110TH CONGRESS
1ST SESSION

S. 1554

To comprehensively address challenges relating to energy independence, air pollution, and climate change facing the United States.

IN THE SENATE OF THE UNITED STATES

JUNE 6, 2007

Ms. COLLINS (for herself and Mr. LIEBERMAN) introduced the following bill; which was read twice and referred to the Committee on Finance

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A BILL

To comprehensively address challenges relating to energy independence, air pollution, and climate change facing the United States.

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 Independence, Clean Air, and Climate Security Act of 2007''.

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

TITLE I—ENERGY INDEPENDENCE THROUGH TRANSPORTATION FUEL EFFICIENCY

Subtitle A—Automobile Fuel Economy Standards

SEC. 101. SHORT TITLE.

This subtitle may be cited as the ''Fuel Economy Improvement Act''.

SEC. 102. AVERAGE FUEL ECONOMY STANDARDS FOR PASSENGER AUTOMOBILES AND LIGHT TRUCKS.

(a) INCREASED STANDARDS.—Section 32902 of title 49, United States Code, is amended—

(1) in subsection (a)—

(A) by striking ''NON-PASSENGER AUTOMOBILES.—'' and inserting ''PRESCRIPTION OF STANDARDS BY REGULATION.—''; and

(B) by striking ''(except passenger automobiles)'' and inserting ''(except passenger automobiles and light trucks)''; and

(2) by amending subsection (b) to read as follows:

''(b) STANDARDS FOR PASSENGER AUTOMOBILES AND LIGHT TRUCKS.—

''(1) IN GENERAL.—The Secretary of Transportation, in consultation with the Administrator of the Environmental Protection Agency, shall prescribe average fuel economy standards for passenger automobiles and light trucks manufactured by a manufacturer in each model year beginning with model year 2010 in order to achieve a combined average fuel economy standard for passenger automobiles and light trucks—

''(A) of at least 35 miles per gallon beginning in model year 2019 (or such other number of miles per gallon as the Secretary may prescribe under subsection (c)); and

''(B) of at least 45 miles per gallon beginning in model year 2030 (or such other number of miles per gallon as the Secretary may prescribe under subsection (c)).

''(2) ELIMINATION OF SUV LOOPHOLE.—Beginning not later than model year 2013, the regulations prescribed under this section may not make any dis-

tinction between passenger automobiles and light trucks.

"(3) PROGRESS TOWARD STANDARD REQUIRED.—In prescribing average fuel economy standards under paragraph (1), the Secretary shall prescribe appropriate annual fuel economy standard increases for passenger automobiles and light trucks that—

"(A) increase the applicable average fuel economy standard ratably beginning with model year 2010 and ending with model year 2019;

"(B) require that each manufacturer achieve—

"(i) a fuel economy standard for passenger automobiles manufactured by that manufacturer of at least 29.5 miles per gallon not later than model year 2010; and

"(ii) a fuel economy standard for light trucks manufactured by that manufacturer of at least 23.5 miles per gallon not later than model year 2010.

"(4) FUEL ECONOMY BASELINE FOR PASSENGER AUTOMOBILES.—Notwithstanding the maximum feasible average fuel economy level established by regulations prescribed under subsection (c), the

minimum fleet wide average fuel economy standard for passenger automobiles manufactured by a manufacturer in a model year for that manufacturer's domestic fleet and foreign fleet, as calculated under section 32904 as in effect before the date of the enactment of the Fuel Economy Improvement Act, shall be the greater of—

''(A) 27.5 miles per gallon; or

''(B) 92 percent of the average fuel economy projected by the Secretary for the combined domestic and foreign fleets manufactured by all manufacturers in that model year.

''(5) DEADLINE FOR REGULATIONS.—The Secretary shall promulgate the regulations required by paragraphs (1) and (2) in final form not later than 18 months after the date of the enactment of the Fuel Economy Improvement Act.''.

SEC. 103. PASSENGER CAR PROGRAM REFORM.

Section 32902(c) of title 49, United States Code, is amended to read as follows:

''(c) AMENDING PASSENGER AUTOMOBILE STANDARDS.—Not later than 18 months before the beginning of each model year, the Secretary of Transportation may prescribe regulations amending a standard prescribed under subsection (b) for a model year to a level that the Sec-

retary determines to be the maximum feasible average fuel economy level for that model year. Section 553 of title 5 shall apply to a proceeding to amend any standard prescribed under subsection (b). Any interested person may make an oral presentation and a transcript shall be taken of that presentation. The Secretary may prescribe separate standards for different classes of passenger automobiles.''.

SEC. 104. WORK TRUCKS.

(a) DEFINITION OF WORK TRUCK.—Section 32901(a) of title 49, United States Code, is amended by adding at the end the following:

''(18) 'work truck' means an automobile that the Secretary determines by regulation—

''(A) is rated at between 8,500 and 10,000 pounds gross vehicle weight; and

''(B) is not a medium-duty passenger vehicle (as defined in section 86.1803–01 of title 40, Code of Federal Regulations).''.

(b) RULEMAKING.—The Secretary of Transportation—

(1) shall issue proposed regulations implementing the amendment made by subsection (a) not later than 1 year after the date of the enactment of this Act; and

(2) shall issue final regulations implementing the amendment made by subsection (a) not later than 18 months after the date of the enactment of this Act.

(c) FUEL ECONOMY STANDARDS FOR WORK TRUCKS.—Section 32902 of title 49, United States Code, is amended—

(1) by redesignating subsections (f), (g), (h), (i), and (j) as subsections (g), (h), (i), (j), and (k), respectively;

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

''(f) WORK TRUCKS.—The Secretary of Transportation, in consultation with the Administrator of the Environmental Protection Agency, shall prescribe standards to achieve the maximum feasible fuel economy for work trucks manufactured by a manufacturer in each model year beginning with model year 2013.'';

(3) in subsection (i), as redesignated, by striking ''and (g) of this section'' and inserting ''(f), and (h)''; and

(4) in subsection (k), as redesignated, by striking ''or (g) of this section'' and inserting ''(f), or (h)''.

SEC. 105. LIGHT TRUCKS.

(a) DEFINITION.—

(1) IN GENERAL.—Section 32901(a) of title 49, United States Code, is amended—

(A) by redesignating paragraphs (12), (13), (14), (15), and (16) as paragraphs (13) (14), (15), (16), and (17), respectively; and

(B) by inserting after paragraph (11) the following:

''(12) 'light truck' means an automobile that the Secretary determines by regulation—

''(A) is manufactured primarily for transporting not more than 10 individuals;

''(B) is rated at not more than 10,000 pounds gross vehicle weight;

''(C) is not a passenger automobile; and

''(D) is not a work truck.''.

(2) RULEMAKING.—The Secretary of Transportation—

(A) shall issue proposed regulations implementing the amendment made by paragraph (1) not later than 1 year after the date of the enactment of this Act; and

(B) shall issue final regulations implementing the amendment not later than 18

months after the date of the enactment of this Act.

(3) EFFECTIVE DATE.—Regulations prescribed under paragraph (1) shall apply beginning with model year 2010.

(b) APPLICABILITY OF EXISTING STANDARDS.—This section does not affect the application of section 32902 of title 49, United States Code, to passenger automobiles or non-passenger automobiles manufactured before model year 2010.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Transportation $25,000,000 for each of the fiscal years 2009 through 2021 to carry out the provisions of chapter 329 of title 49, United States Code, as amended by this Act.

SEC. 106. ENSURING SAFETY OF PASSENGER AUTOMOBILES AND LIGHT TRUCKS.

(a) IN GENERAL.—The Secretary of Transportation shall exercise the authority given the Secretary under Federal law to ensure that—

(1) passenger automobiles and light trucks (as such terms are defined in section 32901 of title 49, United States Code) are safe;

(2) progress is made in improving the overall safety of passenger automobiles and light trucks; and

(3) progress is made in maximizing United States employment.

(b) VEHICLE SAFETY.—Subchapter II of chapter 301 of title 49, United States Code, is amended by adding at the end the following:

"§ 30129. Vehicle compatibility and aggressivity reduction standard

''(a) STANDARDS.—The Secretary of Transportation shall issue a motor vehicle safety standard to reduce vehicle incompatibility and aggressivity between passenger vehicles and non-passenger vehicles. The standard shall address characteristics necessary to ensure better management of crash forces in multiple vehicle frontal and side impact crashes between different types, sizes, and weights of vehicles with a gross vehicle weight of 10,000 pounds or less in order to decrease occupant deaths and injuries.

''(b) CONSUMER INFORMATION.—The Secretary shall develop and implement a public information side and frontal compatibility crash test program with vehicle ratings based on risks to occupants, risks to other motorists, and combined risks by vehicle make and model.''.

(c) RULEMAKING.—

(1) IN GENERAL.—The Secretary of Transportation shall issue—

(A) a notice of a proposed rulemaking to implement section 30129 of title 49, United States Code, not later than January 1, 2010; and

(B) a final rule to implement such section not later than December 31, 2011.

(2) EFFECTIVE DATE.—Any requirement imposed under the final rule issued under paragraph (1)(B) shall become fully effective not later than September 1, 2013.

(d) CONFORMING AMENDMENT.—The chapter analysis for chapter 301 of title 49, United States Code, is amended by inserting after the item relating to section 30128 the following:

''30129. Vehicle compatibility and aggressivity reduction standard.''.

SEC. 107. ONBOARD FUEL ECONOMY INDICATORS AND DEVICES.

(a) IN GENERAL.—Chapter 329 of title 49, United States Code, is amended by adding at the end the following:

''§ 32920. Fuel economy indicators and devices

''(a) IN GENERAL.—The Secretary of Transportation, in consultation with the Administrator of the Environmental Protection Agency, shall prescribe a fuel econ-

omy standard for passenger automobiles and light trucks manufactured by a manufacturer in each model year beginning with model year 2014 that requires each such automobile and light truck to be equipped with—

''(1) an onboard electronic instrument that provides real-time and cumulative fuel economy data;

''(2) an onboard electronic instrument that signals a driver when inadequate tire pressure may be affecting fuel economy; and

''(3) a device that will allow drivers to place the automobile or light truck in a mode that will automatically produce greater fuel economy.

''(b) EXCEPTION.—Subsection (a) shall not apply to any vehicle that is not subject to an average fuel economy standard under section 32902(b).

''(c) ENFORCEMENT.—Subchapter IV of chapter 301 shall apply to a fuel economy standard prescribed under subsection (a) to the same extent and in the same manner as if that standard were a motor vehicle safety standard under chapter 301.''.

(b) CONFORMING AMENDMENT.—The chapter analysis for chapter 329 of title 49, United States Code, is amended by inserting after the item relating to section 32919 the following:

''32920. Fuel economy indicators and devices.''.

SEC. 108. SECRETARY OF TRANSPORTATION TO CERTIFY BENEFITS.

Beginning with model year 2010, the Secretary of Transportation, in consultation with the Administrator of the Environmental Protection Agency, shall annually determine and certify to Congress the reduction in United States consumption of gasoline and petroleum distillates used for vehicle fuel and the reduction in greenhouse gas emissions during the most recent year that are attributable to the implementation of the average fuel economy standards imposed under section 32902 of title 49, United States Code, as a result of the amendments made by this Act.

SEC. 109. CREDIT TRADING PROGRAM.

Section 32903 of title 49, United States Code, is amended—

(1) by striking ''passenger'' each place it appears;

(2) by striking ''section 32902(b)–(d) of this title'' each place it appears and inserting ''subsection (a), (c), or (d) of section 32902'';

(3) in subsection (a)(2), by striking ''clause (1) of this subsection'' and inserting ''paragraph (1)''; and

(4) by amending subsection (e) to read as follows:

''(e) CREDIT TRADING AMONG MANUFACTURERS.—The Secretary of Transportation may establish, by regulation, a corporate average fuel economy credit trading program to allow manufacturers whose automobiles exceed the average fuel economy standards prescribed under section 32902 to earn credits to be sold to manufacturers whose automobiles fail to achieve the prescribed standards.''.

SEC. 110. REPORT TO CONGRESS.

Not later than December 31, 2014, the Secretary of Transportation shall submit to Congress a report on the progress made by the automobile manufacturing industry towards meeting the 35 miles per gallon average fuel economy standard required under section 32902(b)(1) of title 49, United States Code.

SEC. 111. LABELS FOR FUEL ECONOMY AND GREENHOUSE GAS EMISSIONS.

Section 32908 of title 49, United States Code, is amended—

(1) in subsection (a)(1), by striking ''of this title'' and inserting ''and a light truck manufactured by a manufacturer in a model year after model year 2010; and'';

(2) in subsection (b)—

(A) in paragraph (1)—

(i) by striking ''(1)'' and inserting the following:

''(1) IN GENERAL.—'';

(ii) by moving subparagraphs (A) through (F) 2 ems to the right;

(iii) by redesignating subparagraph (F) as subparagraph (H); and

(iv) by inserting after subparagraph (E) the following:

''(F) a label (or a logo imprinted on a label required under this paragraph) that—

''(i) reflects the performance of an automobile based upon criteria developed by the Administrator to reflect the fuel economy and greenhouse gas and other emissions consequences of operating the automobile over its likely useful life;

''(ii) permits consumers to compare performance results under clause (i) among all passenger automobiles and light duty trucks; and

''(iii) is designed to encourage the manufacture and sale of passenger automobiles and light trucks that meet or exceed applicable fuel economy standards under section 32902.

''(G) a fuelstar under paragraph (5).'';

(B) in paragraph (2)—

(i) by striking ''(2)'' and inserting the following:

''(2) REQUIREMENTS FOR COMPLIANCE.—''; and

(ii) by moving the text 2 ems to the right;

(C) in paragraph (3)—

(i) by striking ''(3)'' and inserting the following:

''(3) DEDICATED AUTOMOBILES.—''; and

(ii) by moving the text 2 ems to the right; and

(D) by adding at the end the following:

''(4) GREEN LABEL PROGRAM.—

''(A) MARKETING ANALYSIS.—Not later than 2 years after the date of the enactment of the Fuel Economy Improvement Act, the Administrator shall complete a study of social marketing strategies with the goal of maximizing consumer understanding of point-of-sale labels or logos described in paragraph (1)(F).

''(B) ELIGIBILITY.—Not later than 3 years after the date described in subparagraph (A),

the Administrator shall issue requirements for the label or logo required under paragraph (1)(F) to ensure that a passenger automobile or light truck is not eligible for the label or logo unless it—

''(i) meets or exceeds the applicable fuel economy standard; or

''(ii) will have the lowest greenhouse gas emissions over the useful life of the vehicle of all vehicles in the vehicle class to which it belongs in that model year.

''(C) CRITERIA.—In developing criteria for the label or logo described in paragraph (1)(F), the Administrator shall consider—

''(i) the recyclability of the automobile;

''(ii) any other pollutants or harmful byproducts related to the automobile, which may include those generated during manufacture of the automobile, those issued during use of the automobile, or those generated after the automobile ceases to be operated; and

''(iii) other appropriate factors

''(5) FUELSTAR PROGRAM.—

''(A) IN GENERAL.—The Secretary of Transportation shall establish a program, which shall be known as the 'Fuelstar Program', under which stars shall be imprinted on or attached to the label required under paragraph (1).

''(B) GREEN STARS.—Under the Fuelstar Program, a manufacturer may include on the label maintained on an automobile under paragraph (1)—

''(i) 1 green star for any automobile that meets the average fuel economy standard for the model year under section 32902; and

''(ii) 1 additional green star for each 2 miles per gallon by which the automobile exceeds such standard.

''(C) GOLD STARS.—Under the Fuelstar Program, a manufacturer may include a gold star on the label required under paragraph (1) on—

''(i) a passenger automobile with a fuel economy of at least 50 miles per gallon; and

''(ii) a light truck with a fuel economy of at least 37 miles per gallon.''.

Subtitle B—Improving Fuel Efficiency

SEC. 121. HELPING CONSUMERS TO PURCHASE MORE FUEL-EFFICIENT AUTOMOBILES.

(a) REPEAL OF LIMIT ON NUMBER OF CARS ELIGIBLE FOR CREDIT.—Section 30B of the Internal Revenue Code of 1986 (relating to alternative motor vehicle credit) is amended by striking subsection (f).

(b) EMISSIONS STANDARDS.—Clause (iv) of section 30B(c)(3)(A) of such Code is amended to read as follows:

''(iv) for 2004 and later model vehicles, has received a certificate that such vehicle meets or exceeds the Bin 5 Tier II emission standard established in regulations prescribed by the Administrator of the Environmental Protection Agency under section 202(i) of the Clean Air Act for that make and model year vehicle,''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after the date of the enactment of this Act.

SEC. 122. TRANSIT-ORIENTED DEVELOPMENT CORRIDORS.

(a) DEFINITIONS.—In this section, the following definitions apply:

(1) DEFINITIONS FROM TITLE 49, UNITED STATES CODE.—The terms ''capital project'', ''local governmental authority'', ''mass transportation'', and ''urbanized area'' have the meanings such terms have under section 5302 of title 49, United States Code.

(2) STATE.—The term ''State'' means a State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the United States Virgin Islands.

(3) TRANSIT-ORIENTED DEVELOPMENT CORRIDOR.—The term ''transit-oriented development corridor'' means rights-of-way for fixed-guideway mass transportation facilities, including commercial development that is connected with any such facility physically and functionally.

(b) IN GENERAL.—In consultation with State transportation departments and metropolitan planning organizations, the Secretary of Transportation shall designate, in urbanized areas, at least 20 transit-oriented development corridors by 2015 and 50 transit-oriented development corridors by 2025.

(c) TRANSIT GRANTS.—The Secretary of Transportation shall award grants to a State or local governmental authority to construct or improve transit facilities, bicycle transportation facilities, and pedestrian walkways in a transit-oriented development corridor, including capital projects.

(d) RESEARCH AND DEVELOPMENT.—In order to support effective deployment of grants and incentives under this section, the Secretary of Transportation shall establish a transit-oriented development corridors research and development program for the conduct of research on best practices and performance criteria for transit-oriented development corridors.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section $500,000,000 for each of fiscal years 2007 through 2016, of which $2,000,000 per fiscal year is authorized for the research and development program under subsection (d).

SEC. 123. ENERGY-EFFICIENT MOTOR VEHICLE MANUFACTURING CREDIT.

(a) IN GENERAL.—Subpart B of part IV of subchapter A of chapter 1 of the Internal Revenue Code of 1986 (relating to foreign tax credit, etc.) is amended by adding at the end the following new section:

"SEC. 30D. ENERGY EFFICIENT MOTOR VEHICLES MANUFACTURING CREDIT.

''(a) CREDIT ALLOWED.—In the case of an eligible taxpayer, subject to a credit allocation under subsection (e) to such eligible taxpayer, there shall be allowed as a credit against the tax imposed by this chapter for the taxable year to an amount equal to the sum of—

''(1) the initial investment credit determined under subsection (b) for the taxable year,

''(2) the fuel economy achievement credit determined under subsection (c) for such taxable year, and

''(3) the eligible components R&D credit determined under subsection (d) for such taxable year.

''(b) INITIAL INVESTMENT CREDIT.—For purposes of this section, the initial investment credit is equal to 20 percent of the qualified investment of an eligible taxpayer with respect to energy efficient motor vehicles during the taxable year beginning in 2008.

