energy Guide labeling program if the product categories include products, as determined by the Commission—

(1) that have an annual energy use in excess of 100 kilowatt hours per year; and

(2) for which there is a significant difference in energy use between the most and least efficient products.

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:

Boiler Type	Minimum Annual Fuel Utilization Efficiency	Design 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 ef-

ficiency 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, 2012.—Not later than January 1, 2012, the Secretary shall publish a final rule deter-

mining whether to amend the standards in effect for residential clothes washers manufactured on or after January 1, 2012, 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:

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

(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).

(6) PROGRAM.—The term ''program'' means the industrial efficiency program established under subsection (b).

(b) ESTABLISHMENT OF PROGRAM.—The Secretary shall establish a program under which the Secretary, in cooperation with materials manufacturers, companies engaged in energy-intensive commercial applications, and national industry trade associations representing the manufactures and companies, shall support, develop, and promote the use of new materials manufacturing and industrial and commercial processes, technologies, and techniques to optimize energy efficiency and the economic competitiveness of the United States.

(c) PARTNERSHIPS.—

(1) IN GENERAL.—As part of the program, the Secretary shall—

(A) establish energy efficiency and utilization partnerships between the Secretary and eligible entities to conduct research on, develop, and demonstrate new processes, technologies, and operating practices and techniques to significantly improve energy efficiency and utilization by materials manufacturers and in energy-intensive commercial applications, including the 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 transportation technology 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 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.

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 Secretary, based on recommendations of the National Academy of Sciences.

(ii) ENERGY STORAGE INDUSTRY.—The Council shall consist primarily of representatives of the energy storage industry of the United States.

(iii) CHAIRPERSON.—The Secretary shall select a Chairperson for the Council from among the members appointed under clause (i)

(C) MEETINGS.—

(i) IN GENERAL.—The Council shall meet not less than once a year.

(ii) FEDERAL ADVISORY COMMITTEE ACT.—The Federal Advisory Committee Act (5 U.S.C. App. 2) shall apply to a meeting of the Council.

(D) PLANS.—No later than 1 year after the date of enactment of this Act, in conjunction with the Secretary, the Council shall develop 5-year plans for integrating basic and applied research so that the United States retains a globally competitive domestic energy storage industry for motor transportation and electricity 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 trans-

portation and electricity transmission and distribution, including—

(i) materials design;

(ii) materials synthesis and characterization;

(iii) electrolytes, including bioelectrolytes;

(iv) surface and interface dynamics; and

(v) modeling and simulation.

(B) NANOSCIENCE CENTERS.—The Secretary shall ensure that the nanoscience centers of the Department—

(i) support research in the areas described in subparagraph (A), as part of the mission of the centers; and

(ii) coordinate activities of the centers with activities of the Council.

(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;

(D) compressed air energy systems;

(E) power conditioning electronics; and

(F) manufacturing technologies for energy storage systems.

(6) ENERGY STORAGE RESEARCH CENTERS.—

(A) IN GENERAL.—The Secretary shall establish, through competitive bids, 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 and the Under Secretary of Energy 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))).

(G) INTELLECTUAL PROPERTY.—A participant shall be provided appropriate intellectual property rights commensurate with the nature of the participation agreement of the participant.

(7) REVIEW BY NATIONAL ACADEMY OF SCIENCES.—Not later than 5 years after the date of

enactment of this Act, the Secretary shall offer to enter into an arrangement with the National Academy of Sciences to assess the performance of the Department in making the United States globally competitive in energy storage systems for motor transportation and electricity transmission and distribution.

(8) 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) DEFINITION OF ELECTRIC DRIVE VEHICLE.—In this subsection, the term ''electric drive vehicle'' means a precommercial vehicle that—

(A) draws motive power from a battery with at least 4 kilowatt-hours of electricity;

(B) can be recharged from an external source of electricity for motive power; and

(C) 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 electric drive vehicles.

(3) ELIGIBILITY.—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.

(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 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 OIL SAVING TRANSPORTATION DEPLOYMENT PROGRAM.—

(1) DEFINITION OF QUALIFIED TRANSPORTATION PROJECT.—In this subsection, the term ''qualified transportation project'' means—

(A) a project that simultaneously reduces emissions of criteria pollutants, greenhouse gas emissions, and petroleum usage by at least 40 percent as compared to commercially available, petroleum-based technologies used in nonroad vehicles; and

(B) an electrification project involving onroad commercial trucks, rail transportation, or ships, and any associated infrastructure (including any panel upgrades, battery chargers, trenching, and alternative fuel infrastructure).

(2) PROGRAM.—Not later than 1 year after the date of enactment of this Act, the Secretary, in consultation with the Secretary of Transportation, shall establish a program to provide grants to eligible entities for the conduct of qualified transportation projects.

(3) PRIORITY.—In providing grants under this subsection, the Secretary shall give priority to large-scale projects and large-scale aggregators of projects.

(4) 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.

(5) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to carry this subsection $90,000,000 for each of fiscal years 2008 through 2013.

