AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
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111TH CONGRESS
1ST SESSION

S. 1733

To create clean energy jobs, promote energy independence, reduce global warming pollution, and transition to a clean energy economy.

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 30, 2009

Mr. KERRY (for himself and Mrs. BOXER) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To create clean energy jobs, promote energy independence, reduce global warming pollution, and transition to a clean energy economy.

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 "Clean Energy Jobs and American Power Act".

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

Sec. 1. Short title; table of contents.
Sec. 2. Findings.
Sec. 3. Economy-wide emission reduction goals.
Sec. 4. Definitions.

DIVISION A—AUTHORIZATIONS FOR POLLUTION REDUCTION, TRANSITION, AND ADAPTATION

Sec. 101. Structure of Act.

TITLE I—GREENHOUSE GAS REDUCTION PROGRAMS

Subtitle A—Clean Transportation

Sec. 111. Emission standards.

"PART B—Mobile Sources

"Sec. 821. Greenhouse gas emission standards for mobile sources.
Sec. 112. Greenhouse gas emission reductions through transportation efficiency.

"PART C—Transportation Emissions

"Sec. 831. Greenhouse gas emission reductions through transportation efficiency.
Sec. 113. Transportation greenhouse gas emission reduction program grants.
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Subtitle B—Carbon Capture and Sequestration

Sec. 121. National strategy.
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"Sec. 813. Geological storage sites.
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Sec. 124. Performance standards for coal-fueled power plants.
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Sec. 125. Carbon capture and sequestration demonstration and early deployment program.

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Sec. 131. Findings and policy.
Sec. 132. Nuclear worker training.
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Subtitle D—Water Efficiency

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Sec. 142. Federal procurement of water-efficient products.
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Subtitle E—Miscellaneous

Sec. 151. Office of Consumer Advocacy.
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Sec. 153. Product carbon disclosure program.
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Sec. 155. Supplemental agriculture and forestry greenhouse gas reduction and renewable energy program.
Sec. 156. Economic Development Climate Change Fund.

"Sec. 219. Economic Development Climate Change Fund.
Sec. 157. Study of risk-based programs addressing vulnerable areas.

Subtitle F—Energy Efficiency and Renewable Energy

Sec. 161. Renewable energy.
Sec. 162. Advanced biofuels.
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Subtitle G—Emission Reductions From Public Transportation Vehicles

Sec. 171. Short title.
Sec. 172. State fuel economy regulation for taxicabs.
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Subtitle H—Clean Energy and Natural Gas

Sec. 181. Clean Energy and Accelerated Emission Reduction Program.
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TITLE II—RESEARCH

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Sec. 201. Advanced energy research.

Subtitle B—Drinking Water Adaptation, Technology, Education, and Research

Sec. 211. Effects of climate change on drinking water utilities.

TITLE III—TRANSITION AND ADAPTATION

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PART 1—Green Jobs

Sec. 301. Clean energy curriculum development grants.
Sec. 302. Development of Information and Resources clearinghouse for vocational education and job training in renewable energy sectors.
Sec. 303. Green construction careers demonstration project.

PART 2—Climate Change Worker Adjustment Assistance

Sec. 311. Petitions, eligibility requirements, and determinations.
Sec. 312. Program benefits.
Sec. 313. General provisions.

Subtitle B—International Climate Change Programs

Sec. 321. Strategic Interagency Board on International Climate Investment.
Sec. 322. Emission reductions from reduced deforestation.

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"Sec. 752. Purposes.
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Sec. 323. International Clean Energy Deployment Program.

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"Sec. 702. Economy-wide reduction goals.
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Sec. 141. Ensuring real reductions in industrial emissions.

"PART F—Ensuring Real Reductions in Industrial Emissions

"Sec. 761. Purposes.
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"Sec. 763. Eligible industrial sectors.
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Sec. 202. State and local investment in energy efficiency and renewable energy.
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Sec. 213. Climate change safeguards for natural resources conservation.
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SEC. 2. FINDINGS.

Congress finds that—

(1) the United States can take back control of the energy future of the United States, strengthen economic competitiveness, safeguard the health of families and the environment, and ensure the national security, of the United States by increasing energy independence;

(2) creating a clean energy future requires a comprehensive approach that includes support for the improvement of all energy sources, including coal, natural gas, nuclear power, and renewable generation;

(3) efficiency in the energy sector also represents a critical avenue to reduce energy consumption and carbon pollution, and those benefits can be captured while generating additional savings for consumers;

(4) substantially increasing the investment in the clean energy future of the United States will provide economic opportunities to millions of people in the United States and drive future economic growth in this country;

(5) the United States is responsible for many of the initial scientific advances in clean energy technology, but, as of September 2009, the United States has only 5 of the top 30 leading companies in solar, wind, and advanced battery technology;

(6) investment in the clean energy sector will allow companies in the United States to retake a leadership position, and the jobs created by those investments will significantly accelerate growth in domestic manufacturing;

(7) those opportunities also will result in substantial employment gains in construction, a sector in which the median hourly wage is 17 percent higher than the national median;

(8) those jobs are distributed throughout the United States, and the highest clean energy economy employment growth rates in the last 10 years were in the States of Idaho, Nebraska, South Dakota, Oregon, and New Mexico;

(9) focusing on clean energy will dramatically reduce pollution and significantly improve the health of families in and the environment of the United States;

(10) moving to a low-carbon economy must protect the most vulnerable populations in the United States, including low-income families that are particularly affected by volatility in energy prices;

(11) if unchecked, the impact of climate change will include widespread effects on health and welfare, including—

(A) increased outbreaks from waterborne diseases;

(B) more droughts;

(C) diminished agricultural production;