''(c) FUEL ECONOMY ACHIEVEMENT CREDIT.—For purposes of this section—

''(1) IN GENERAL.—In the case of an eligible taxpayer who meets the requirements of paragraph (2) for a model year ending in a taxable year specified in the table contained in paragraph (3), the fuel

economy achievement credit for such taxable year is equal to 30 percent of the sum of—

"(A) at the election of the eligible taxpayer, such qualified investment for any preceding taxable year beginning after 2007 if such taxable year has not previously been taken into account under this subsection by such taxpayer, plus

"(B) at the election of the eligible taxpayer, the qualified investment with respect to energy efficient motor vehicles of the eligible taxpayer for the taxable year beginning in 2017.

"(2) DEMONSTRATED COMBINED FLEET ECONOMY IMPROVEMENTS.—The requirements of this paragraph are met for any model year ending in a taxable year if the eligible taxpayer can demonstrate to the satisfaction of the Secretary that the percentage by which the taxpayer's overall combined fuel economy standard for the taxpayer's vehicle fleet for such model year exceeds such standard for such taxpayer's 2007 model year as reported to the National Highway Traffic Safety Administration under section 32907 of title 49, United States Code, is not

less than the percentage determined for such model year under paragraph (3).

''(3) PERCENTAGE INCREASE.—The percentage determined under this paragraph for any taxable year is equal to—

''Model year ending in taxable year:	**Percentage increase:**
2010	5
2011	10
2012	15
2013	20
2014	27.5
2015	35
2016	42.5
2017	50.

''(d) ELIGIBLE COMPONENTS R&D CREDIT.—For purposes of this section, the eligible R&D credit for any taxable year is equal to 30 percent of the research and development costs paid or incurred by an eligible taxpayer for such taxable year with respect to eligible components used or to be used in the manufacture of energy efficient motor vehicles.

''(e) LIMITATION.—

''(1) INITIAL INVESTMENT CREDIT AND FUEL ECONOMY ACHIEVEMENT CREDIT.—Subject to paragraph (2), the aggregate amount of initial investment credits and fuel economy achievement credits allowed under subsection (a) for any taxable year beginning in a calendar year after 2007 shall be allo-

cated by the Secretary among all eligible taxpayers—

"(A) based on each eligible taxpayer's percentage of the total qualified investment of all such taxpayers, and

"(B) such that such aggregate amount does not exceed—

"(i) $1,000,000,000, plus

"(ii) any amount of credit unallocated during any preceding calendar year.

"(2) ELIGIBLE COMPONENTS R&D CREDIT.—Of the dollar amount available for allocation under paragraph (1) for any taxable year, 10 percent of such amount shall be allocated in the same manner by the Secretary among all eligible taxpayers with respect to the eligible components R&D credit.

"(f) QUALIFIED INVESTMENT.—For purposes of this section—

"(1) IN GENERAL.—The qualified investment for any taxable year is equal to the incremental costs incurred during such taxable year—

"(A) to re-equip or expand any manufacturing facility of the eligible taxpayer to produce energy efficient motor vehicles or to produce eligible components, and

''(B) for engineering integration of such vehicles and components as described in subsection (h).

''(2) ATTRIBUTION RULES.—In the event a facility of the eligible taxpayer produces both energy efficient motor vehicles and conventional motor vehicles, or eligible and non-eligible components, only the qualified investment attributable to production of energy efficient motor vehicles and the research and development costs attributable to eligible components shall be taken into account.

''(g) ENERGY EFFICIENT MOTOR VEHICLES AND ELIGIBLE COMPONENTS.—For purposes of this section—

''(1) ENERGY EFFICIENT MOTOR VEHICLE.—The term 'energy efficient motor vehicle' means—

''(A) any new advanced lean burn technology motor vehicle (as defined in section 30B(c)(3) determined without regard to subparagraph (A)(iv)(II) thereof or the weight limitation under subparagraph (A)(iv)(I) thereof),

''(B) any new qualified hybrid motor vehicle (as defined in section 30B(d)(3)(A) determined without regard to subparagraph (A)(ii)(II) thereof, the weight limitation under

subparagraph (A)(ii)(I) thereof, and subparagraph (A)(iv) thereof), or

''(C) any other new technology motor vehicle identified by the Secretary as offering a substantial increase in fuel economy.

''(2) ELIGIBLE COMPONENTS.—The term 'eligible component' means any component inherent to any energy efficient motor vehicle, including—

''(A) with respect to any gasoline-electric new qualified hybrid motor vehicle—

''(i) electric motor or generator,

''(ii) power split device,

''(iii) power control unit,

''(iv) power controls,

''(v) integrated starter generator, or

''(vi) battery,

''(B) with respect to any new advanced lean burn technology motor vehicle—

''(i) diesel engine,

''(ii) turbocharger,

''(iii) fuel injection system, or

''(iv) after-treatment system, such as a particle filter or NOx absorber, and

''(C) with respect to any energy efficient motor vehicle, any other component approved by the Secretary.

''(h) ENGINEERING INTEGRATION COSTS.—For purposes of subsection (f)(1)(B), costs for engineering integration are costs incurred prior to the market introduction of energy efficient vehicles for engineering tasks related to—

''(1) incorporating eligible components into the design of energy efficient motor vehicles, and

''(2) designing new tooling and equipment for production facilities which produce eligible components or energy efficient motor vehicles.

''(i) ELIGIBLE TAXPAYER.—For purposes of this section, the term 'eligible taxpayer' means, with respect to any taxable year, any taxpayer if more than 25 percent of the taxpayer's gross receipts for the taxable year is derived from the manufacture of motor vehicles or any component parts of such vehicles.

''(j) LIMITATION BASED ON AMOUNT OF TAX.—The credit allowed under subsection (a) for the taxable year shall not exceed the excess of—

''(1) the sum of—

''(A) the regular tax liability (as defined in section 26(b)) for such taxable year, plus

''(B) the tax imposed by section 55 for such taxable year, over

''(2) the sum of the credits allowable under subpart A and sections 27, 30, 30B, and 30C for the taxable year.

''(k) REDUCTION IN BASIS.—For purposes of this subtitle, if a credit is allowed under this section for any expenditure with respect to any property, the increase in the basis of such property which would (but for this paragraph) result from such expenditure shall be reduced by the amount of the credit so allowed.

''(l) NO DOUBLE BENEFIT.—

''(1) COORDINATION WITH OTHER DEDUCTIONS AND CREDITS.—The amount of any deduction or other credit allowable under this chapter for any cost taken into account in determining the amount of the credit under subsection (a) shall be reduced by the amount of such credit attributable to such cost.

''(2) RESEARCH AND DEVELOPMENT COSTS.—

''(A) IN GENERAL.—Except as provided in subparagraph (B), any amount described in subsection (d) taken into account in determining the amount of the credit under subsection (a) for any taxable year shall not be

taken into account for purposes of determining the credit under section 41 for such taxable year.

"(B) COSTS TAKEN INTO ACCOUNT IN DETERMINING BASE PERIOD RESEARCH EXPENSES.—Any amounts described in subsection (d) taken into account in determining the amount of the credit under subsection (a) for any taxable year which are qualified research expenses (within the meaning of section 41(b)) shall be taken into account in determining base period research expenses for purposes of applying section 41 to subsequent taxable years.

"(m) BUSINESS CARRYOVERS ALLOWED.—If the credit allowable under subsection (a) for a taxable year exceeds the limitation under subsection (j) for such taxable year, such excess (to the extent of the credit allowable with respect to property subject to the allowance for depreciation) shall be allowed as a credit carryback and carryforward under rules similar to the rules of section 39.

"(n) DEFINITIONS AND SPECIAL RULES.—For purposes of this section—

"(1) DEFINITIONS.—Any term which is used in this section and in chapter 329 of title 49, United

States Code, shall have the meaning given such term by such chapter.

''(2) SPECIAL RULES.—Rules similar to the rules of paragraphs (4) and (5) of section 179A(e) and paragraphs (1) and (2) of section 41(f) shall apply.

''(o) ELECTION NOT TO TAKE CREDIT.—No credit shall be allowed under subsection (a) for any property if the taxpayer elects not to have this section apply to such property.

''(p) REGULATIONS.—The Secretary shall prescribe such regulations as necessary to carry out the provisions of this section.

''(q) TERMINATION.—This section shall not apply to any qualified investment made after December 31, 2017.''.

(b) CONFORMING AMENDMENTS.—

(1) Section 1016(a) of such Code is amended by striking ''and'' at the end of paragraph (36), by striking the period at the end of paragraph (37) and inserting '', and'', and by adding at the end the following new paragraph:

''(38) to the extent provided in section 30D(k).''.

(2) Section 6501(m) of such Code is amended by inserting ''30D(o),'' after ''30C(e)(5),''.

(3) The table of sections for subpart B of part IV of subchapter A of chapter 1 of such Code is amended by inserting after the item relating to section 30C the following new item:

''Sec. 30D. Energy efficient motor vehicles manufacturing credit.''.

(c) EFFECTIVE DATE.—The amendments made by this subsection shall apply to amounts incurred in taxable years beginning after December 31, 2007.

SEC. 124. FUEL EFFICIENCY STANDARDS FOR REPLACEMENT TIRES.

(a) STANDARDS FOR TIRES MANUFACTURED FOR INTERSTATE COMMERCE.—Section 30123 of title 49, United States Code, is amended—

(1) in subsection (b), by inserting after the first sentence the following: ''The grading system shall include standards for rating the fuel economy of tires designed for use on passenger cars and light trucks.''; and

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

''(d) NATIONAL TIRE FUEL ECONOMY PROGRAM.—(1) Not later than March 31, 2008, the Secretary shall establish a national tire fuel economy program for tires designed for use on passenger cars and light trucks.

''(2) The program established under paragraph (1) shall include the following:

''(A) Policies and procedures for testing and labeling tires for fuel economy to inform tire purchasers of the fuel economy of tires.

''(B) Policies and procedures to promote the purchase of energy-efficient replacement tires, including policies and procedures related to the following:

''(i) Development of incentives for the purchase of energy-efficient replacement tires.

''(ii) Use of the Internet to promote the use of energy-efficient replacement tires.

''(iii) Publication and distribution of fuel economy guide booklets.

''(C) Regulations that require tire retailers to provide tire purchasers with fuel economy information on tires, promulgated by the Secretary.

''(D) Regulations that establish minimum fuel economy standards for tires, promulgated by the Secretary.

''(3) The minimum fuel economy standards for tires shall, established pursuant to paragraph (2)(D)—

''(A) ensure that the average fuel economy of replacement tires is equal to or better than the average fuel economy of tires sold as original equipment;

''(B) secure the maximum technically feasible and cost-effective fuel savings;

''(C) not adversely affect tire safety;

''(D) not adversely affect the average tire life of replacement tires;

''(E) incorporate the results from—

''(i) laboratory testing; and

''(ii) to the extent appropriate and available, on-road fleet testing programs conducted by manufacturers; and

''(F) not adversely affect efforts to manage scrap tires.

''(4) The regulations, policies, procedures, and standards developed under paragraphs (2) and (3) shall apply to all tire types and models that are covered by section 575.104 of title 49, Code of Federal Regulations (commonly known as the 'Uniform Tire Quality Grading Standards'), or any successor regulation.

''(5) Not less than once every 3 years, the Secretary shall review the minimum fuel economy standards in effect for tires under this subsection and revise the standards as necessary to ensure compliance with requirements under paragraph (3). The Secretary may not reduce the average fuel economy standards applicable to replacement tires.

''(6) Nothing in this section shall be construed to preempt any provision of State law relating to higher fuel economy standards applicable to replacement tires designed for use on passenger cars and light trucks.

''(7) Nothing in this section shall apply to the following:

''(A) A tire or group of tires with the same product identification number, plant, and year, for which the volume of tires produced or imported is less than 15,000 annually.

''(B) A deep tread, winter-type snow tire, space-saver tire, or temporary use spare tire.

''(C) A tire with a normal rim diameter of 12 inches or less.

''(D) A motorcycle tire.

''(E) A tire manufactured specifically for use in an off-road motorized recreational vehicle.

''(8) In this subsection, the term 'fuel economy', with respect to a tire, means the extent to which the tire contributes to the fuel efficiency of the motor vehicle on which the tire is mounted.''.

(b) CONFORMING AMENDMENT.—Section 30103(b)(1) of title 49, United States Code, is amended by striking ''When'' and inserting ''Except as provided in section 30123(d) of this title, when''.

SEC. 125. FUEL ECONOMY FOR HEAVY DUTY TRUCKS.

Part C of subtitle VI of title 49, United States Code, is amended by inserting after chapter 329 the following:

"CHAPTER 330—HEAVY DUTY MOTOR VEHICLE FUEL ECONOMY STANDARDS

"CHAPTER 330—HEAVY DUTY MOTOR VEHICLE FUEL ECONOMY STANDARDS

"§ 33001. Purpose and policy

"The purpose of this chapter is to reduce petroleum consumption by heavy duty motor vehicles.

"§ 33002. Definition

"In this chapter, the term 'heavy duty motor vehicle'—

"(1) means a vehicle having a gross vehicle weight rating of at least 10,000 pounds that is driven or drawn by mechanical power and manufactured primarily for use on public streets, roads, and highways; and

"(2) does not include a vehicle operated only on a rail line.

"§ 33003. Testing and assessment

"(a) IN GENERAL.—The Administrator of the Environmental Protection Agency (referred to in this section

as the 'Administrator') shall develop and coordinate a national testing and assessment program to—

''(1) calculate the fuel economy of heavy duty motor vehicles; and

''(2) assess the fuel economy that heavy duty motor vehicles could attain through available technology.

''(b) TESTING.—Not later than 18 months after the date of the enactment of this chapter, the Administrator shall design and implement a national testing program to calculate the fuel economy of heavy duty motor vehicles that is modeled on the fuel economy program established under chapter 329.

''(c) ASSESSMENT.—The Administrator shall consult with the Secretary of Transportation regarding the assessment of available technologies to enhance the fuel economy of heavy duty motor vehicles to ensure that vehicle use and needs are appropriately considered.

''(d) REPORTS TO CONGRESS.—

''(1) INITIAL REPORT.—Not later than 2 years after the date of the enactment of this chapter, the Administrator shall submit a report to Congress regarding the results of the assessment of available technologies to improve the fuel economy of heavy duty motor vehicles.

''(2) BIENNIAL REPORTS.—Not less frequently than once every 2 years, the Administrator shall submit a report to Congress that addresses the fuel economy of heavy duty vehicles.

"§ 33004. Standards

''(a) IN GENERAL.—Not later than 18 months after the completion of the testing and assessments under section 33003 and not later than 18 months before the beginning of a model year, the Secretary of Transportation shall prescribe by regulation average fuel economy standards for heavy duty motor vehicles manufactured for such model year. Each standard shall be the maximum feasible average fuel economy level that the Secretary determines that manufacturers can achieve for that model year. The Secretary may prescribe separate standards for different classes of heavy duty motor vehicles.

''(b) CONSIDERATIONS AND CONSULTATION.—In determining maximum feasible average fuel economy, the Secretary shall consider—

''(1) relevant available heavy duty motor vehicle fuel consumption information;

''(2) technological feasibility;

''(3) economic practicability;

''(4) the desirability of reducing United States dependence on oil;

''(5) the effects of average fuel economy standards on vehicle safety;

''(6) the effects of average fuel economy standards on levels of employment and competitiveness of the heavy duty motor vehicle manufacturing industry; and

''(7) the extent to which the standard will carry out the purpose described in section 33001.

''(c) COOPERATION.—The Secretary may advise, assist, and cooperate with departments, agencies, and instrumentalities of the Federal Government, States, and other public and private agencies in developing fuel economy standards for heavy duty motor vehicles.

''(d) 5-YEAR PLAN FOR TESTING STANDARDS.—

''(1) IN GENERAL.—The Secretary shall establish, periodically review, and continually update a 5-year plan for testing fuel economy standards prescribed under this chapter for heavy duty motor vehicles.

''(2) PRIORITIES.—In establishing testing priorities, the Secretary shall consider appropriate factors that are consistent with the purpose described in section 33001 and the Secretary's other duties and powers under this chapter.

''§ 33005. Authorization of appropriations

''There are authorized to be appropriated, for each of the fiscal years 2008 through 2013, such sums as may be necessary to carry out this chapter.''.

SEC. 126. IDLING REDUCTION TAX CREDIT.

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

''SEC. 45O. IDLING REDUCTION CREDIT.

''(a) GENERAL RULE.—For purposes of section 38, the idling reduction tax credit determined under this section for the taxable year is an amount equal to 50 percent of the amount paid or incurred for the purchase and installation of each qualifying idling reduction device or qualifying idle reduction infrastructure placed in service by the taxpayer during the taxable year.

''(b) LIMITATION.—The maximum amount allowed as a credit under subsection (a) shall not exceed $3,500 per device or per infrastructure.

''(c) DEFINITIONS.—For purposes of subsection (a)—

''(1) QUALIFYING IDLING REDUCTION DEVICE.—The term 'qualifying idling reduction device' means any device or system of devices which—

''(A) is installed on a heavy-duty diesel-powered on-highway vehicle,

''(B) is designed to provide to such vehicle those services (such as heat, air conditioning, or electricity) that would otherwise require the operation of the main drive engine while the vehicle is temporarily parked or remains stationary using either—

''(i) an all electric unit, such as a battery powered unit or from grid-supplied electricity, or

''(ii) a dual fuel unit powered by diesel or other fuels, and capable of providing such services from grid-supplied electricity or on-truck batteries alone,

''(C) the original use of which commences with the taxpayer,

''(D) is acquired for use by the taxpayer and not for resale, and

''(E) is certified by the Secretary of Energy, in consultation with the Administrator of the Environmental Protection Agency and the Secretary of Transportation, to reduce long-duration idling of such vehicle at a motor vehicle

rest stop or other location where such vehicles are temporarily parked or remain stationary.

''(2) HEAVY-DUTY DIESEL-POWERED ON-HIGHWAY VEHICLE.—The term 'heavy-duty diesel-powered on-highway vehicle' means any vehicle, machine, tractor, trailer, or semi-trailer propelled or drawn by mechanical power and used upon the highways in the transportation of passengers or property, or any combination thereof determined by the Federal Highway Administration.

''(3) LONG-DURATION IDLING.—The term 'long-duration idling' means the operation of a main drive engine, for a period greater than 15 consecutive minutes, where the main drive engine is not engaged in gear. Such term does not apply to routine stoppages associated with traffic movement or congestion.

''(4) QUALIFYING IDLE REDUCTION INFRASTRUCTURE.—The term 'qualifying idle reduction infrastructure' means either—

''(A) off-truck equipment to supply electric power, including electric receptacles, boxes, wiring, conduit, and other connections to one truck space, or

''(B) off-truck equipment that directly provides air conditioning, heating, electric power, and other connections and services to one truck space.

''(d) NO DOUBLE BENEFIT.—For purposes of this section—

''(1) REDUCTION IN BASIS.—If a credit is determined under this section with respect to any property by reason of expenditures described in subsection (a), the basis of such property shall be reduced by the amount of the credit so determined.

''(2) OTHER DEDUCTIONS AND CREDITS.—No deduction or credit shall be allowed under any other provision of this chapter with respect to the amount of the credit determined under this section.

''(e) ELECTION NOT TO CLAIM CREDIT.—This section shall not apply to a taxpayer for any taxable year if such taxpayer elects to have this section not apply for such taxable year.''.