Subtitle D—Setting Energy Efficiency Goals

SEC. 251. NATIONAL GOALS FOR ENERGY SAVINGS IN TRANSPORTATION.

(a) GOALS.—The goals of the United States are to reduce gasoline usage in the United States from the levels projected under subsection (b) by—

(1) 20 percent by calendar year 2017;

(2) 35 percent by calendar year 2025; and

(3) 45 percent by calendar year 2030.

(b) MEASUREMENT.—For purposes of subsection (a), reduction in gasoline usage shall be measured from the estimates for each year in subsection (a) contained in the reference case in the report of the Energy Information Administration entitled ''Annual Energy Outlook 2007''.

(c) 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 reduction in gasoline usage established under subsection (a).

(2) PUBLIC INPUT AND COMMENT.—The Secretary shall develop the plan in a manner that provides appropriate opportunities for public comment.

(d) 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.

(e) 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) to the maximum extent practicable, verify energy savings resulting from the policies.

(f) REPORT TO CONGRESS AND PUBLIC.—The Secretary shall submit to Congress, and make available to the public, the initial strategic plan developed under subsection (c) and each updated plan.

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 ap-

propriate 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.

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.

''(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 from a public utility service 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, and if 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 building'' 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 con-

trols, 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 chang-

ing the purpose for which the funds are appropriated.

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 ef-

ficiency 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 energy 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 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;

''(2) to reduce the total energy use of the States 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 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) 70 percent to eligible units of local government; and

''(ii) 30 percent to States.

''(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.

''(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 cri-

teria under subparagraph (B)(ii) or (C)(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) or (C)(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, 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 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, 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. WORKFORCE TRAINING.

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) WORKFORCE TRAINING.—

''(1) IN GENERAL.—The Secretary, in cooperation with the Secretary of Labor, shall promulgate regulations to implement a program to provide workforce training to meet the high demand for workers skilled in the energy efficiency and renewable energy industries.

''(2) CONSULTATION.—In carrying out this subsection, the Secretary shall consult with representatives of the energy efficiency and renewable energy

industries concerning skills that are needed in those industries.''.

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.

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 of carbon dioxide;

''(ii) development of new or improved technologies that reduce the cost and increase the efficacy of the 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; and

''(v) research and development of new and improved technologies for carbon use, including recycling and reuse of carbon dioxide.

''(2) CARBON CAPTURE DEMONSTRATION PROJECT.—

''(A) IN GENERAL.—The Secretary shall carry out a demonstration of large-scale carbon dioxide capture from an appropriate gasification facility selected by the Secretary.

''(B) LINK TO STORAGE ACTIVITIES.—The Secretary may require the use of carbon dioxide from the project carried out under subparagraph (A) in a field testing validation activity under this section.

''(3) 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 geo-

thermal resources of low permeability or porosity; and

''(vi) deep geologic systems containing basalt formations.

''(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.

''(4) LARGE-SCALE TESTING AND DEPLOYMENT.—

''(A) IN GENERAL.—The Secretary shall conduct not less than 7 initial large-volume sequestration tests for geological containment of carbon dioxide (at least 1 of which shall be international in scope) to validate information on the cost and feasibility of commercial deployment of technologies for geological containment of carbon dioxide.

''(B) DIVERSITY OF FORMATIONS TO BE STUDIED.—In selecting formations for study under this paragraph, the Secretary shall consider a variety of geological formations across the United States, and require characterization and modeling of candidate formations, as determined by the Secretary.

''(5) PREFERENCE IN PROJECT SELECTION FROM MERITORIOUS PROPOSALS.—In making competitive awards under this subsection, subject to the requirements of section 989, the Secretary shall give preference to proposals from partnerships among industrial, academic, and government entities.

''(6) COST SHARING.—Activities under this subsection shall be considered research and development activities that are subject to the cost-sharing requirements of section 988(b).

''(7) 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 requirements) 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 Carbon Sequestration Atlas of the United States and Canada that was completed by the Department of Energy in April 2006.

(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, insti-

tutions 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 (including 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 ca-

pacity 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 relevant 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 shall incorporate the results of the assessment using the NatCarb database, to the maximum extent practicable.

(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) INDUSTRIAL SOURCES OF CARBON DIOXIDE DEFINED.—In this section, the term ''industrial sources of carbon dioxide'' means one or more facilities to—

(1) generate electric energy from fossil fuels;

(2) refine petroleum;

(3) manufacture iron or steel;

(4) manufacture cement or cement clinker;

(5) manufacture commodity chemicals (including from coal gasification); or

(6) manufacture transportation fuels from coal.

(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 carries out the large-scale capture (including purification and compression) of carbon dioxide, as well as the cost of transportation and injection of carbon dioxide.

(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 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.

Calendar No. 140

110TH CONGRESS
1ST SESSION

S. 1321

[Report No. 110–65]

A BILL

To enhance the energy security of the United States by promoting biofuels, energy efficiency, and carbon capture and storage, and for other purposes.

MAY 7, 2007

Read twice and placed on the calendar