(b) CREDIT TO BE PART OF GENERAL BUSINESS CREDIT.—Subsection (b) of section 38 of the Internal Revenue Code of 1986 (relating to general business credit) is amended by striking ''plus'' at the end of paragraph (30), by striking the period at the end of paragraph (31)

and inserting ", plus" , and by adding at the end the following new paragraph:

"(32) the idling reduction tax credit determined under section 45O(a).".

(c) CONFORMING AMENDMENTS.—

(1) The table of sections for subpart D of part IV of subchapter A of chapter 1 of the Internal Revenue Code of 1986 is amended by inserting after the item relating to section 45N the following new item:

"Sec. 45O. Idling reduction credit.".

(2) Section 1016(a) of such Code is amended by striking "and" at the end of paragraph (36), by striking the period at the end of paragraph (37) and inserting ", and", and by adding at the end the following:

"(38) in the case of a facility with respect to which a credit was allowed under section 45O, to the extent provided in section 45O(d)(1).".

(3) Section 6501(m) of such Code is amended by inserting "45O(e)," after "45D(c)(4),".

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after December 31, 2006.

(e) DETERMINATION OF CERTIFICATION STANDARDS BY SECRETARY OF ENERGY FOR CERTIFYING IDLING REDUCTION DEVICES.—Not later than 6 months after the

date of the enactment of this Act and in order to reduce air pollution and fuel consumption, the Secretary of Energy, in consultation with the Administrator of the Environmental Protection Agency and the Secretary of Transportation, shall publish the standards under which the Secretary, in consultation with the Administrator of the Environmental Protection Agency and the Secretary of Transportation, will, for purposes of section 45O of the Internal Revenue Code of 1986 (as added by this section), certify the idling reduction devices and idling reduction infrastructure which will reduce long-duration idling of vehicles at motor vehicle rest stops or other locations where such vehicles are temporarily parked or remain stationary in order to reduce air pollution and fuel consumption.

SEC. 127. REPEAL OF PREEMPTION OF STATE LAW RELATING TO AUTOMOBILE FUEL ECONOMY STANDARDS.

Section 32919 of title 49, United States Code, is repealed.

SEC. 128. FEDERAL FLEET REQUIREMENTS.

(a) REGULATIONS.—

(1) IN GENERAL.—The Secretary of Energy shall issue regulations for Federal fleets subject to the Energy Policy Act of 1992 (42 U.S.C. 13201 et seq.) requiring that not later than fiscal year 2016

each Federal agency achieve at least a 30 percent reduction in petroleum consumption, as calculated from the baseline established by the Secretary for fiscal year 2005.

(2) REQUIREMENT.—Beginning not later than fiscal year 2016, of the Federal vehicles required to be alternative fueled vehicles under title V of the Energy Policy Act of 1992 (42 U.S.C. 13251 et seq.), at least 30 percent shall be hybrid motor vehicles (including plug-in hybrid motor vehicles) or new advanced lean burn technology motor vehicles (as defined in section 30B(c)(3) of the Internal Revenue Code of 1986).

(b) INCLUSION OF ELECTRIC DRIVE IN ENERGY POLICY ACT OF 1992.—Section 508(a) of the Energy Policy Act of 1992 (42 U.S.C. 13258(a)) is amended—

(1) by striking ''The Secretary'' and inserting the following:

''(1) ALLOCATION.—The Secretary''; and

(2) by adding at the end the following:

''(2) ELECTRIC VEHICLES.—Not later than January 31, 2009, the Secretary shall—

''(A) allocate credit in an amount to be determined by the Secretary for—

''(i) acquisition of—

"(I) a light-duty hybrid motor vehicle;

"(II) a plug-in hybrid motor vehicle;

"(III) a fuel cell electric vehicle;

"(IV) a medium- or heavy-duty hybrid motor vehicle;

"(V) a neighborhood electric vehicle; or

"(VI) a medium- or heavy-duty dedicated vehicle; and

"(ii) investment in qualified alternative fuel infrastructure or nonroad equipment, as determined by the Secretary; and

"(B) allocate more than 1, but not more than 5, credits for investment in an emerging technology relating to any vehicle described in subparagraph (A) to encourage—

"(i) a reduction in petroleum demand;

"(ii) technological advancement; and

"(iii) environmental safety.".

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section,

and the amendments made by subsection (b), $10,000,000 for the period of fiscal years 2008 through 2013.

TITLE II—ENERGY INDEPENDENCE THROUGH RENEWABLE FUELS

Subtitle A—Advanced Clean Fuels

SEC. 201. DEFINITIONS.

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

(1) by redesignating subparagraphs (A) through (D) as subparagraphs (C), (P), (L), and (M), respectively;

(2) by inserting before subparagraph (C) (as redesignated by paragraph (1)) the following:

''(A) ACADEMY.—The term 'Academy' means the National Academy of Sciences.

''(B) ADVERSE LIFECYCLE IMPACT.—The term 'adverse lifecycle impact' means, with respect to increases in the volume of renewable fuel sold or dispensed to consumers in the United States for a calendar year, that the increases, as determined by the Administrator, would reasonably be anticipated—

''(i) to result in an inconsistency or material interference with the implementa-

tion of or compliance with any Federal environmental law (including a regulation);

''(ii) to result in a material increase in—

''(I) air pollution, including global warming pollution;

''(II) water pollution; or

''(III) human exposure to pesticides;

''(iii) to result in a substantial increase in deforestation on a global or national scale;

''(iv) to result in a substantial adverse effect on land conservation and wildlife habitat;

''(v) to result in any other substantial adverse effect on the environment;

''(vi) to result in a substantial adverse effect on food or feed production or prices, as determined in consultation with the Secretary of Agriculture;

''(vii) to result in a substantial adverse effect on long-term agricultural productivity, including effects on soils and

water resources, as determined in consultation with the Secretary of Agriculture; or

''(viii) not to increase the supply of clean, domestic energy;'';

(3) in subparagraph (C) (as redesignated by paragraph (1)), by striking clause (viii) and inserting the following:

''(viii) separated food waste, yard waste, and lawn debris recovered from municipal solid waste.'';

(4) by inserting after subparagraph (C) (as redesignated by paragraph (1)) the following:

''(D) CONVENTIONAL TRANSPORTATION FUEL.—The term 'conventional transportation fuel' means any fossil-fuel-based transportation fuel used in the United States as of the date of enactment of the Energy Independence, Clean Air, and Climate Security Act of 2007.

''(E) ECOSYSTEM CONVERSION.—The term 'ecosystem conversion' means an alteration of an ecologically significant native habitat (including modification of hydrology and dominant vegetative and other species) to an extent at which the native habitat no longer supports

most dominant native species or ecological processes.

''(F) FIREWISE ZONE.—The term 'firewise zone' means the immediate vicinity of a building or other area regularly occupied by individuals, or any public infrastructure, that is at risk of wildfire.

''(G) FUEL EMISSION BASELINE.—The term 'fuel emission baseline' means the average lifecycle greenhouse gas emissions per unit of energy of the fossil fuel component of conventional transportation fuels in commerce in the United States in calendar year 2008, as determined by the Administrator under paragraph (11).

''(H) FUEL PROVIDER.—

''(i) IN GENERAL.—The term 'fuel provider' means an obligated party (as described in section 80.1106 of title 40, Code of Federal Regulations (or a successor regulation)).

''(ii) INCLUSIONS.—The term 'fuel provider' includes, as the Administrator determines to be appropriate, an individual or entity that produces, blends, or imports

gasoline or any other transportation fuel in commerce in, or into, the United States.

''(I) GREENHOUSE GAS.—The term 'greenhouse gas' means any of—

''(i) carbon dioxide;

''(ii) methane;

''(iii) nitrous oxide;

''(iv) hydrofluorocarbons;

''(v) perfluorocarbons; and

''(vi) sulfur hexafluoride.

''(J) LIFECYCLE GREENHOUSE GAS EMISSIONS.—The term 'lifecycle greenhouse gas emissions' means, with respect to a transportation fuel, the aggregate quantity of greenhouse gases emitted, directly or indirectly, during production, feedstock production or extraction, distribution, marketing, and use of the transportation fuel, or waste disposal relating to the transportation fuel, as determined by the Administrator under paragraph (11)(B).

''(K) NATIVE HABITAT.—

''(i) IN GENERAL.—The term 'native habitat' means dynamic groupings of native plant and animal communities that—

''(I) occur together on a landscape or in water; and

''(II) are connected through—

''(aa) similar ecological processes;

''(bb) underlying environmental features, such as geology; or

''(cc) environmental gradients, such as elevation.

''(ii) EXCLUSION.—The term 'native habitat' does not include land that is or has been under agricultural production.'';

(5) in clause (i) of subparagraph (L) (as redesignated by paragraph (1)), by striking ''The term'' and inserting ''Except as otherwise provided in this subsection, the term'';

(6) by inserting after subparagraph (M) (as redesignated by paragraph (1)) the following:

''(N) TECHNICALLY INFEASIBLE.—The term 'technically infeasible', with respect to compliance with a standard or requirement under this subsection, means that adequate technology or infrastructure is not reasonably anticipated to exist within a sufficient time to

permit compliance with the standard or requirement.

''(O) TRANSPORTATION FUEL.—The term 'transportation fuel' means fuel used to power motor vehicles, nonroad engines, or aircraft.''.

SEC. 202. ADVANCED CLEAN FUEL PROGRAM.

(a) ADVANCED CLEAN FUEL PERFORMANCE STANDARD.—Section 211(o) of the Clean Air Act (42 U.S.C. 7545(o)) is amended by adding at the end the following:

''(11) ADVANCED CLEAN FUEL PERFORMANCE STANDARD.—

''(A) DEFINITIONS.—In this paragraph:

''(i) NATIONAL INTEREST LAND.—The term 'national interest land' includes land that is within the National Wildlife Refuge System, the National Park System, a National Monument, the National Wilderness Preservation System, the National Landscape Conservation System, or the National Forest System, that is Bureau of Land Management land protected by statute, proclamation, or regulation from commercial timber activities, or that is endangered or threatened species habitat, an old-

growth forest, or an inventoried roadless area.

''(ii) PHASE II RENEWABLE FUEL.—The term 'phase II renewable fuel' means renewable fuel the lifecycle greenhouse gas emissions of which are 50 percent to 74 percent lower than the fuel emission baseline.

''(iii) PHASE III RENEWABLE FUEL.—The term 'phase III renewable fuel' means renewable fuel the lifecycle greenhouse gas emissions of which are at least 75 percent lower than the fuel emission baseline.

''(iv) RENEWABLE BIOMASS.—

''(I) IN GENERAL.—The term 'renewable biomass' means any organic matter that is available on a renewable or recurring basis.

''(II) INCLUSIONS.—The term 'renewable biomass' includes—

''(aa) renewable plant material, including—

''(AA) feed grains;

''(BB) other agricultural commodities;

"(CC) other plants and trees grown for energy production; and

"(DD) algae; and

"(bb) waste material, including—

"(AA) crop residue;

"(BB) other vegetative waste material (including wood waste and wood residues);

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

"(DD) separated food waste, yard waste, and lawn debris recovered from municipal solid waste.

"(III) EXCLUSIONS.—The term 'renewable biomass' does not include biomass derived from—

"(aa) land on which ecosystem conversion has occurred after the date of enactment of

the Energy Independence, Clean Air, and Climate Security Act of 2007, as determined by the Administrator;

''(bb) land enrolled in the conservation reserve program established under subchapter B of chapter 1 of subtitle D of title XII of the Food Security Act of 1985 (16 U.S.C. 3831 et seq.) or the wetlands reserve program established under subchapter C of chapter 1 of subtitle D of title XII of the Food Security Act of 1985 (16 U.S.C. 3837 et seq.), unless the biomass is produced in a manner consistent with all applicable guidelines, and terms and conditions of any applicable contract, under the program;

''(cc) any national interest land (other than land in a firewise zone), except for harvest residue, mill waste, or pre-commercial thinnings derived from

national interest land assigned to timber production;

"(dd) recyclable postconsumer waste paper;

"(ee) painted, treated, or pressurized wood;

"(ff) wood contaminated with plastic or metals; or

"(gg) any material produced, harvested, acquired, transported, or processed pursuant to an exemption from otherwise applicable Federal environmental laws (including regulations).

"(v) RENEWABLE FUEL.—

"(I) IN GENERAL.—The term 'renewable fuel' means transportation fuel that is not an ether and that—

"(aa)(AA) is produced from renewable biomass; or

"(BB) is natural gas produced from a biogas source, including a landfill, sewage waste treatment plant, feedlot, or other

place where decaying organic material is found;

"(bb) is used to replace or reduce the quantity of fossil fuel present in a fuel mixture used for transportation; and

"(cc) has lifecycle greenhouse gas emissions that are at least 20 percent lower than the fuel emission baseline.

"(II) INCLUSION.—The term 'renewable fuel' includes fuel meeting the criteria in subclause (I) that is—

"(aa) cellulosic biomass ethanol and waste derived ethanol;

"(bb) biodiesel (as defined in section 312(f) of the Energy Policy Act of 1992 (42 U.S.C. 13220(f))) and any blending components derived from renewable fuel (provided that only the renewable fuel portion of any such blending component shall be considered part of the applicable volume under the renewable fuel

program established by this subsection); or

"(cc) fuel produced from pyrolysis or thermal conversion of renewable biomass.

"(B) STANDARD.—

"(i) IN GENERAL.—Not later than January 1, 2010, the Administrator shall, by regulation—

"(I) establish a methodology for use in determining the lifecycle greenhouse gas emissions of transportation fuel in commerce, including—

"(aa) conventional transportation fuel; and

"(bb) renewable fuel;

"(II) determine the fuel emission baseline;

"(III) establish a transportation fuel certification and marketing process—

"(aa) to certify fuels that qualify as renewable fuel under this paragraph;

"(bb) to determine the lifecycle greenhouse gas emissions of conventional transportation fuels and renewable fuels being sold or introduced into commerce in the United States; and

"(cc) to label and market conventional transportation fuel and renewable fuel in a manner that indicates—

"(AA) the status of the fuel as conventional transportation fuel or renewable fuel; and

"(BB) the lifecycle greenhouse gas emissions of the fuel; and

"(IV) in accordance with clause (ii), establish a requirement applicable to each fuel provider to reduce the average lifecycle greenhouse gas emissions per unit of energy of the aggregate quantity of transportation fuel produced, blended, or imported by the

fuel provider to a level that is, to the maximum extent practicable—

"(aa) by not later than calendar year 2011, at least equal to or less than the fuel emission baseline;

"(bb) by not later than calendar year 2015, 5 percent less than the fuel emission baseline; and

"(cc) by not later than calendar year 2020, 10 percent less than the fuel emission baseline.

"(ii) MAXIMUM REDUCTIONS.—

"(I) IN GENERAL.—In determining the maximum practicable level of reduction under clause (i)(IV), the Administrator shall—

"(aa) take into consideration the results of the applicable study carried out under paragraph (12); and

"(bb) determine whether a level of reduction—

"(AA) is technically infeasible; or

"(BB) would result in 1 or more adverse lifecycle impacts that cannot be adequately mitigated through regulatory or nonregulatory measures under subclause (II).

"(II) MITIGATION.—

"(aa) IN GENERAL.—For the purpose of making a determination under subclause (I)(bb)(BB), the Administrator, in consultation with the heads of other appropriate Federal agencies, shall use the existing authorities of the Administrator to mitigate, to the maximum extent practicable, using regulatory or nonregulatory approaches as the Administrator determines to be appropriate, adverse lifecycle impacts in accordance with a schedule that ensures that mitigation

measures are in place by a date sufficient to avoid adverse lifecycle impacts.

''(bb) AIR QUALITY IMPACTS.—For the purpose of this subclause, in the case of any air quality-related adverse lifecycle impact resulting from emissions from motor vehicles using renewable fuel, the Administrator shall ensure, by regulation promulgated under this title, that gasoline containing renewable fuel does not result in—

''(AA) average per-gallon motor vehicle emissions (measured on a mass basis) of air pollutants in excess of those emissions attributable to gasoline sold or introduced into commerce in the United States in calendar year 2007; or

''(BB) a violation of any motor vehicle emission

or fuel content limitation under any other provision of this Act.

''(iii) CALENDAR YEAR 2025 AND THEREAFTER.—For calendar year 2025, and each fifth calendar year thereafter, the Administrator, in consultation with the Secretary of Agriculture and the Secretary of Energy, shall revise the applicable performance standard to require that each fuel provider shall additionally reduce, to the maximum extent practicable, the average lifecycle greenhouse gas emissions per unit of energy of the aggregate quantity of transportation fuel introduced by the fuel provider into commerce in the United States.

''(iv) REVISION OF REGULATIONS.—In accordance with the purposes of the Energy Independence, Clean Air, and Climate Security Act of 2007 , the Administrator may, as appropriate, revise the regulations promulgated under clause (i) as necessary to reflect or respond to changes in the

transportation fuel market or other relevant circumstances.

''(v) METHOD OF CALCULATION.—In calculating the lifecycle greenhouse gas emissions of hydrogen or electricity (when used as a transportation fuel) pursuant to clause (i)(I), the Administrator shall—

''(I) include emissions resulting from the production of the hydrogen or electricity; and

''(II) consider to be equivalent to the energy delivered by 1 gallon of ethanol the energy delivered by—

''(aa) 6.4 kilowatt-hours of electricity;

''(bb) 132 standard cubic feet of hydrogen; or

''(cc) 1.25 gallons of liquid hydrogen.

''(C) ELECTION TO PARTICIPATE.—An electricity provider may elect to participate in the program under this section if the electricity provider—

''(i) provides and separately tracks electricity for transportation through a meter that—

''(I) measures the electricity used for transportation separately from electricity used for other purposes; and

''(II) allows for load management and time-of-use rates; and

''(ii) generates more than 15 percent of the electricity sold by the electricity provider from renewable energy sources.

''(D) CREDITS.—

''(i) IN GENERAL.—The regulations promulgated to carry out this paragraph shall permit fuel providers to receive credits for achieving, during a calendar year, greater reductions in lifecycle greenhouse gas emissions of the fuel produced, blended, or imported by the fuel provider than are required under subparagraph (B)(i)(IV).

''(ii) METHOD OF CALCULATION.—The number of credits received by a fuel provider as described clause (i) for a cal-

endar year shall be calculated by multiplying—

"(I) the aggregate quantity of fuel produced, distributed, or imported by the fuel provider in the calendar year; and

"(II) the difference between—

"(aa) the lifecycle greenhouse gas emissions of that quantity of fuel; and

"(bb) the maximum lifecycle greenhouse gas emissions of that quantity of fuel permitted for the calendar year under subparagraph (B)(i)(VI).

"(E) COMPLIANCE.—Each fuel provider subject to this paragraph shall demonstrate compliance with this paragraph, including, as necessary, through the use of credits banked or purchased.

"(F) NO EFFECT ON STATE AUTHORITY OR MORE STRINGENT REQUIREMENTS.—Nothing in this subsection—

"(i) affects the authority of a State to establish, or to maintain in effect, any

transportation fuel performance standard or other similar standard that is more stringent than a standard established under this paragraph; or

''(ii) supercedes or otherwise affects any more stringent requirement under any other provision of this Act.''.

(b) ADVANCED CLEAN FUEL VOLUME STANDARD.—Section 211(o)(2) of the Clean Air Act (42 U.S.C. 7545(o)(2)) is amended—

(1) in subparagraph (B)—

(A) by striking the subparagraph designation and heading and all that follows through ''For the purpose'' and inserting the following:

''(B) APPLICABLE VOLUME.—For the purpose''; and

(B) by striking clauses (ii) through (iv); and

(2) by adding at the end the following:

''(C) ADVANCED CLEAN FUEL VOLUME STANDARD.—

''(i) DEFINITION OF RENEWABLE FUEL.—In this subparagraph, the term 'renewable fuel' has the meaning given the term in paragraph (11).

"(ii) INCREASE IN RENEWABLE FUEL VOLUME.—

"(I) IN GENERAL.—Unless, based on the results of the study carried out under paragraph (12), the Administrator determines that the total applicable volume of renewable fuel specified in clause (iii) for a calendar year would be technically infeasible, or would result in 1 or more adverse lifecycle impacts that cannot be adequately mitigated under subclause (V), the Administrator shall promulgate regulations that require the aggregate quantity of transportation fuel sold or introduced into commerce in the United States to contain such volume of renewable fuel as the Administrator determines will result in the total minimum volume for the calendar year specified in clause (iii).

"(II) INCREASE.—If the Administrator makes a determination under subclause (I), the Administrator may promulgate regulations that require

such increase in the aggregate quantity of transportation fuel sold or introduced into commerce in the United States as the Administrator determines to be appropriate, with respect to the determination under subclause (I).

''(III) SCHEDULE OF REGULATIONS.—In implementing subclauses (I) and (II), the Administrator shall—

''(aa) not later than January 1, 2010, promulgate regulations establishing any total applicable volume requirements for calendar years 2011 through 2013; and

''(bb) not later than January 1, 2013, and every 3 years thereafter, promulgate regulations establishing any total applicable volume requirements for the 3-calendar-year period beginning with the calendar year after the calendar year in which the regulations are promulgated.

''(IV) EFFECTIVE DATE.—The regulations promulgated under subclauses (I) and (II) shall take effect not sooner than 1 year after the date of promulgation of the regulations.

''(V) MITIGATION.—

''(aa) IN GENERAL.—For purposes of this clause, the Administrator, in consultation with the heads of other appropriate Federal agencies, shall use the existing authorities of the Administrator to mitigate, to the maximum extent practicable, using regulatory or nonregulatory approaches as the Administrator determines to be appropriate, adverse lifecycle impacts in accordance with a schedule that ensures that mitigation measures are in place by a date sufficient to avoid adverse lifecycle impacts.

''(bb) AIR QUALITY IMPACTS.—For the purpose of this subclause, in the case of any air

quality-related adverse lifecycle impact resulting from emissions from motor vehicles using renewable fuel, the Administrator shall ensure, by regulation, that gasoline containing renewable fuel does not result in—

"(AA) average per gallon motor vehicle emissions (measured on a mass basis) of air pollutants in excess of the quantity of those emissions attributable to gasoline sold or introduced into commerce in the United States during calendar year 2007; or

"(BB) a violation of any motor vehicle emission or fuel content limitation under any other provision of this Act.

"(iii) TOTAL ADVANCED CLEAN FUEL VOLUME.—

"(I) CALENDAR YEARS 2011 THROUGH 2025.—For the purpose of clause (ii), the total applicable volumes for any of calendar years 2011 through 2025 (including the minimum additional volumes required under subparagraph (B)) shall be determined in accordance with the following table:

Calendar year	Total applicable volume of renewable fuel (in billions of gallons)	Total volume of phase II renewable fuel (in billions of gallons)	Total volume of phase III renewable fuel (in billions of gallons)
2011	12.0	0	0
2012	14.0	0.5	0.25
2013	16.0	0.5	0.25
2014	18.0	1.5	0.75
2015	20.0	1.5	0.75
2016	22.0	3.0	1.5
2017	24.0	3.0	1.5
2018	26.0	5.0	2.5
2019	28.0	5.0	2.5
2020	30.0	8.0	4.0
2021	31.0	8.0	4.0
2022	32.0	11.0	6.0
2023	33.0	11.0	6.0
2024	34.0	11.0	6.0
2025	35.0	13.0	8.0.

"(II) CALENDAR YEAR 2026 AND THEREAFTER.—Subject to clause (iv), for the purposes of clause (ii), the total applicable volume for calendar

year 2026 and each calendar year thereafter shall be determined by the Administrator, in consultation with the Secretary of Agriculture and the Secretary of Energy, based on a review of the implementation of this subparagraph and subparagraph (B) during calendar years 2011 through 2025, including a review of—

"(aa) the impact of renewable fuel, phase II renewable fuel, and phase III renewable fuel on the environment of the United States and the world; and

"(bb) the impact of the use of renewable fuel, phase II renewable fuel, and phase III renewable fuel on other factors, including job creation, rural economic development, domestic energy production, and the energy security of the United States.

"(III) REVISION OF REGULATIONS.—In accordance with the purposes of the Energy Independence,

Clean Air, and Climate Security Act of 2007 , the Administrator may, as appropriate, revise the regulations promulgated pursuant to clause (i) as the Administrator determines to be necessary to reflect or respond to—

"(aa) changes in the transportation fuel market; or

"(bb) other relevant circumstances.

"(iv) CALCULATION OF TOTAL ADVANCED CLEAN FUEL VOLUME.—For the purpose of clause (iii)(II), the total applicable volume for calendar year 2026 and each calendar year thereafter shall be equal to the product obtained by multiplying—

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

"(II) the ratio that, as applicable—

"(aa) 35,000,000,000 gallons of renewable fuel (including

up to 13,000,000,000 gallons of phase II renewable fuel and up to 8,000,000,000 gallons of phase III renewable fuel); bears to

"(bb) the number of gallons of conventional transportation fuel sold or introduced into commerce in calendar year 2025.

"(v) NO EFFECT ON MORE STRINGENT REQUIREMENTS.—Nothing in this subparagraph supercedes or otherwise affects any more stringent requirement under any other provision of this Act.".

(c) STUDY.—Section 211(o) of the Clean Air Act (42 U.S.C. 7545(o)) (as amended by subsection (a)) is amended by adding at the end the following:

"(12) STUDY ON EFFECTS OF INCREASE IN RENEWABLE FUEL VOLUME.—

"(A) IN GENERAL.—The Administrator shall offer to enter into an agreement with the Academy under which the Academy shall periodically carry out, and submit to Congress and the Administrator a report on the results of, a study to determine whether the total applicable volume of renewable fuel specified in paragraph

(2)(C)(iii) or the advanced clean fuel performance standards specified in paragraph (11)(B) for any calendar year would reasonably be anticipated—

"(i) to result in 1 or more adverse lifecycle impacts; or

"(ii) to be technically infeasible.

"(B) SCHEDULE OF STUDIES.—In implementing subparagraph (A), the Administrator shall—

"(i) not later than 90 days after the date of enactment of this paragraph, offer to enter into an agreement with the Academy under which the Academy shall conduct the study described in subparagraph (A) with respect to calendar years 2011 through 2013; and

"(ii) not later than 3 years after the deadline specified in clause (i), and every 3 years thereafter, offer to enter into an agreement with the Academy under which the Academy shall conduct the study described in subparagraph (A) with respect to the 3-calendar-year period following the

most recent 3-calendar-year period studied by the Academy under this paragraph.

''(C) INITIAL STUDY OF ANALYTICAL METHODS.—The first study conducted under this paragraph shall include an identification and development of analytical methods for use—

''(i) in determining the lifecycle greenhouse gas emissions of conventional transportation fuel and renewable fuel; and

''(ii) in assessing the impacts of increasing volumes of renewable fuel in the transportation fuel supply on—

''(I) the environment of the United States and the world, taking into consideration potential additional warming of the oceans and surface of Earth as a result of changes in land use and cover; and

''(II) food and feedstock supply and prices.''.

(d) OPT-IN AREAS UNDER REFORMULATED GASOLINE PROGRAM.—Section 211(k)(6)(B) of the Clean Air Act (42 U.S.C. 7545(k)(6)(B)) is amended—

(1) in the subparagraph heading, by striking ''OZONE TRANSPORT REGION'' and inserting ''ADDITIONAL OPT-IN AREAS''; and

(2) in clause (i)(I)—

(A) by striking ''in the ozone transport region established by section 184(a)''; and

(B) by striking ''(other than an area classified as a marginal, moderate, serious, or severe ozone nonattainment area under subpart 2 of part D of title I)''.

SEC. 203. VOLUNTARY RENEWABLE FUELS LABELING PROGRAM.

Section 211(o) of the Clean Air Act (42 U.S.C. 7545(o)) (as amended by section 202(c)) is amended by adding at the end the following:

''(13) VOLUNTARY RENEWABLE FUELS LABELING PROGRAM.—

''(A) DEFINITIONS.—In this paragraph:

''(i) PROGRAM.—The term 'Program' means the Voluntary Renewable Fuels Labeling Program established under subparagraph (B).

''(ii) RENEWABLE FUEL.—The term 'renewable fuel' has the meaning given the term in paragraph (11).

"(iii) VOLUNTARY MANAGEMENT PRACTICE.—The term 'voluntary management practice' means a practice that protects the ecological values (including water, soil, and biological diversity) of a landscape used to produce renewable biomass.

"(B) ESTABLISHMENT.—The Administrator shall establish a program, to be modeled on the Energy Star Program, to promote consumer awareness of renewable fuels that meet the requirements of subparagraph (C).

"(C) REQUIREMENTS.—The Program shall provide authorization to applicable entities for the use of a unique label for any renewable fuel that—

"(i) has a lifecycle greenhouse gas emission rate that is at least 50 percent lower than the fuel emission baseline; and

"(ii) complies with applicable voluntary management practices established under subparagraph (D)(i).

"(D) VOLUNTARY MANAGEMENT PRACTICES, TERMS, AND PROCEDURES.—In carrying out the Program, the Administrator shall establish—

"(i) voluntary management practices for use in determining the eligibility of a renewable fuel for a unique renewable fuel label under the Program;

"(ii) terms governing the use of a unique renewable fuel label; and

"(iii) procedures for—

"(I) designating a renewable fuel to be eligible for a unique renewable fuel label;

"(II) verifying the values reported by producers of renewable fuel; and

"(III) monitoring compliance with the voluntary management practices established under clause (i).

"(E) LABEL INFORMATION.—The label to be applied to each qualifying renewable fuel under the Program shall indicate the lifecycle greenhouse gas emission rate of the renewable fuel.

"(F) ADVISORY COMMITTEE.—

"(i) ESTABLISHMENT.—The Administrator shall establish an independent advi-

sory committee to assist the Administrator in carrying out the Program.

''(ii) DUTIES.—Not less frequently than once every 2 years, the advisory committee shall provide recommendations to the Administrator for updates and improvements to the Program, including recommendations relating to the voluntary management practices established under subparagraph (D)(i).''.

SEC. 204. WATER QUALITY PROTECTION.

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

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

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

(2) by striking '', or (B) if'' and inserting the following: ''; or

''(B) if''; and

(3) in subparagraph (A), by striking ''air pollution which'' and inserting ''air pollution or water pollution (including any degradation in the quality of groundwater) that''.

Subtitle B—Assistance and Research

SEC. 211. SMALL ETHANOL PRODUCER CREDIT EXPANSION FOR PRODUCERS OF SUCROSE AND ETHANOL.

(a) IN GENERAL.—Subparagraph (C) of section 40(b)(4) of the Internal Revenue Code of 1986 (relating to small ethanol producer credit) is amended by inserting ''(30,000,000 gallons for any sucrose or cellulosic ethanol producer)'' after ''15,000,000 gallons''.

(b) SUCROSE OR CELLULOSIC ETHANOL PRODUCER.—Section 40(b)(4) of the Internal Revenue Code of 1986 is amended by adding at the end the following new subparagraph:

''(E) SUCROSE OR CELLULOSIC ETHANOL PRODUCER.—

''(i) IN GENERAL.—For purposes of this paragraph, the term 'sucrose or cellulosic ethanol producer' means a producer of ethanol using sucrose feedstock or a producer of cellulosic biomass ethanol (as defined in section 168(l)(3)).

''(ii) SUCROSE FEEDSTOCK.—For purposes of clause (i), the term 'sucrose feedstock' means any raw sugar, refined sugar,

or sugar equivalents (including juice and extract). Such term does not include any molasses, beet thick juice, or other similar products as determined by the Secretary.''.

(c) CONFORMING AMENDMENTS.—

(1) Section 40(g)(2) of the Internal Revenue Code of 1986 is amended by striking ''15,000,000 gallon limitation'' and inserting ''15,000,000 and 30,000,000 gallon limitations''.

(2) Section 40(g)(5)(B) of such Code is amended by striking ''15,000,000 gallons'' and inserting ''the gallon limitation under subsection (b)(4)(C)''.

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after the date of the enactment of this Act.

SEC. 212. RESEARCH AND DEVELOPMENT IN SUPPORT OF LOW-CARBON FUELS.

(a) DECLARATION OF POLICY.—Congress declares that, in order to achieve maximum reductions in greenhouse gas emissions, enhance national security, and ensure the protection of wildlife habitat, biodiversity, water quality, air quality, and rural and regional economies throughout the lifecycle of each low-carbon fuel, it is necessary and desirable to undertake a combination of basic and applied research, as well as technology development

and demonstration, involving the colleges and universities of the United States, in partnership with the Federal Government, State governments, and the private sector.

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

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

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

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

(B) are targeted at regional feedstocks and markets;

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

dustrial processes or industrial, commercial, and residential heating;

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

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

(i) the fuel emission baseline; and

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

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

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

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

(4) conducting research to determine to what extent the use of low-carbon fuels in the transportation sector would impact greenhouse gas emissions

in other sectors, such as the agricultural, industrial, and manufacturing sectors;

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

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

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

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

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

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

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

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

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

TITLE III—CLEAN POWER ACT

SEC. 301. SHORT TITLE.

This title may be cited as the ''Clean Power Act of 2007''.

SEC. 302. ELECTRIC ENERGY GENERATION EMISSION REDUCTIONS.

(a) IN GENERAL.—The Clean Air Act (42 U.S.C. 7401 et seq.) is amended by adding at the end the following:

"TITLE VII—ELECTRIC ENERGY GENERATION EMISSION REDUCTIONS

"SEC. 701. FINDINGS.

"Congress finds that—

"(1) public health and the environment continue to suffer as a result of pollution emitted by powerplants across the United States, despite the success of Public Law 101–549 (commonly known as the 'Clean Air Act Amendments of 1990') (42 U.S.C. 7401 et seq.) in reducing emissions;

"(2) according to the most reliable scientific knowledge, acid rain precursors must be significantly reduced for the ecosystems of the Northeast and

Southeast to recover from the ecological harm caused by acid deposition;

''(3) because lakes and sediments across the United States are being contaminated by mercury emitted by powerplants, there is an increasing risk of mercury poisoning of aquatic habitats and fish-consuming human populations;

''(4)(A) electricity generation accounts for approximately 40 percent of the total emissions in the United States of carbon dioxide, a major greenhouse gas causing global warming; and

''(B) the quantity of carbon dioxide in the atmosphere is growing without constraint and well beyond the international commitments of the United States;

''(5) the cumulative impact of powerplant emissions on public and environmental health must be addressed swiftly by reducing those harmful emissions to levels that are less threatening; and

''(6)(A) the atmosphere is a public resource; and

''(B) emission allowances, representing permission to use that resource for disposal of air pollution from electricity generation, should be allocated to promote public purposes, including—

''(i) protecting electricity consumers from adverse economic impacts;

''(ii) providing transition assistance to adversely affected employees, communities, and industries; and

''(iii) promoting clean energy resources and energy efficiency.

''SEC. 702. PURPOSES.

''The purposes of this title are—

''(1) to alleviate the environmental and public health damage caused by emissions of sulfur dioxide, nitrogen oxides, carbon dioxide, and mercury resulting from the combustion of fossil fuels in the generation of electric and thermal energy;

''(2) to reduce by 2012 the annual national emissions from electricity generating facilities to not more than—

''(A) 2,250,000 tons of sulfur dioxide;

''(B) 1,510,000 tons of nitrogen oxides; and

''(C) 2,050,000,000 tons of carbon dioxide;

''(3) to reduce by 2011 the annual national emissions of mercury from electricity generating facilities to not more than 5 tons;

''(4) to effectuate the reductions described in paragraphs (2) and (3) by—

''(A) requiring electricity generating facilities to comply with specified emission limitations by specified deadlines; and

''(B) allowing electricity generating facilities to meet the emission limitations (other than the emission limitation for mercury) through an alternative method of compliance consisting of an emission allowance and transfer system; and

''(5) to encourage energy conservation, use of renewable and clean alternative technologies, and pollution prevention as long-range strategies, consistent with this title, for reducing air pollution and other adverse impacts of energy generation and use.

''SEC. 703. DEFINITIONS.

''In this title:

''(1) COVERED POLLUTANT.—The term 'covered pollutant' means—

''(A) sulfur dioxide;

''(B) any nitrogen oxide;

''(C) carbon dioxide; and

''(D) mercury.

''(2) ELECTRICITY GENERATING FACILITY.—The term 'electricity generating facility' means an

electric or thermal electricity generating unit, a combination of such units, or a combination of 1 or more such units and 1 or more combustion devices, that—

''(A) has a nameplate capacity of 15 megawatts or more (or the equivalent in thermal energy generation, determined in accordance with a methodology developed by the Administrator);

''(B) generates electric energy, for sale, through combustion of fossil fuel; and

''(C) emits a covered pollutant into the atmosphere.

''(3) ELECTRICITY INTENSIVE PRODUCT.—The term 'electricity intensive product' means a product with respect to which the cost of electricity consumed in the production of the product represents more than 5 percent of the value of the product.

''(4) EMISSION ALLOWANCE.—The term 'emission allowance' means a limited authorization to emit in accordance with this title—

''(A) 1 ton of sulfur dioxide;

''(B) 1 ton of nitrogen oxides; or

''(C) 1 ton of carbon dioxide.

''(5) ENERGY EFFICIENCY PROJECT.—The term 'energy efficiency project' means any specific action (other than ownership or operation of an energy efficient building) commenced after the date of enactment of this title—

''(A) at a facility (other than an electricity generating facility), that verifiably reduces the annual electricity or natural gas consumption per unit output of the facility, as compared with the annual electricity or natural gas consumption per unit output that would be expected in the absence of an allocation of emission allowances (as determined by the Administrator); or

''(B) by an entity that is primarily engaged in the transmission and distribution of electricity, that significantly improves the efficiency of that type of entity, as compared with standards for efficiency developed by the Administrator, in consultation with the Secretary of Energy, after the date of enactment of this title.

''(6) ENERGY EFFICIENT BUILDING.—The term 'energy efficient building' means a residential building or commercial building completed after the date of enactment of this title for which the projected

lifetime consumption of electricity or natural gas for heating, cooling, and ventilation is at least 30 percent less than the lifetime consumption of a typical new residential building or commercial building, as determined by the Administrator (in consultation with the Secretary of Energy)—

''(A) on a State or regional basis; and

''(B) taking into consideration—

''(i) applicable building codes; and

''(ii) consumption levels achieved in practice by new residential buildings or commercial buildings in the absence of an allocation of emission allowances.

''(7) ENERGY EFFICIENT PRODUCT.—The term 'energy efficient product' means a product manufactured after the date of enactment of this title that has an expected lifetime electricity or natural gas consumption that—

''(A) is less than the average lifetime electricity or natural gas consumption for that type of product; and

''(B) does not exceed the lesser of—

''(i) the maximum energy consumption that qualifies for the applicable Energy Star label for that type of product; or

''(ii) the average energy consumption of the most efficient 25 percent of that type of product manufactured in the same year.

''(8) LIFETIME.—The term 'lifetime' means—

''(A) in the case of a residential building that is an energy efficient building, 30 years;

''(B) in the case of a commercial building that is an energy efficient building, 15 years; and

''(C) in the case of an energy efficient product, a period determined by the Administrator to be the average life of that type of energy efficient product.

''(9) MERCURY.—The term 'mercury' includes any mercury compound.

''(10) NEW CLEAN FOSSIL FUEL-FIRED ELECTRICITY GENERATING UNIT.—The term 'new clean fossil fuel-fired electricity generating unit' means a unit that—

''(A) has been in operation for 10 years or less; and

''(B) is—

''(i) a natural gas fired generator that—

''(I) has an energy conversion efficiency of at least 55 percent; and

''(II) uses best available control technology (as defined in section 169);

''(ii) a generator that—

''(I) uses integrated gasification combined cycle technology;

''(II) uses best available control technology (as defined in section 169); and

''(III) has an energy conversion efficiency of at least 45 percent; or

''(iii) a fuel cell operating on fuel derived from a nonrenewable source of energy.

''(11) NONWESTERN REGION.—The term 'nonwestern region' means the area of the States that is not included in the western region.

''(12) RENEWABLE ELECTRICITY GENERATING UNIT.—The term 'renewable electricity generating unit' means a unit that—

''(A) has been in operation for 10 years or less; and

''(B) generates electric energy by means of—

"(i) wind;

"(ii) biomass;

"(iii) landfill gas;

"(iv) a geothermal, solar thermal, or photovoltaic source; or

"(v) a fuel cell operating on fuel derived from a renewable source of energy.

"(13) SMALL BUSINESS CONCERN.—The term 'small business concern' has the meaning given the term in section 3 of the Small Business Act (15 U.S.C. 632).

"(14) SMALL ELECTRICITY GENERATING FACILITY.—The term 'small electricity generating facility' means an electric or thermal electricity generating unit, or combination of units, that—

"(A) has a nameplate capacity of less than 15 megawatts (or the equivalent in thermal energy generation, determined in accordance with a methodology developed by the Administrator);

"(B) generates electric energy, for sale, through combustion of fossil fuel; and

"(C) emits a covered pollutant into the atmosphere.

"(15) WESTERN REGION.—The term 'western region' means the area comprising the States of Ari-

zona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

"SEC. 704. EMISSION LIMITATIONS.

"(a) IN GENERAL.—Subject to subsections (b) and (c), the Administrator shall promulgate regulations to ensure that, during 2012 and each year thereafter (in the case of each covered pollutant other than carbon dioxide), and during 2022 and each year thereafter (in the case of carbon dioxide), the total annual emissions of covered pollutants from all electricity generating facilities located in all States does not exceed—

"(1) in the case of sulfur dioxide—

"(A) 275,000 tons in the western region; or

"(B) 1,975,000 tons in the nonwestern region;

"(2) in the case of nitrogen oxides, 1,510,000 tons;

"(3) in the case of carbon dioxide, 2,050,000,000 tons; or

"(4) in the case of mercury, 5 tons.

"(b) EXCESS EMISSIONS BASED ON UNUSED ALLOWANCES.—The regulations promulgated under subsection (a) shall authorize emissions of covered pollutants

in excess of the national emission limitations established under that subsection for a year to the extent that the number of tons of the excess emissions is less than or equal to the number of emission allowances that are—

''(1) used in the year; but

''(2) allocated for any previous year under section 707.

''(c) REDUCTIONS.—For 2012 (or 2022, in the case of carbon dioxide) and each year thereafter, the quantity of emissions specified for each covered pollutant in subsection (a) shall be reduced by the sum of—

''(1) the number of tons of the covered pollutant that were emitted by small electricity generating facilities in the second preceding year; and

''(2) any number of tons of reductions in emissions of the covered pollutant required under section 705(h).

''SEC. 705. EMISSION ALLOWANCES.

''(a) CREATION AND ALLOCATION.—

''(1) IN GENERAL.—For 2012 (or 2022, in the case of carbon dioxide) and each year thereafter, subject to paragraph (2), there are created, and the Administrator shall allocate in accordance with section 707, emission allowances as follows:

''(A) In the case of sulfur dioxide—

''(i) 275,000 emission allowances for each year for use in the western region; and

''(ii) 1,975,000 emission allowances for each year for use in the nonwestern region.

''(B) In the case of nitrogen oxides, 1,510,000 emission allowances for each year.

''(C) In the case of carbon dioxide, 2,050,000,000 emission allowances for each year.

''(2) REDUCTIONS.—For 2012 (or 2022, in the case of carbon dioxide) and each year thereafter, the number of emission allowances specified for each covered pollutant in paragraph (1) shall be reduced by a number equal to the sum of—

''(A) the number of tons of the covered pollutant that were emitted by small electricity generating facilities in the second preceding year; and

''(B) any number of tons of reductions in emissions of the covered pollutant required under subsection (h).

''(b) NATURE OF EMISSION ALLOWANCES.—

''(1) NOT A PROPERTY RIGHT.—An emission allowance allocated by the Administrator under subsection (a) is not a property right.

''(2) NO LIMIT ON AUTHORITY TO TERMINATE OR LIMIT.—Nothing in this title or any other provision of law limits the authority of the United States to terminate or limit an emission allowance.

''(3) TRACKING AND TRANSFER OF EMISSION ALLOWANCES.—

''(A) IN GENERAL.—Not later than 1 year after the date of enactment of this title, the Administrator shall promulgate regulations to establish an emission allowance tracking and transfer system for emission allowances of sulfur dioxide, nitrogen oxides, and carbon dioxide.

''(B) REQUIREMENTS.—The emission allowance tracking and transfer system established under subparagraph (A) shall—

''(i) incorporate the requirements of subsections (b) and (d) of section 412 (except that written certification by the transferee shall not be necessary to effect a transfer); and

''(ii) permit any entity—

''(I) to buy, sell, or hold an emission allowance; and

''(II) to permanently retire an unused emission allowance.

''(C) PROCEEDS OF TRANSFERS.—Proceeds from the transfer of emission allowances by any person to which the emission allowances have been allocated—

''(i) shall not constitute funds of the United States; and

''(ii) shall not be available to meet any obligations of the United States.

''(c) IDENTIFICATION AND USE.—

''(1) IN GENERAL.—Each emission allowance allocated by the Administrator shall bear a unique serial number, including—

''(A) an identifier of the covered pollutant to which the emission allowance pertains; and

''(B) the first year for which the allowance may be used.

''(2) SULFUR DIOXIDE EMISSION ALLOWANCES.—In the case of sulfur dioxide emission allowances, the Administrator shall ensure that the emission allowances allocated to electricity generating facilities in the western region are distinguish-

able from emission allowances allocated to electricity generating facilities in the nonwestern region.

''(3) YEAR OF USE.—Each emission allowance may be used in the year for which the emission allowance is allocated or in any subsequent year.

''(d) ANNUAL SUBMISSION OF EMISSION ALLOWANCES.—

''(1) IN GENERAL.—On or before April 1, 2013 (or April 1, 2023, in the case of carbon dioxide), and April 1 of each year thereafter, the owner or operator of each electricity generating facility shall submit to the Administrator 1 emission allowance for the applicable covered pollutant (other than mercury) for each ton of sulfur dioxide, nitrogen oxides, or carbon dioxide emitted by the electricity generating facility during the previous calendar year.

''(2) SPECIAL RULE FOR OZONE EXCEEDANCES.—

''(A) IDENTIFICATION OF FACILITIES CONTRIBUTING TO NONATTAINMENT.—Not later than December 31, 2013, and the end of each 3-year period thereafter, each State, consistent with the obligations of the State under section 110(a)(2)(D), shall identify the electricity generating facilities in the State and in other

States that are significantly contributing (as determined based on guidance issued by the Administrator) to nonattainment of the national ambient air quality standard for ozone in the State.

''(B) SUBMISSION OF ADDITIONAL ALLOWANCES.—In 2012 and each year thereafter, on petition from a State or a person demonstrating that the control measures in effect at an electricity generating facility that is identified under subparagraph (A) as significantly contributing to nonattainment of the national ambient air quality standard for ozone in a State during the previous year are inadequate to prevent the significant contribution described in subparagraph (A), the Administrator, if the Administrator determines that the electricity generating facility is inadequately controlled for nitrogen oxides, may require that the electricity generating facility submit 3 nitrogen oxide emission allowances for each ton of nitrogen oxides emitted by the electricity generating facility during any period of an exceedance of the national ambient air quality standard for ozone in the State during the previous year.

''(3) REGIONAL LIMITATIONS FOR SULFUR DIOXIDE.—The Administrator shall not allow—

''(A) the use of sulfur dioxide emission allowances allocated for the western region to meet the obligations under this subsection of electricity generating facilities in the nonwestern region; or

''(B) the use of sulfur dioxide emission allowances allocated for the nonwestern region to meet the obligations under this subsection of electricity generating facilities in the western region.

''(e) EMISSION VERIFICATION, MONITORING, AND RECORDKEEPING.—

''(1) IN GENERAL.—The Administrator shall ensure that Federal regulations, in combination with any applicable State regulations, are adequate to verify, monitor, and document emissions of covered pollutants from electricity generating facilities.

''(2) INVENTORY OF EMISSIONS FROM SMALL ELECTRICITY GENERATING FACILITIES.—On or before July 1, 2008, the Administrator, in cooperation with State agencies, shall complete, and on an annual basis update, a comprehensive inventory of emissions of sulfur dioxide, nitrogen oxides, carbon

dioxide, and particulate matter from small electricity generating facilities.

''(3) MONITORING INFORMATION.—

''(A) IN GENERAL.—Not later than 180 days after the date of enactment of this title, the Administrator shall promulgate regulations to require each electricity generating facility to submit to the Administrator—

''(i) not later than April 1 of each year, verifiable information on covered pollutants emitted by the electricity generating facility in the previous year, expressed in—

''(I) tons of covered pollutants; and

''(II) tons of covered pollutants per megawatt hour of energy (or the equivalent thermal energy) generated; and

''(ii) as part of the first submission under clause (i), verifiable information on covered pollutants emitted by the electricity generating facility in 2002, 2003, and 2004, if the electricity generating fa-

cility was required to report that information in those years.

"(B) SOURCE OF INFORMATION.—Information submitted under subparagraph (A) shall be obtained using a continuous emission monitoring system (as defined in section 402).

"(C) AVAILABILITY TO THE PUBLIC.—The information described in subparagraph (A) shall be made available to the public—

"(i) in the case of the first year in which the information is required to be submitted under that subparagraph, not later than 18 months after the date of enactment of this title; and

"(ii) in the case of each year thereafter, not later than April 1 of the year.

"(4) AMBIENT AIR QUALITY MONITORING FOR SULFUR DIOXIDE AND HAZARDOUS AIR POLLUTANTS.—

"(A) IN GENERAL.—Beginning January 1, 2008, each coal-fired electricity generating facility with an aggregate generating capacity of 50 megawatts or more shall, in accordance with guidelines issued by the Administrator, commence ambient air quality monitoring within a

30-mile radius of the coal-fired electricity generating facility for the purpose of measuring maximum concentrations of sulfur dioxide and hazardous air pollutants emitted by the coal-fired electricity generating facility.

''(B) LOCATION OF MONITORING POINTS.—Monitoring under subparagraph (A) shall include monitoring at not fewer than 2 points—

''(i) that are at ground level and within 3 miles of the coal-fired electricity generating facility;

''(ii) at which the concentration of pollutants being monitored is expected to be the greatest; and

''(iii) at which the monitoring shall be the most frequent.

''(C) FREQUENCY OF MONITORING OF SULFUR DIOXIDE.—Monitoring of sulfur dioxide under subparagraph (A) shall be carried out on a continuous basis and averaged over 5-minute periods.

''(D) AVAILABILITY TO THE PUBLIC.—The results of the monitoring under subparagraph (A) shall be made available to the public.

''(f) EXCESS EMISSION PENALTY.—

''(1) IN GENERAL.—Subject to paragraph (2), section 411 shall be applicable to an owner or operator of an electricity generating facility.

''(2) CALCULATION OF PENALTY.—

''(A) IN GENERAL.—Except as provided in subparagraph (B), the penalty for failure to submit emission allowances for covered pollutants as required under subsection (d) shall be equal to 3 times the product obtained by multiplying—

''(i) as applicable—

''(I) the number of tons emitted in excess of the emission limitation requirement applicable to the electricity generating facility; or

''(II) the number of emission allowances that the owner or operator failed to submit; and

''(ii) the average annual market price of emission allowances (as determined by the Administrator).

''(B) MERCURY.—In the case of mercury, the penalty shall be equal to 3 times the product obtained by multiplying—

''(i) the number of grams emitted in excess of the emission limitation requirement for mercury applicable to the electricity generating facility; and

''(ii) the average cost of mercury controls at electricity generating units that have a nameplate capacity of 15 megawatts or more in all States (as determined by the Administrator).

''(g) SIGNIFICANT ADVERSE LOCAL IMPACTS.—

''(1) IN GENERAL.—If the Administrator determines that emissions of an electricity generating facility may reasonably be anticipated to cause or contribute to a significant adverse impact on an area (including endangerment of public health, contribution to acid deposition in a sensitive receptor area, and other degradation of the environment), the Administrator shall limit the emissions of the electricity generating facility as necessary to avoid that impact.

''(2) VIOLATION.—Notwithstanding the availability of emission allowances, it shall be a violation of this Act for any electricity generating facility to exceed any limitation on emissions established under paragraph (1).

''(h) ADDITIONAL REDUCTIONS.—

''(1) PROTECTION OF PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT.—If the Administrator determines that the emission levels necessary to achieve the national emission limitations established under section 704 are not reasonably anticipated to protect public health or welfare or the environment (including protection of children, pregnant women, minority or low-income communities, and other sensitive populations), the Administrator may require reductions in emissions from electricity generating facilities in addition to the reductions required under the other provisions of this title.

''(2) EMISSION ALLOWANCE TRADING.—

''(A) STUDIES.—

''(i) IN GENERAL.—In 2015 and at the end of each 3-year period thereafter, the Administrator shall complete a study of the impacts of the emission allowance trading authorized under this title.

''(ii) REQUIRED ASSESSMENT.—The study shall include an assessment of ambient air quality in areas surrounding electricity generating facilities that participate in emission allowance trading, including a comparison between—

''(I) the ambient air quality in those areas; and

''(II) the national average ambient air quality.

''(B) LIMITATION ON EMISSIONS.—If the Administrator determines, based on the results of a study under subparagraph (A), that adverse local impacts result from emission allowance trading, the Administrator may require reductions in emissions from electricity generating facilities in addition to the reductions required under the other provisions of this title.

''(i) USE OF CERTAIN OTHER EMISSION ALLOWANCES.—

''(1) IN GENERAL.—Subject to paragraph (2), emission allowances or other emission trading instruments created under title I or IV for sulfur dioxide or nitrogen oxides shall not be valid for submission under subsection (d).

''(2) EMISSION ALLOWANCES PLACED IN RESERVE.—

''(A) IN GENERAL.—Except as provided in subparagraph (B), an emission allowance described in paragraph (1) that was placed in reserve under section 404(a)(2) or 405 or

through regulations implementing controls on nitrogen oxides, because an affected unit emitted fewer tons of sulfur dioxide or nitrogen oxides than were permitted under an emission limitation imposed under title I or IV before the date of enactment of this title, shall be considered to be equivalent to ¼ of an emission allowance created by subsection (a) for sulfur dioxide or nitrogen oxides, respectively.

''(B) EMISSION ALLOWANCES RESULTING FROM ACHIEVEMENT OF NEW SOURCE PERFORMANCE STANDARDS.—If an emission allowance described in subparagraph (A) was created and placed in reserve during the period of 2001 through 2009 by the owner or operator of an electricity generating facility through the application of pollution control technology that resulted in the achievement and maintenance by the electricity generating facility of the applicable standards of performance required of new sources under section 111, the emission allowance shall be valid for submission under subsection (d).

"SEC. 706. PERMITTING AND TRADING OF EMISSION ALLOWANCES.

"(a) IN GENERAL.—Not later than 1 year after the date of enactment of this title, the Administrator shall promulgate regulations to establish a permitting and emission allowance trading compliance program to implement the limitations on emissions of covered pollutants from electricity generating facilities established under section 704.

"(b) EMISSION ALLOWANCE TRADING WITH FACILITIES OTHER THAN ELECTRICITY GENERATING FACILITIES.—

"(1) IN GENERAL.—Subject to paragraph (2) and section 705(i), the regulations promulgated to establish the program under subsection (a) shall prohibit use of emission allowances generated from other emission control programs for the purpose of demonstrating compliance with the limitations on emissions of covered pollutants from electricity generating facilities established under section 704.

"(2) EXCEPTION FOR CERTAIN CARBON DIOXIDE EMISSION CONTROL PROGRAMS.—The prohibition described in paragraph (1) shall not apply in the case of carbon dioxide emission allowances generated from an emission control program that limits

total carbon dioxide emissions from the entirety of any industrial sector.

''(c) METHODOLOGY.—The program established under subsection (a) shall clearly identify the methodology for the allocation of emission allowances, including standards for measuring annual electricity generation and energy efficiency as the standards relate to emissions.

''SEC. 707. EMISSION ALLOWANCE ALLOCATION.

''(a) ALLOCATION TO ELECTRICITY CONSUMERS.—

''(1) IN GENERAL.—For 2012 (or 2022, in the case of carbon dioxide) and each year thereafter, after making allocations of emission allowances under subsections (b) through (g), the Administrator shall allocate the remaining emission allowances created by section 705(a) for the year for each covered pollutant other than mercury to households served by electricity.

''(2) ALLOCATION AMONG HOUSEHOLDS.—The allocation to each household shall reflect—

''(A) the number of persons residing in the household; and

''(B) the ratio that—

''(i) the quantity of the residential electricity consumption of the State in which the household is located; bears to

''(ii) the quantity of the residential electricity consumption of all States.

''(3) REGULATIONS.—Not later than 1 year after the date of enactment of this title, the Administrator shall promulgate regulations making appropriate arrangements for the allocation of emission allowances to households under this subsection, including as necessary the appointment of 1 or more trustees—

''(A) to receive the emission allowances for the benefit of the households;

''(B) to obtain fair market value for the emission allowances; and

''(C) to distribute the proceeds to the beneficiaries.

''(b) ALLOCATION FOR TRANSITION ASSISTANCE.—

''(1) IN GENERAL.—For 2012 and each year thereafter through 2021 (or, for 2022 and each year thereafter through 2031, in the case of carbon dioxide), the Administrator shall allocate the percentage specified in paragraph (2) of the emission allowances created by section 705(a) for the year for each covered pollutant other than mercury in the following manner:

''(A) 80 percent shall be allocated to provide transition assistance to—

''(i) dislocated workers (as defined in section 101 of the Workforce Investment Act of 1998 (29 U.S.C. 2801)) whose employment has been terminated or who have been laid off as a result of the emission reductions required by this title;

''(ii) communities that have experienced disproportionate adverse economic impacts as a result of the emission reductions required by this title; and

''(iii) small business concerns that have experienced disproportionate adverse economic impacts as a result of high electricity prices.

''(B) 20 percent shall be allocated to producers of electricity intensive products in a number equal to the product obtained by multiplying—

''(i) the ratio that—

''(I) the quantity of each electricity intensive product produced by each producer in the previous year; bears to

''(II) the quantity of the electricity intensive product produced by all producers in the previous year;

''(ii) the average quantity of electricity used in producing the electricity intensive product by producers that use the most energy efficient process for producing the electricity intensive product; and

''(iii) with respect to the previous year, the national average quantity (expressed in tons) of emissions of each such pollutant per megawatt hour of electricity generated by electricity generating facilities in all States.

''(2) SPECIFIED PERCENTAGES.—The percentages referred to in paragraph (1) are—

''(A) in the case of 2012 (or 2022, with respect to carbon dioxide), 6 percent;

''(B) in the case of 2013 (or 2023, with respect to carbon dioxide), 5.5 percent;

''(C) in the case of 2014 (or 2024, with respect to carbon dioxide), 5 percent;

''(D) in the case of 2015 (or 2025, with respect to carbon dioxide), 4.5 percent;

"(E) in the case of 2016 (or 2026, with respect to carbon dioxide), 4 percent;

"(F) in the case of 2017 (or 2027, with respect to carbon dioxide), 3.5 percent;

"(G) in the case of 2018 (or 2028, with respect to carbon dioxide), 3 percent;

"(H) in the case of 2019 (or 2029, with respect to carbon dioxide), 2.5 percent;

"(I) in the case of 2020 (or 2030, with respect to carbon dioxide), 2 percent; and

"(J) in the case of 2021 (or 2031, with respect to carbon dioxide), 1.5 percent.

"(3) REGULATIONS FOR ALLOCATION FOR TRANSITION ASSISTANCE TO DISLOCATED WORKERS AND COMMUNITIES.—

"(A) IN GENERAL.—Not later than 1 year after the date of enactment of this title, the Administrator shall promulgate regulations making appropriate arrangements for the distribution of emission allowances under paragraph (1)(A), including as necessary the appointment of 1 or more trustees—

"(i) to receive the emission allowances allocated under paragraph (1)(A) for the

benefit of the dislocated workers and communities;

''(ii) to obtain fair market value for the emission allowances; and

''(iii) to apply the proceeds to providing transition assistance to the dislocated workers and communities.

''(B) FORM OF TRANSITION ASSISTANCE.—Transition assistance under paragraph (1)(A) may take the form of—

''(i) grants to employers, employer associations, and representatives of employees—

''(I) to provide training, adjustment assistance, and employment services to dislocated workers; and

''(II) to make income-maintenance and needs-related payments to dislocated workers; and

''(ii) grants to States and local governments to assist communities in attracting new employers or providing essential local government services.

''(c) ALLOCATION TO RENEWABLE ELECTRICITY GENERATING UNITS, EFFICIENCY PROJECTS, AND

CLEANER ENERGY SOURCES.—For 2012 (or 2022, in the case of carbon dioxide) and each year thereafter, the Administrator shall allocate not more than 20 percent of the emission allowances created by section 705(a) for the year for each covered pollutant other than mercury—

''(1) to owners and operators of renewable electricity generating units, in a number equal to the product obtained by multiplying—

''(A) the number of megawatt hours of electricity generated in the previous year by each renewable electricity generating unit; and

''(B) with respect to the previous year, the national average quantity (expressed in tons) of emissions of each such pollutant per megawatt hour of electricity generated by electricity generating facilities in all States;

''(2) to owners and operators of energy efficient buildings, producers of energy efficient products, and entities that carry out energy efficient projects, in a number equal to the product obtained by multiplying—

''(A) the number of megawatt hours of electricity or cubic feet of natural gas saved in the previous year as a result of each energy ef-

ficient building, energy efficient product, or energy efficiency project; and

''(B) with respect to the previous year, the national average quantity (expressed in tons) of emissions of each such pollutant per, as appropriate—

''(i) megawatt hour of electricity generated by electricity generating facilities in all States; or

''(ii) cubic foot of natural gas burned for a purpose other than generation of electricity in all States;

''(3) to owners and operators of new clean fossil fuel-fired electricity generating units, in a number equal to the product obtained by multiplying—

''(A) the number of megawatt hours of electricity generated in the previous year by each new clean fossil fuel-fired electricity generating unit; and

''(B) with respect to the previous year, ½ of the national average quantity (expressed in tons) of emissions of each such pollutant per megawatt hour of electricity generated by electricity generating facilities in all States; and

''(4) to owners and operators of combined heat and power electricity generating facilities, in a number equal to the product obtained by multiplying—

''(A) the number of British thermal units of thermal energy produced and put to productive use in the previous year by each combined heat and power electricity generating facility; and

''(B) with respect to the previous year, the national average quantity (expressed in tons) of emissions of each such pollutant per British thermal unit of thermal energy generated by electricity generating facilities in all States.

''(d) TRANSITION ASSISTANCE TO ELECTRICITY GENERATING FACILITIES.—

''(1) IN GENERAL.—For 2012 and each year thereafter through 2021 (or for 2022 and each year thereafter through 2031, in the case of carbon dioxide), the Administrator shall allocate the percentage specified in paragraph (2) of the emission allowances created by section 705(a) for the year for each covered pollutant other than mercury to the owners or operators of electricity generating facilities in the ratio that—

"(A) the quantity of electricity generated by each electricity generating facility in 2003; bears to

"(B) the quantity of electricity generated by all electricity generating facilities in 2003.

"(2) SPECIFIED PERCENTAGES.—The percentages referred to in paragraph (1) are—

"(A) in the case of 2012 (or 2022, with respect to carbon dioxide), 10 percent;

"(B) in the case of 2013 (or 2023, with respect to carbon dioxide), 9 percent;

"(C) in the case of 2014 (or 2024, with respect to carbon dioxide), 8 percent;

"(D) in the case of 2015 (or 2025, with respect to carbon dioxide), 7 percent;

"(E) in the case of 2016 (or 2026, with respect to carbon dioxide), 6 percent;

"(F) in the case of 2017 (or 2027, with respect to carbon dioxide), 5 percent;

"(G) in the case of 2018 (or 2028, with respect to carbon dioxide), 4 percent;

"(H) in the case of 2019 (or 2029, with respect to carbon dioxide), 3 percent;

"(I) in the case of 2020 (or 2030, with respect to carbon dioxide), 2 percent; and

"(J) in the case of 2021 (or 2031, with respect to carbon dioxide), 1 percent.

"(e) ALLOCATION TO ENCOURAGE BIOLOGICAL CARBON SEQUESTRATION.—

"(1) IN GENERAL.—For 2022 and each year thereafter, the Administrator shall allocate, on a competitive basis and in accordance with paragraphs (2) and (3), not more than 0.075 percent of the carbon dioxide emission allowances created by section 705(a) for the year for the purposes of—

"(A) carrying out projects to reduce net carbon dioxide emissions through biological carbon dioxide sequestration in the United States that—

"(i) result in benefits to watersheds and fish and wildlife habitats; and

"(ii) are conducted in accordance with project reporting, monitoring, and verification guidelines based on—

"(I) measurement of increases in carbon storage in excess of the carbon storage that would have occurred in the absence of such a project;

"(II) comprehensive carbon accounting that—

"(aa) reflects net increases in carbon reservoirs; and

"(bb) takes into account any carbon emissions resulting from disturbance of carbon reservoirs in existence as of the date of commencement of the project;

"(III) adjustments to account for—

"(aa) emissions of carbon that may result at other locations as a result of the impact of the project on timber supplies; or

"(bb) potential displacement of carbon emissions to other land owned by the entity that carries out the project; and

"(IV) adjustments to reflect the expected carbon storage over various time periods, taking into account the likely duration of the storage of the carbon stored in a carbon reservoir; and

"(B) conducting accurate inventories of carbon sinks.

''(2) CARBON INVENTORY.—The Administrator, in consultation with the Secretary of Agriculture, shall allocate not more than ⅓ of the emission allowances described in paragraph (1) to not more than 5 State or multistate land or forest management agencies or nonprofit entities that—

''(A) have a primary goal of land conservation; and

''(B) submit to the Administrator proposals for projects—

''(i) to demonstrate and assess the potential for the development and use of carbon inventorying and accounting systems;

''(ii) to improve the standards relating to, and the identification of, incremental carbon sequestration in forests, agricultural soil, grassland, or rangeland; or

''(iii) to assist in development of a national biological carbon storage baseline or inventory.

''(3) REVOLVING LOAN PROGRAM.—The Administrator shall allocate not more than ⅔ of the emission allowances described in paragraph (1) to States, based on proposals submitted by States to conduct programs under which each State shall—

''(A) use the value of the emission allowances to establish a State revolving loan fund to provide loans to owners of nonindustrial private forest land in the State to carry out forest and forest soil carbon sequestration activities that will achieve the purposes specified in paragraph (2)(B); and

''(B) for 2013 and each year thereafter, contribute to the program of the State an amount equal to 25 percent of the value of the emission allowances received under this paragraph for the year in cash, in-kind services, or technical assistance.

''(4) USE OF EMISSION ALLOWANCES.—An entity that receives an allocation of emission allowances under this subsection may use the proceeds from the sale or other transfer of the emission allowances only for the purpose of carrying out activities described in this subsection.

''(5) RECOMMENDATIONS CONCERNING CARBON DIOXIDE EMISSION ALLOWANCES.—

''(A) IN GENERAL.—Not later than 4 years after the date of enactment of this title, the Administrator, in consultation with the Secretary of Agriculture, shall submit to Congress rec-

ommendations for establishing a system under which entities that receive grants or loans under this section may be allocated carbon dioxide emission allowances created by section 705(a) for incremental carbon sequestration in forests, agricultural soils, rangeland, or grassland.

''(B) GUIDELINES.—The recommendations shall include recommendations for development, reporting, monitoring, and verification guidelines for quantifying net carbon sequestration from land use projects that address the elements specified in paragraph (1)(A).

''(f) ALLOCATION TO ENCOURAGE GEOLOGICAL CARBON SEQUESTRATION.—

''(1) IN GENERAL.—For 2022 and each year thereafter, the Administrator shall allocate not more than 1.5 percent of the carbon dioxide emission allowances created by section 705(a) to entities that carry out geological sequestration of carbon dioxide produced by an electric generating facility in accordance with requirements established by the Administrator—

''(A) to ensure the permanence of the sequestration; and

"(B) to ensure that the sequestration will not cause or contribute to significant adverse effects on the environment.

"(2) NUMBER OF EMISSION ALLOWANCES.—For 2022 and each year thereafter, the Administrator shall allocate to each entity described in paragraph (1) a number of emission allowances that is equal to the number of tons of carbon dioxide produced by the electric generating facility during the previous year that is geologically sequestered as described in paragraph (1).

"(3) USE OF EMISSION ALLOWANCES.—An entity that receives an allocation of emission allowances under this subsection may use the proceeds from the sale or other transfer of the emission allowances only for the purpose of carrying out activities described in this subsection.

"(g) ALLOCATION FOR FISH AND WILDLIFE HABITAT.—

"(1) IN GENERAL.—For 2022 and each calendar year thereafter, the Administrator shall allocate at least 2 percent of the carbon dioxide emission allowances created by section 705(a) for the year for the purpose of mitigating the impacts of cli-

mate change on fish and wildlife habitat in accordance with this subsection.

''(2) WILDLIFE RESTORATION FUND.—

''(A) IN GENERAL.—For each calendar year, the Administrator shall transfer an amount equal to not less than 70 percent of the value of emission allowances allocated under paragraph (1) to the Federal aid to wildlife restoration fund established under section 3(a)(1) of the Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669b(a)(1))—

''(i) to carry out climate change impact mitigation actions pursuant to comprehensive wildlife conservation strategies; and

''(ii) to provide relevant information, training, monitoring, and other assistance to develop climate change impact mitigation and adaptation plans and integrate the plans into State comprehensive wildlife conservation strategies.

''(B) AVAILABILITY.—Amounts transferred to the Federal aid to wildlife restoration fund under this paragraph shall—

"(i) be available, without further appropriation, for obligation and expenditure; and

"(ii) remain available until expended.

"(3) PROTECTION OF NATURAL RESOURCES.—

"(A) IN GENERAL.—For each calendar year, the Administrator, in consultation with the Secretary of Agriculture, the Secretary of Commerce, the Chief of Engineers, and State and national wildlife conservation organizations, shall transfer an amount equal to not more than 30 percent of the value of emission allowances allocated under paragraph (1) to the Secretary of the Interior for use in carrying out Federal and State programs and projects—

"(i) to protect natural communities that are most vulnerable to climate change;

"(ii) to restore and protect natural resources that directly guard against damages from climate change events; and

"(iii) to restore and protect ecosystem services that are most vulnerable to climate change.

''(B) ADMINISTRATION.—Amounts transferred to the Secretary of the Interior under this paragraph shall—

''(i) be available, without further appropriation, for obligation and expenditure;

''(ii) remain available until expended;

''(iii)(I) be obligated not later than 2 years after the date of transfer; or

''(II) if the amounts are not obligated in accordance with subclause (I), be transferred to the Federal aid to wildlife restoration fund for use in accordance with paragraph (2); and

''(iv) supplement, and not supplant, the amount of Federal, State, and local funds otherwise expended to carry out programs and projects described in subparagraph (A).

''(C) PROGRAMS AND PROJECTS.—Programs and projects for which funds may be used under this paragraph include—

''(i) Federal programs and projects—

''(I) to identify Federal land and water at greatest risk of being damaged or depleted by climate change;

"(II) to monitor Federal land and water to allow for early detection of impacts;

"(III) to develop adaptation strategies to minimize the damage; and

"(IV) to restore and protect Federal land and water at the greatest risk of being damaged or depleted by climate change;

"(ii) Federal programs and projects to identify climate change risks and develop adaptation strategies for natural grassland, wetlands, migratory corridors, and other habitats vulnerable to climate change on private land enrolled in—

"(I) the wetlands reserve program established under subchapter C of chapter 1 of subtitle D of title XII of the Food Security Act of 1985 (16 U.S.C. 3837 et seq.);

"(II) the grassland reserve program established under subchapter C of chapter 2 of subtitle D of title XII

of that Act (16 U.S.C. 3838n et seq.); and

''(III) the wildlife habitat incentive program established under section 1240N of that Act (16 U.S.C. 3839bb–1);

''(iii) programs and projects under the North American Wetlands Conservation Act (16 U.S.C. 4401 et seq.), the North American Bird Conservation Initiative, and the Neotropical Migratory Bird Conservation Act (16 U.S.C. 6101 et seq.) to protect habitat for migratory birds that are vulnerable to climate change impacts;

''(iv) programs and projects—

''(I) to identify coastal and marine resources (such as coastal wetlands, coral reefs, submerged aquatic vegetation, shellfish beds, and other coastal or marine ecosystems) at the greatest risk of being damaged by climate change;

''(II) to monitor those resources to allow for early detection of impacts;

"(III) to develop adaptation strategies;

"(IV) to protect and restore those resources; and

"(V) to integrate climate change adaptation requirements into State plans developed under the coastal zone management program established under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.), the national estuary program established under section 320 of the Federal Water Pollution Control Act (33 U.S.C. 1330), the Coastal and Estuarine Land Conservation Program established under the fourth proviso of the matter under the heading 'PROCUREMENT, ACQUISITION, AND CONSTRUCTION (INCLUDING TRANSFERS OF FUNDS') of title II of the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 2002 (16 U.S.C. 1456d), or other comparable State programs;

"(v) programs and projects to conserve habitat for endangered species and species of conservation concern that are vulnerable to the impact of climate change;

"(vi) programs and projects under the Forest Legacy Program established under section 7 of the Cooperative Forestry Assistance Act (16 U.S.C. 2103c), to support State efforts to protect environmentally sensitive forest land through conservation easements to provide refuges for wildlife;

"(vii) other Federal or State programs and projects identified by the heads of agencies described in subparagraph (A) as high priorities—

"(I) to protect natural communities that are most vulnerable to climate change;

"(II) to restore and protect natural resources that directly guard against damages from climate change events; and

"(III) to restore and protect ecosystem services that are most vulnerable to climate change;

"(viii) to address climate change in Federal land use planning and plan implementation and to integrate climate change adaptation strategies into—

"(I) comprehensive conservation plans prepared under section 4(e) of the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd(e));

"(II) general management plans for units of the National Park System;

"(III) resource management plans of the Bureau of Land Management; and

"(IV) land and resource management plans under the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1600 et seq.) and the National Forest Management Act of 1976 (16 U.S.C. 1600 et seq.); and

"(ix) projects to promote sharing of information on climate change wildlife impacts and mitigation strategies across

agencies, including funding efforts to strengthen and restore habitat that improves the ability of fish and wildlife to adapt successfully to climate change through the Wildlife Conservation and Restoration Account established by section 3(a)(2) of the Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669b(a)(2)).

"SEC. 708. MERCURY EMISSION LIMITATIONS.

''(a) IN GENERAL.—

''(1) REGULATIONS.—

''(A) IN GENERAL.—Not later than 1 year after the date of enactment of this title, the Administrator shall promulgate regulations to establish emission limitations for mercury emissions by coal-fired electricity generating facilities.

''(B) NO EXCEEDANCE OF NATIONAL LIMITATION.—The regulations shall ensure that the national limitation for mercury emissions from each coal-fired electricity generating facility established under section 704(a)(4) is not exceeded.

''(C) EMISSION LIMITATIONS FOR 2011 AND THEREAFTER.—In carrying out subparagraph

(A), for 2011 and each year thereafter, the Administrator shall not—

"(i) subject to subsections (e) and (f) of section 112, establish limitations on emissions of mercury from coal-fired electricity generating facilities that allow emissions in excess of 2.48 grams of mercury per 1000 megawatt hours; or

"(ii) differentiate between facilities that burn different types of coal.

"(2) ANNUAL REVIEW AND DETERMINATION.—

"(A) IN GENERAL.—Not later than April 1 of each year, the Administrator shall—

"(i) review the total mercury emissions during the 2 previous years from electricity generating facilities located in all States; and

"(ii) determine whether, during the 2 previous years, the total mercury emissions from facilities described in clause (i) exceeded the national limitation for mercury emissions established under section 704(a)(4).

"(B) EXCEEDANCE OF NATIONAL LIMITATION.—If the Administrator determines under

subparagraph (A)(ii) that, during the 2 previous years, the total mercury emissions from facilities described in subparagraph (A)(i) exceeded the national limitation for mercury emissions established under section 704(a)(4), the Administrator shall, not later than 1 year after the date of the determination, revise the regulations promulgated under paragraph (1) to reduce the emission rates specified in the regulations as necessary to ensure that the national limitation for mercury emissions is not exceeded in any future year.

''(3) COMPLIANCE FLEXIBILITY.—

''(A) IN GENERAL.—Each coal-fired electricity generating facility subject to an emission limitation under this section shall be in compliance with that limitation if that limitation is greater than or equal to the quotient obtained by dividing—

''(i) the total mercury emissions of the coal-fired electricity generating facility during each 30-day period; by

''(ii) the quantity of electricity generated by the coal-fired electricity generating facility during that period.

''(B) MORE THAN 1 UNIT AT A FACILITY.—In any case in which more than 1 coal-fired electricity generating unit at a coal-fired electricity generating facility subject to an emission limitation under this section was operated in 1999 under common ownership or control, compliance with the emission limitation may be determined by averaging the emission rates of all coal-fired electricity generating units at the electricity generating facility during each 30-day period.

''(b) PREVENTION OF RE-RELEASE.—

''(1) REGULATIONS.—Not later than July 1, 2008, the Administrator shall promulgate regulations to ensure that any mercury captured or recovered by emission controls installed at an electricity generating facility is not re-released into the environment.

''(2) REQUIRED ELEMENTS.—The regulations shall require—

''(A) daily covers on all active waste disposal units, and permanent covers on all inactive waste disposal units, to prevent the release of mercury into the air;

''(B) monitoring of groundwater to ensure that mercury or mercury compounds do not migrate from the waste disposal unit;

''(C) waste disposal siting requirements and cleanup requirements to protect groundwater and surface water resources;

''(D) elimination of agricultural application of coal combustion wastes; and

''(E) appropriate limitations on mercury emissions from sources or processes that reprocess or use coal combustion waste, including manufacturers of wallboard and cement.

''SEC. 709. OTHER HAZARDOUS AIR POLLUTANTS.

''(a) IN GENERAL.—Not later than January 1, 2008, the Administrator shall issue to owners and operators of coal-fired electricity generating facilities requests for information under section 114 that are of sufficient scope to generate data sufficient to support issuance of standards under section 112(d) for hazardous air pollutants other than mercury emitted by coal-fired electricity generating facilities.

''(b) DEADLINE FOR SUBMISSION OF REQUESTED INFORMATION.—The Administrator shall require each recipient of a request for information described in subsection

(a) to submit the requested data not later than 180 days after the date of the request.

''(c) PROMULGATION OF EMISSION STANDARDS.—The Administrator shall—

''(1) not later than January 1, 2008, propose emission standards under section 112(d) for hazardous air pollutants other than mercury; and

''(2) not later than January 1, 2009, promulgate emission standards under section 112(d) for hazardous air pollutants other than mercury.

''(d) PROHIBITION ON EXCESS EMISSIONS.—It shall be unlawful for an electricity generating facility subject to standards for hazardous air pollutants other than mercury promulgated under subsection (c) to emit, after December 31, 2010, any such pollutant in excess of the standards.

''(e) EFFECT ON OTHER LAW.—Nothing in this section or section 708 affects any requirement of subsection (e), (f)(2), or (n)(1)(A) of section 112, except that the emission limitations established by regulations promulgated under this section shall be deemed to represent the maximum achievable control technology for mercury emissions from electricity generating units under section 112(d).

"SEC. 710. EFFECT OF FAILURE TO PROMULGATE REGULATIONS.

"If the Administrator fails to promulgate regulations to implement and enforce the limitations specified in section 704—

"(1)(A) each electricity generating facility shall achieve, not later than January 1, 2012 (or January 1, 2022, in the case of carbon dioxide), an annual quantity of emissions that is less than or equal to—

"(i) in the case of nitrogen oxides, 15 percent of the annual emissions by a similar electricity generating facility that has no controls for emissions of nitrogen oxides; and

"(ii) in the case of carbon dioxide, 75 percent of the annual emissions by a similar electricity generating facility that has no controls for emissions of carbon dioxide; and

"(B) each electricity generating facility that does not use natural gas as the primary combustion fuel shall achieve, not later than January 1, 2010, an annual quantity of emissions that is less than or equal to—

"(i) in the case of sulfur dioxide, 5 percent of the annual emissions by a similar electricity generating facility that has no controls for emissions of sulfur dioxide; and

''(ii) in the case of mercury, 10 percent of the annual emissions by a similar electricity generating facility that has no controls included specifically for the purpose of controlling emissions of mercury; and

''(2) the applicable permit under this Act for each electricity generating facility shall be deemed to incorporate a requirement for achievement of the reduced levels of emissions specified in paragraph (1).

''SEC. 711. PROHIBITIONS.

''It shall be unlawful—

''(1) for the owner or operator of any electricity generating facility—

''(A) to operate the electricity generating facility in noncompliance with the requirements of this title (including any regulations implementing this title);

''(B) to fail to submit by the required date any emission allowances, or pay any penalty, for which the owner or operator is liable under section 705;

''(C) to fail to provide and comply with any plan to offset excess emissions required under section 705(f); or

''(D) to emit mercury in excess of the emission limitations established under section 708; or

''(2) for any person to hold, use, or transfer any emission allowance allocated under this title except in accordance with regulations promulgated by the Administrator.

''SEC. 712. MODERNIZATION OF ELECTRICITY GENERATING FACILITIES.

''(a) IN GENERAL.—Beginning on the later of January 1, 2016, or the date that is 40 years after the date on which the electricity generating facility commences operation, each electricity generating facility shall be subject to emission limitations reflecting the application of best available control technology on a new major source of a similar size and type (as determined by the Administrator) as determined in accordance with the procedures specified in part C of title I.

''(b) ADDITIONAL REQUIREMENTS.—The requirements of this section shall be in addition to the other requirements of this title.

''SEC. 713. RELATIONSHIP TO OTHER LAW.

''(a) IN GENERAL.—Except as expressly provided in this title, nothing in this title—

''(1) limits or otherwise affects the application of any other provision of this Act; or

''(2) precludes a State from adopting and enforcing any requirement for the control of emissions of air pollutants that is more stringent than the requirements imposed under this title.

''(b) REGIONAL SEASONAL EMISSION CONTROLS.—Nothing in this title affects any regional seasonal emission control for nitrogen oxides established by the Administrator or a State under title I.''.

(b) CONFORMING AMENDMENT.—Section 412(a) of the Clean Air Act (42 U.S.C. 7651k(a)) is amended in the first sentence by striking ''opacity'' and inserting ''mercury, opacity,''.

SEC. 303. SAVINGS CLAUSE.

Section 193 of the Clean Air Act (42 U.S.C. 7515) is amended by striking ''date of the enactment of the Clean Air Act Amendments of 1990'' each place it appears and inserting ''date of enactment of the Clean Power Act of 2007''.

SEC. 304. ACID PRECIPITATION RESEARCH PROGRAM.

Section 103(j) of the Clean Air Act (42 U.S.C. 7403(j)) is amended—

(1) in paragraph (3)—

(A) in subparagraph (F)(i), by striking ''effects; and'' and inserting ''effects, including an assessment of—

''(I) acid-neutralizing capacity; and

''(II) changes in the number of water bodies in the sensitive ecosystems referred to in subparagraph (G)(ii) with an acid-neutralizing capacity greater than zero; and''; and

(B) by adding at the end the following:

''(G) SENSITIVE ECOSYSTEMS.—

''(i) IN GENERAL.—Beginning in 2008, and every 4 years thereafter, the report under subparagraph (E) shall include—

''(I) an identification of environmental objectives necessary to be achieved (and related indicators to be used in measuring achievement of the objectives) to adequately protect and restore sensitive ecosystems; and

''(II) an assessment of the status and trends of the environmental objec-

tives and indicators identified in previous reports under this paragraph.

''(ii) SENSITIVE ECOSYSTEMS TO BE ADDRESSED.—Sensitive ecosystems to be addressed under clause (i) include—

''(I) the Adirondack Mountains, mid-Appalachian Mountains, Rocky Mountains, and southern Blue Ridge Mountains;

''(II) the Great Lakes, Lake Champlain, Long Island Sound, and the Chesapeake Bay; and

''(III) other sensitive ecosystems, as determined by the Administrator.

''(H) ACID DEPOSITION STANDARDS.—Beginning in 2008, and every 4 years thereafter, the report under subparagraph (E) shall include a revision of the report under section 404 of Public Law 101–549 (42 U.S.C. 7651 note) that includes a reassessment of the health and chemistry of the lakes and streams that were subjects of the original report under that section.''; and

(2) by adding at the end the following:

"(4) PROTECTION OF SENSITIVE ECOSYSTEMS.—

"(A) DETERMINATION.—Not later than December 31, 2014, the Administrator, taking into consideration the findings and recommendations of the report revisions under paragraph (3)(H), shall determine whether emission reductions under titles IV and VII are sufficient to—

"(i) achieve the necessary reductions identified under paragraph (3)(F); and

"(ii) ensure achievement of the environmental objectives identified under paragraph (3)(G).

"(B) REGULATIONS.—

"(i) IN GENERAL.—Not later than 2 years after the Administrator makes a determination under subparagraph (A) that emission reductions are not sufficient, the Administrator shall promulgate regulations to protect the sensitive ecosystems referred to in paragraph (3)(G)(ii).

"(ii) CONTENTS.—Regulations under clause (i) shall include modifications to—

''(I) provisions relating to nitrogen oxide and sulfur dioxide emission reductions;

''(II) provisions relating to allocations of nitrogen oxide and sulfur dioxide allowances; and

''(III) such other provisions as the Administrator determines to be necessary.''.

SEC. 305. AUTHORIZATION OF APPROPRIATIONS FOR DEPOSITION MONITORING.

(a) OPERATIONAL SUPPORT.—In addition to amounts made available under any other law, there are authorized to be appropriated for each of fiscal years 2008 through 2017—

(1) for operational support of the National Atmospheric Deposition Program National Trends Network—

(A) $2,000,000 to the United States Geological Survey;

(B) $600,000 to the Environmental Protection Agency;

(C) $600,000 to the National Park Service; and

(D) $400,000 to the Forest Service;

(2) for operational support of the National Atmospheric Deposition Program Mercury Deposition Network—

(A) $400,000 to the Environmental Protection Agency;

(B) $400,000 to the United States Geological Survey;

(C) $100,000 to the National Oceanic and Atmospheric Administration; and

(D) $100,000 to the National Park Service;

(3) for the National Atmospheric Deposition Program Atmospheric Integrated Research Monitoring Network $1,500,000 to the National Oceanic and Atmospheric Administration;

(4) for the Clean Air Status and Trends Network $5,000,000 to the Environmental Protection Agency; and

(5) for the Temporally Integrated Monitoring of Ecosystems and Long-Term Monitoring Program $2,500,000 to the Environmental Protection Agency.

(b) MODERNIZATION.—In addition to amounts made available under any other law, there are authorized to be appropriated—

(1) for equipment and site modernization of the National Atmospheric Deposition Program National Trends Network $6,000,000 to the Environmental Protection Agency;

(2) for equipment and site modernization and network expansion of the National Atmospheric Deposition Program Mercury Deposition Network $2,000,000 to the Environmental Protection Agency;

(3) for equipment and site modernization and network expansion of the National Atmospheric Deposition Program Atmospheric Integrated Research Monitoring Network $1,000,000 to the National Oceanic and Atmospheric Administration; and

(4) for equipment and site modernization and network expansion of the Clean Air Status and Trends Network $4,600,000 to the Environmental Protection Agency.

(c) AVAILABILITY OF AMOUNTS.—Each of the amounts appropriated under subsection (b) shall remain available until expended.

SEC. 306. TECHNICAL AMENDMENTS.

Title IV of the Clean Air Act (relating to noise pollution) (42 U.S.C. 7641 et seq.)—

(1) is amended by redesignating sections 401 through 403 as sections 801 through 803, respectively; and

(2) is redesignated as title VIII and moved so as to appear at the end of that Act.

TITLE IV—REDUCING HEATING AND ELECTRIC BILLS

SEC. 401. WEATHERIZATION ASSISTANCE.

Section 422 of the Energy Conservation and Production Act (42 U.S.C. 6872) is amended to read as follows:

"SEC. 422. AUTHORIZATION OF APPROPRIATIONS.

''There are authorized to be appropriated to carry out the weatherization program under this part—

''(1) $1,000,000,000 for fiscal year 2008;

''(2) $1,200,000,000 for fiscal year 2009; and

''(3) $1,400,000,000 for fiscal year 2010.''.

SEC. 402. ENERGY STAR PROGRAMS.

There are authorized to be appropriated for use in carrying out the Energy Star program under section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a)—

(1) to the Administrator of the Environmental Protection Agency, $100,000,000 for each fiscal year; and

(2) to the Secretary of Energy, $12,000,000 for each fiscal year.

SEC. 403. RENEWABLE ELECTRICITY PRODUCTION CREDIT.

(a) EXTENSION.—Section 45(d) of the Internal Revenue Code of 1986 (relating to qualified facilities) is amended—

(1) by striking ''January 1, 2009'' each place it appears in paragraphs (1), (2), (3), (5), and (7) and inserting ''January 1, 2013'', and

(2) by striking ''January 1, 2009'' through ''solar energy)'' in paragraph (4) and inserting ''January 1, 2013 (January 1, 2011, in the case of a facility using solar energy)''.

(b) REPEAL OF MUNICIPAL SOLID WASTE AS QUALIFIED RESOURCE.—

(1) IN GENERAL.—Paragraph (1) of section 45(c) of the Internal Revenue Code of 1986 is amended by inserting ''and'' at the end of subparagraph (F) and by striking subparagraph (G).

(2) CONFORMING AMENDMENT.—Subsection (d) of section 45 of such Code is amended by striking paragraph (6).

(c) EXTENSION OF CREDIT FOR RESIDENTIAL ENERGY EFFICIENT PROPERTY.—Subsection (g) of section 25D of the Internal Revenue Code of 1986 (relating to

termination) is amended by striking ''December 31, 2008'' and inserting ''December 31, 2012''.

SEC. 404. EFFICIENCY RESOURCE STANDARD.

(a) IN GENERAL.—The Public Utility Regulatory Policies Act of 1978 is amended by inserting adding after section 609 (7 U.S.C. 918c) at the end the following:

''SEC. 610. EFFICIENCY RESOURCE STANDARD FOR RETAIL ELECTRICITY AND NATURAL GAS SUPPLIERS.

''(a) RESOURCE STANDARD.—Each retail electricity and natural gas supplier shall undertake energy savings measures in each calendar year from 2007 through 2011 and thereafter that produce electricity demand savings and electricity and natural gas usage savings, as a percentage of the supplier's base amount as shown in the following table. These targets represent savings realized from measures installed in the current year, plus cumulative savings realized from measures installed in all previous years. Each retail electricity and natural gas supplier subject to this subsection may use any electricity or natural gas savings measures available to it to achieve compliance with the performance standard established under this section, so long as the electricity and natural gas savings achieved by such measures can be calculated and verified pursuant to the rules promulgated under subsection (b).

Year	Reductions in peak electricity demand	Reductions in electricity and natural gas usage
2007	0.25%	0.25%
2008	0.75%	0.75%
2009	1.75%	1.5%
2010	2.75%	2.25%
2011 and thereafter	3.75%	3.0%

''(b) DETERMINATION OF COMPLIANCE.—The Secretary shall promulgate rules not later than one year after the enactment of this section regarding the means to be used to calculate and verify compliance with the performance standard established under subsection (a). Each retail electric and natural gas supplier subject to this section shall calculate its compliance with such standard in accordance with such rules. The rules shall include each of the following:

''(1) Procedures and standards for defining and measuring electricity savings achieved or obtained by electricity and natural gas suppliers (hereinafter in this section referred to as 'electricity and natural gas savings') from customer facility end-uses that occur in a calendar year from all measures in place in that year (including measures implemented in previous years that produce electricity and natural gas savings in such calendar year).

''(2) Procedures and standards for verification of electricity and natural gas savings reported by the retail electricity and natural gas supplier.

''(3) Requirements for the contents and format of a bi-annual report from each retail electricity and natural gas supplier demonstrating its compliance with the requirements of subsection (a). The bi-annual report must include sufficient detail regarding the calculation of electricity and natural gas savings to enable the regulatory authority to verify and enforce compliance with the requirements of this section and the regulations under this section.

''(c) CREDIT AND TRADING SYSTEM.—(1) After consultation with the Administrator of the Environmental Protection Agency, the Secretary shall promulgate rules establishing a nationwide credit and credit trading system for electricity and natural gas savings. Under such rules the Secretary may certify as credits electricity or natural savings achieved by a retail electricity or natural gas supplier in a given year in excess of the quantity of electricity or natural gas savings required that calendar year for such supplier to meet the resource standard, as long as such savings comply with the rules established under subsection (b). The Secretary shall also certify as credits customer energy savings created by retail electric or natural gas

suppliers or other entities, as long as such savings comply with the rules established under subsection (b). An electricity savings credit shall equal one kilowatt hour; a natural gas savings credit shall constitute one therm.

''(2) The Secretary shall not award credits to any retail electricity or natural gas supplier subject to State administration and enforcement under subsection (d) unless the Secretary has determined that such administration and enforcement are at least equivalent to administration and enforcement by the Secretary.

''(3) An electricity or natural gas savings credit is not a property right. Nothing in this or any other provision of law shall be construed to limit the authority of the United States to terminate or limit such credits.

''(4) A retail electric or natural gas supplier may sell such credit to any other entity, and other entities may sell such credits to retail electric or natural gas suppliers, in accordance with the accounting and verification rules established by the Secretary. Such credit may be used by a purchasing retail electricity or natural gas supplier for purposes of complying with the resource standards set forth in subsection (a).

''(5) In order to receive an electricity or natural gas savings credit, the recipient of an electricity savings credit shall pay a fee, calculated by the Secretary, in an amount

that is equal to the administrative costs of issuing, recording, monitoring the sale or exchange of, and tracking the credit or does not exceed five percent of the dollar value of the credit, whichever is lower. The Secretary shall retain the fee and use it to pay these administrative costs.

''(6) A credit may be counted toward compliance with subsection (a) only once. A retail electricity or natural gas supplier may satisfy the requirements of subsection (a) through the accumulation of—

''(A) electricity or natural gas savings credits obtained by purchase or exchange under paragraph (7);

''(B) electricity or natural gas savings credits borrowed against future years under paragraph (8); or

''(C) any combination of credits under subparagraphs (A) and (B).

''(7) An electricity or natural gas savings credit may be sold or exchanged by the entity to whom issued or by any other entity that acquires the credit. An energy efficiency credit for any year that is not used to satisfy the minimum energy savings requirement of subsection (a) for that year may be carried forward for use within the next 4 years.

''(8) During the first year covered by the standards, a retail electricity or natural gas supplier that has reason to believe that it will not have sufficient electricity savings credits to comply with subsection (a) may—

''(A) submit a plan to the Secretary demonstrating that the retail electricity or natural gas supplier will earn sufficient credits within the next two calendar years which, when taken into account, will enable the retail electricity or natural gas supplier to meet the requirements of subsection (a) for the calendar year involved; and

''(B) upon the approval of the plan by the Secretary, apply credits that the plan demonstrates will be earned within the next two calendar years to meet the requirements of subsection (a) for the calendar year involved.

''(9) Any retail electricity or natural gas supplier may elect to comply with the requirements of this section in any calendar year by paying a fee of 3 cents per kilowatt hour, and 30 cents per therm, for any portion of the electricity or natural gas savings it would be obligated to achieve in that year by not later than March 31 of the following year. Funds produced from such fees shall be deposited in an escrow account established by the Secretary, and shall be distributed to the States for their use

in creating electricity or natural gas savings at customer facilities.

''(d) ENFORCEMENT OF COMPLIANCE.—(1) If the State regulatory authority with ratemaking jurisdiction over a State-regulated retail electricity or natural gas supplier notifies the Secretary that it will enforce compliance by such supplier with the performance standards under subsection (a) of this section, such State regulatory authority shall have the authority to administer and enforce such standards for such supplier under State law. If the State regulatory authority does not so notify the Secretary, the Secretary shall exercise such authority until receiving such notice from the State regulatory authority.

''(2) Not later than July 1 of the calendar years 2008, 2010, 2012, 2014, and 2016, each retail electricity and natural gas supplier shall submit the compliance report required under subsection (b) to—

''(A) the appropriate State regulatory authority, if such authority has notified the Secretary under subsection (d), or

''(B) the Secretary to determine and enforce compliance with the standards.

''(3) In the case of any retail electricity or natural gas supplier for which the Secretary is enforcing compliance with the standards under this section, if such sup-

plier fails to comply with such standards for two consecutive calendar years, the Secretary shall determine the number of kilowatt hours of electricity savings, or therms of natural gas savings, by which the supplier has fallen short of the standards, and, by order, require such supplier, after notice and opportunity for hearing, to deposit in an escrow account to be designated by the Secretary an amount equal to 3.5 cents per kilowatt hour for each such kilowatt hour, and 35 cents per therm for each such therm. The holder of such escrow account shall annually distribute the total amount of such account to the States to be used by the States for the purpose of achieving customer electricity and natural gas savings. Any retail electricity or natural gas supplier required to make such a payment may, within 60 calendar days after the issuance of such order, bring an action in the United States Court of Appeals for the District of Columbia for judicial review of such order. Such court shall have jurisdiction to enter a judgment affirming, modifying, or setting aside such order or remanding such order in whole or in part to the Secretary.

''(e) INFORMATION COLLECTION.—The Secretary may collect the information necessary to verify and audit—

''(1) the annual electric energy sales, natural gas sales, electricity savings, and natural gas savings of any entity applying for electricity or natural gas savings credits under this section,

''(2) the validity of electricity or natural gas savings credits submitted by a retail electricity or natural gas supplier to the Secretary, and

''(3) the quantity of electricity and natural gas sales of all retail electricity and natural gas suppliers.

''(f) STATE LAW.—Nothing in this section shall supersede or otherwise affect any State or local law requiring or otherwise relating to reductions in total annual electricity or natural gas energy consumption by or peak power consumption by electric consumers to the extent that such State or local law requires more stringent reductions than those required under this section. Any retail electricity or natural gas supplier that achieves reductions referred to in this section in accordance with State requirements shall be entitled to full credit under this section for such reductions to the extent that such reductions meet the requirements of this section and the regulations under this section (including verification and monitoring requirements).

''(g) DEFINITIONS.—For purposes of this section:

''(1) The term 'retail electricity or natural supplier' means a person that sells electric energy or natural gas to consumers and sold not less than 1,000,000 megawatt-hours of electric energy or 20,000,000 therms of natural gas to consumers for purposes other than resale during the preceding calendar year; except that such term does not include the United States, a State or any political subdivision of a State, or any agency, authority, or instrumentality of any one or more of the foregoing, or a rural electric cooperative.

''(2) The term 'retail electricity or natural gas supplier's base amount' means the total amount of electric energy or natural gas sold by the retail electricity or natural gas supplier to customers during the most recent calendar year for which information is available.

''(3) The term 'electricity savings' means reductions in end-use electricity consumption in customer facilities relative to consumption at those same facilities in a base year as defined in rules issued by the Secretary, or in the case of new facilities, relative to reference facilities defined in rules issued by the Secretary, or distributed generation efficiency measures, including fuel cells and combined heat

and power (CHP) technologies, that provide electricity only for onsite customer use.

''(4) The term 'natural gas savings' means reductions in end-use natural gas consumption in customer facilities relative to consumption at those same facilities in a base year as defined in rules issued by the Secretary, or in the case of new facilities, relative to reference facilities defined in rules issued by the Secretary.''.

(b) TABLE OF CONTENTS.—The table of contents of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. prec. 2601) is amended by adding at the end of the items relating to title VI the following:

''Sec. 610. Efficiency resource standard for retail electricity and natural gas suppliers.''.

SEC. 405. FEDERAL RENEWABLE PORTFOLIO STANDARD.

(a) IN GENERAL.—The Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.) (as amended by section 404(a)) is amended by adding at the end the following:

''SEC. 611. FEDERAL RENEWABLE PORTFOLIO STANDARD.

''(a) MINIMUM RENEWABLE GENERATION REQUIREMENT.—For each calendar year beginning in calendar year 2009, each retail electric supplier shall submit to the Secretary, not later than April 1 of the following calendar

year, renewable energy credits in an amount equal to the required annual percentage specified in subsection (b).

''(b) REQUIRED ANNUAL PERCENTAGE.—For calendar years after 2008, the required annual percentage of the retail electric supplier's base amount that shall be generated from renewable energy resources, or otherwise credited towards such percentage requirement pursuant to subsection (c), shall be the percentage specified in the following table:

''Calendar Years:	**Required annual percentage:**
2009 through 2010	1
2010 through 2011	2
2011 through 2012	4
2012 through 2013	6
2013 through 2015	8
2015 through 2016	10
2016 through 2017	12
2017 through 2018	14
2018 through 2019	16
2019 through 2020	18
2020 and thereafter	20.

''(c) SUBMISSION OF CREDITS.—(1) A retail electric supplier may satisfy the requirements of subsection (a) through the submission of renewable energy credits—

''(A) issued to the retail electric supplier under subsection (d);

''(B) obtained by purchase or exchange under subsection (e); or

''(C) borrowed under subsection (f).

''(2) A renewable energy credit may be counted toward compliance with subsection (a) only once.

''(d) ISSUANCE OF CREDITS.—(1) The Secretary shall establish by rule, not later than 1 year after the date of enactment of this section, a program to issue and monitor the sale or exchange of, and track, renewable energy credits.

''(2) Under the program established by the Secretary, an entity that generates electric energy through the use of a renewable energy resource may apply to the Secretary for the issuance of renewable energy credits. The application shall indicate—

''(A) the type of renewable energy resource used to produce the electricity;

''(B) the location where the electric energy was produced; and

''(C) any other information the Secretary determines appropriate.

''(3)(A) Except as provided in subparagraphs (B), (C), and (D), the Secretary shall issue to each entity that generates electric energy one renewable energy credit for each kilowatt hour of electric energy the entity generates from the date of enactment of this section and in each subsequent calendar year through the use of a renewable energy resource at an eligible facility.

''(B) For incremental hydropower the renewable energy credits shall be calculated based on the expected in-

crease in average annual generation resulting from the efficiency improvements or capacity additions. The number of credits shall be calculated using the same water flow information used to determine a historic average annual generation baseline for the hydroelectric facility and certified by the Secretary or the Federal Energy Regulatory Commission. The calculation of the renewable energy credits for incremental hydropower shall not be based on any operational changes at the hydroelectric facility not directly associated with the efficiency improvements or capacity additions.

''(C) The Secretary shall issue two renewable energy credits for each kilowatt hour of electric energy generated and supplied to the grid in that calendar year through the use of a renewable energy resource at an eligible facility located on Indian land. For purposes of this paragraph, renewable energy generated by biomass cofired with other fuels is eligible for two credits only if the biomass was grown on such land.

''(D) For electric energy resources produced from a generation offset, the Secretary shall issue two renewable energy credits for each kilowatt hour generated.

''(E) To be eligible for a renewable energy credit, the unit of electric energy generated through the use of a renewable energy resource may be sold or may be used by

the generator. If both a renewable energy resource and a non-renewable energy resource are used to generate the electric energy, the Secretary shall issue renewable energy credits based on the proportion of the renewable energy resources used. The Secretary shall identify renewable energy credits by type and date of generation.

''(4) When a generator sells electric energy generated through the use of a renewable energy resource to a retail electric supplier under a contract subject to section 210 of this Act, the retail electric supplier is treated as the generator of the electric energy for the purposes of this section or the duration of the contract.

''(5) The Secretary shall issue renewable energy credits for existing facility offsets to be applied against a retail electric supplier's required annual percentage. Such credits are not tradeable and may be used only in the calendar year generation actually occurs.

''(e) CREDIT TRADING.—A renewable energy credit, may be sold or exchanged by the entity to whom issued or by any other entity who acquires the renewable energy credit. A renewable energy credit for any year that is not used to satisfy the minimum renewable generation requirement of subsection (a) for that year may be carried forward for use within the next 4 years.

''(f) CREDIT BORROWING.—At any time before the end of calendar year 2009, a retail electric supplier that has reason to believe it will not have sufficient renewable energy credits to comply with subsection (a) may—

''(1) submit a plan to the Secretary demonstrating that the retail electric supplier will earn sufficient credits within the next 3 calendar years which, when taken into account, will enable the retail electric supplier to meet the requirements of subsection (a) for calendar year 2009 and the subsequent calendar years involved; and

''(2) upon the approval of the plan by the Secretary, apply renewable energy credits that the plan demonstrates will be earned within the next 3 calendar years to meet the requirements of subsection (a) for each calendar year involved.

The retail electric supplier must repay all of the borrowed renewable energy credits by submitting an equivalent number of renewable energy credits, in addition to those otherwise required under subsection (a), by calendar year 2010 or any earlier deadlines specified in the approved plan. Failure to repay the borrowed renewable energy credits shall subject the retail electric supplier to civil penalties under subsection (h) for violation of the requirements of subsection (a) for each calendar year involved.

''(g) CREDIT COST CAP.—The Secretary shall offer renewable energy credits for sale at the lesser of 3 cents per kilowatt-hour or 200 percent of the average market value of renewable credits for the applicable compliance period. On January 1 of each year following calendar year 2008, the Secretary shall adjust for inflation the price charged per credit for such calendar year, based on the Gross Domestic Product Implicit Price Deflator.

''(h) ENFORCEMENT.—The Secretary may bring an action in the appropriate United States district court to impose a civil penalty on a retail electric supplier that does not comply with subsection (a), unless the retail electric supplier was unable to comply with subsection (a) for reasons outside of the supplier's reasonable control (including weather-related damage, mechanical failure, lack of transmission capacity or availability, strikes, lockouts, actions of a governmental authority). A retail electric supplier who does not submit the required number of renewable energy credits under subsection (a) shall be subject to a civil penalty of not more than the greater of 3 cents or 200 percent of the average market value of credits for the compliance period for each renewable energy credit not submitted..

''(i) INFORMATION COLLECTION.—The Secretary may collect the information necessary to verify and audit—

''(1) the annual electric energy generation and renewable energy generation of any entity applying for renewable energy credits under this section;

''(2) the validity of renewable energy credits submitted by a retail electric supplier to the Secretary; and

''(3) the quantity of electricity sales of all retail electric suppliers.

''(j) ENVIRONMENTAL SAVINGS CLAUSE.—Incremental hydropower shall be subject to all applicable environmental laws and licensing and regulatory requirements.

''(k) EXISTING PROGRAMS.—This section does not preclude a State from imposing additional renewable energy requirements in that State, including specifying eligible technologies under such State requirements.

''(l) DEFINITIONS.—For purposes of this section:

''(1) BIOMASS.—The term 'biomass' means any organic material that is available on a renewable or recurring basis, including dedicated energy crops, trees grown for energy production, wood waste and wood residues, plants (including aquatic plants, grasses, and agricultural crops), residues, fibers, animal wastes and other organic waste materials (but not including unsegregated municipal solid waste (garbage)), and fats and oils, except that with

respect to 'trees grown for energy production', the term includes only trees that are procured in conformance with sustainable forestry practices recognized in the U.S., including the Sustainable Forestry Initiative, or another forest management system determined to be equivalent by the Secretary in consultation with the Secretary of the Department of Agriculture and the Secretary of the Department of Commerce and that are in excess of those relied upon by an existing forest products manufacturing facility to manufacture forest products, and with respect to material removed from National Forest System lands the term includes only organic material from—

''(A) thinnings from trees that are less than 12 inches in diameter;

''(B) slash;

''(C) brush; and

''(D) mill residues.

''(2) ELIGIBLE FACILITY.—The term 'eligible facility' means—

''(A) a facility for the generation of electric energy from a renewable energy resource that is placed in service on or after the date of enactment of this section; or

"(B) a repowering or cofiring increment that is placed in service on or after the date of enactment of this section at a facility for the generation of electric energy from a renewable energy resource that was placed in service before that date.

"(3) ELIGIBLE RENEWABLE ENERGY RESOURCE.—The term 'renewable energy resource' means solar, wind, ocean, or geothermal energy, biomass (excluding solid waste and paper that is commonly recycled), landfill gas, a generation offset, or incremental hydropower.

"(4) GENERATION OFFSET.—The term 'generation offset' means reduced electricity usage metered at a site where a customer consumes energy from a renewable energy technology.

"(5) EXISTING FACILITY OFFSET.—The term 'existing facility offset' means renewable energy generated from an existing facility, not classified as an eligible facility, that is owned or under contract, directly or indirectly, to a retail electric supplier on the date of enactment of this section.

"(6) INCREMENTAL HYDROPOWER.—The term 'incremental hydropower' means additional generation that is achieved from increased efficiency or ad-

ditions of capacity on or after the date of enactment of this section or the effective date of the applicable State renewable portfolio standard program, at a hydroelectric facility that was placed in service before that date.

''(7) INDIAN LAND.—The term 'Indian land' means—

''(A) any land within the limits of any Indian reservation, pueblo, or rancheria;

''(B) any land not within the limits of any Indian reservation, pueblo, or rancheria title to which was on the date of enactment of this paragraph either held by the United States for the benefit of any Indian tribe or individual or held by any Indian tribe or individual subject to restriction by the United States against alienation;

''(C) any dependent Indian community; and

''(D) any land conveyed to any Alaska Native corporation under the Alaska Native Claims Settlement Act.

''(8) INDIAN TRIBE.—The term 'Indian tribe' means any Indian tribe, band, nation, or other organized group or community, including any Alaskan

Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

''(9) RENEWABLE ENERGY.—The term 'renewable energy' means electric energy generated by a renewable energy resource.

''(10) RENEWABLE ENERGY RESOURCE.—The term 'renewable energy resource' means solar, wind, ocean, geothermal energy, biomass (not including municipal solid waste), landfill gas, a generation offset, or incremental hydropower.

''(11) REPOWERING OR COFIRING INCREMENT.—The term 'repowering or cofiring increment' means—

''(A) the additional generation from a modification that is placed in service on or after the date of enactment of this section to expand electricity production at a facility used to generate electric energy from a renewable energy resource or to cofire biomass that was placed in service before the date of enactment of this section, or

''(B) the additional generation above the average generation in the 3 years preceding the date of enactment of this section to expand electricity production at a facility used to generate electric energy from a renewable energy resource or to cofire biomass that was placed in service before the date of enactment of this section.

''(12) RETAIL ELECTRIC SUPPLIER.—The term 'retail electric supplier' means a person that sells electric energy to electric consumers and sold not less than 1,000,000 megawatt-hours of electric energy to electric consumers for purposes other than resale during the preceding calendar year; except that such term does not include the United States, a State or any political subdivision of a State, or any agency, authority, or instrumentality of any one or more of the foregoing.

''(13) RETAIL ELECTRIC SUPPLIER'S BASE AMOUNT.—The term 'retail electric supplier's base amount' means the total amount of electric energy sold by the retail electric supplier to electric customers during the most recent calendar year for which information is available, excluding electric energy generated by—

''(A) an eligible renewable energy resource; or

''(B) a hydroelectric facility.

''(m) SUNSET.—This section expires December 31, 2030.''.

(b) TABLE OF CONTENTS.—The table of contents for the Public Utilities Regulatory Policies Act of 1978 (16 U.S.C. prec. 2601) (as amended by section 404(b)) is amended by adding at the end of the items relating to title VI the following:

''Sec. 611. Federal renewable portfolio standard.''.

TITLE V—SAVING TAXPAYERS MONEY THROUGH ELIMINATION OF TAX BREAKS

SEC. 501. REPEAL OF CERTAIN TAX PROVISIONS FOR OIL INDUSTRY.

(a) AMORTIZATION OF GEOLOGICAL AND GEOPHYSICAL EXPENDITURES.—

(1) IN GENERAL.—Section 167(h) of the Internal Revenue Code of 1986 (relating to amortization of geological and geophysical expenditures) is amended by adding at the end the following new paragraph:

''(5) NONAPPLICATION TO MAJOR INTEGRATED OIL COMPANIES.—This subsection shall not apply to

any sale during any taxable year by a taxpayer which is—

''(A) an integrated oil company (as defined in section 291(b)(4)) which has an average daily worldwide production of crude oil of at least 500,000 barrels for such taxable year, or

''(B) a related person to such company.''.

(2) EFFECTIVE DATE.—The amendment made by this subsection shall apply to amounts paid or incurred in taxable years beginning after the date of the enactment of this Act.

(b) PERCENTAGE DEPLETION ALLOWANCE FOR OIL AND GAS PROPERTIES.—

(1) IN GENERAL.—Section 613A is amended by adding at the end the following new subsection:

''(f) NONAPPLICATION TO MAJOR INTEGRATED OIL COMPANIES.—The allowance for percentage depletion shall be zero during any taxable year with respect to a taxpayer which is—

''(1) an integrated oil company (as defined in section 291(b)(4)) which has an average daily worldwide production of crude oil of at least 500,000 barrels for such taxable year, or

''(2) a related person to such company.''.

(2) EFFECTIVE DATE.—The amendment made by this subsection shall apply to taxable years beginning after the date of the enactment of this Act.

(c) DEDUCTION FOR INTANGIBLE DRILLING AND DEVELOPMENT COSTS.—

(1) IN GENERAL.—Section 263(c) of the Internal Revenue Code of 1986 is amended by adding at the end the following new sentence: ''This subsection shall not apply during any taxable year with respect to a taxpayer which is an integrated oil company (as defined in section 291(b)(4)) which has an average daily worldwide production of crude oil of at least 500,000 barrels for such taxable year or a related person to such company.''.

(2) EFFECTIVE DATE.—The amendment made by this subsection shall apply to amounts paid or incurred in taxable years beginning after the date of the enactment of this Act.

TITLE VI—CLIMATE CHANGE RESEARCH

SEC. 601. SHORT TITLE.

This title may be cited as the ''Abrupt Climate Change Research Act of 2007''.

SEC. 602. ABRUPT CLIMATE CHANGE RESEARCH PROGRAM.

(a) DEFINITION OF ABRUPT CLIMATE CHANGE.—In this section, the term ''abrupt climate change'' means a change in the climate that occurs so rapidly or unexpectedly that human or natural systems have difficulty adapting to the climate as changed.

(b) ESTABLISHMENT OF PROGRAM.—The Secretary of Commerce shall establish within the Office of Oceanic and Atmospheric Research of the National Oceanic and Atmospheric Administration, and shall carry out, a program of scientific research on abrupt climate change.

(c) PURPOSES OF PROGRAM.—The purposes of the program are—

(1) to develop a global array of terrestrial and oceanographic indicators of paleoclimate in order to sufficiently identify and describe past instances of abrupt climate change;

(2) to improve understanding of thresholds and nonlinearities in geophysical systems related to the mechanisms of abrupt climate change;

(3) to incorporate those mechanisms into advanced geophysical models of climate change; and

(4) to test the output of those models against an improved global array of records of past abrupt climate changes.

SEC. 603. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated to the Department of Commerce to carry out the research program required under section 702 $10,000,000 for each of fiscal years 2008 through 2013, to remain available until expended.

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