(D) severe storms and floods;

(E) heat waves;

(F) wildfires; and

(G) a substantial rise in sea levels, due in part to—

(i) melting mountain glaciers;

(ii) shrinking sea ice; and

(iii) thawing permafrost;

(12) the most recent science indicates that the changes described in paragraph (11)(G) are occurring faster and with greater intensity than expected;

(13) military officials, including retired admirals and generals, concur with the intelligence community that climate change acts as a threat multiplier for instability and presents significant national security challenges for the United States;

(14) massive portions of the infrastructure of the United States, including critical military infrastructure, are at risk from the effects of climate change;

(15) impacts are already being felt in local communities within the United States as well as by at-risk populations abroad;

(16) the Declaration of the Leaders from the Major Economies Forum on Energy and Climate, representing 17 of the largest economies in the world, recognizes the need to limit the increase in global average temperatures to within 2 degrees Centigrade, as a necessary step to prevent the catastrophic consequences of climate change; and

(17) the United States should lead the global community in combating the threat of global climate change and reaching a robust international agree-

ment to address global warming under the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992 (or a successor agreement).

SEC. 3. ECONOMY-WIDE EMISSION REDUCTION GOALS.

The goals of this Act and the amendments made by this Act are to reduce steadily the quantity of United States greenhouse gas emissions such that—

(1) in 2012, the quantity of United States greenhouse gas emissions does not exceed 97 percent of the quantity of United States greenhouse gas emissions in 2005;

(2) in 2020, the quantity of United States greenhouse gas emissions does not exceed 80 percent of the quantity of United States greenhouse gas emissions in 2005;

(3) in 2030, the quantity of United States greenhouse gas emissions does not exceed 58 percent of the quantity of United States greenhouse gas emissions in 2005; and

(4) in 2050, the quantity of United States greenhouse gas emissions does not exceed 17 percent of the quantity of United States greenhouse gas emissions in 2005.

SEC. 4. DEFINITIONS.

In this Act:

(1) ADMINISTRATOR.—The term ''Administrator'' means the Administrator of the Environmental Protection Agency.

(2) INDIAN TRIBE.—The term ''Indian tribe'' has the meaning given the term in section 302 of the Clean Air Act (42 U.S.C. 7602).

(3) STATE.—The term ''State'' has the meaning given that term in section 302 of the Clean Air Act (42 U.S.C. 7602).

DIVISION A—AUTHORIZATIONS FOR POLLUTION REDUCTION, TRANSITION, AND ADAPTATION

SEC. 101. STRUCTURE OF ACT.

(a) AUTHORIZED AND ALLOCATED PROGRAMS.—The following programs authorized under this division are eligible to receive an allocation under title VII of the Clean Air Act:

(1) The program for greenhouse gas emission reductions through transportation efficiency under part C of title VIII the Clean Air Act (as added by sections 112 and 113 of this division).

(2) The program for nuclear worker training under section 132 of this division and 214 of division B.

(3) State recycling programs under section 154 of this division and section 211 of division B.

(4) The supplemental agriculture and forestry greenhouse gas reduction and renewable energy program under section 155 of this division and section 215 of division B.

(5) The program for energy efficiency in building codes under section 163 of this division and section 203 of division B.

(6) The program for retrofit for energy and environmental performance under section 164 of this division and section 204 of division B.

(7) The program for worker transition under part 2 of subtitle A of title III of this division and section 210 of division B.

(8) The program for public health and climate change under subpart B of part 1 of subtitle C of title III of this division and section 212 of division B.

(9) The program for climate change safeguards for natural resources conservation under subpart C

of part 1 of subtitle C of title III of this division and section 213 of division B.

(10) The program for emission reductions from reduced deforestation under section 753 of the Clean Air Act (as added by section 322 of this division) and section 771(d) of the Clean Air Act (as added by section 111 of division B).

(11) The International Clean Energy Deployment Program under section 323 of this division and section 207 of division B.

(12) The international climate change adaptation and global security program under 324 of this division and section 208 of division B.

(13) The program for water system mitigation and adaptation partnerships under section 381 of this division and section 211 of division B.

(14) The program for flood control, protection, prevention, and response under section 382 of this division and section 211 of division B.

(15) The program for wildfire under section 383 of this division and section 211 of division B.

(16) The Coastal and Great Lakes State Adaptation Program under section 384 of this division and section 211 of division B.

(b) ALLOCATED PROGRAMS.—The following allocations are provided under title VII of the Clean Air Act:

(1) The Market Stability Reserve Fund under section 726 of the Clean Air Act (as added by section 101 of division B).

(2) The program to ensure real reductions in industrial emissions under part F of title VII of the Clean Air Act (as added by section 141 of division B).

(3) The program for electricity consumers pursuant to section 772 of the Clean Air Act (as added by section 111 of division B).

(4) The program for natural gas consumers pursuant to section 773 of the Clean Air Act (as added by section 111 of division B).

(5) The program for home heating oil and propane consumers pursuant to section 774 of the Clean Air Act (as added by section 111 of division B).

(6) The program for domestic fuel production, including petroleum refiners and small business refiners, under section 775 of the Clean Air Act (as added by section 111 of division B).

(7) The program for climate change consumer refunds and low- and moderate-income consumers

pursuant to section 776 of the Clean Air Act (as added by section 111 of division B), including—

(A) consumer rebates under section 776(a) of the Clean Air Act (as so added); and

(B) energy refunds under section 776(b) of the Clean Air Act (as so added).

(8) The program for commercial deployment of carbon capture and storage technology under section 780 of the Clean Air Act (as added by section 111 of division B).

(9) The program for early action recognition pursuant to section 782 of the Clean Air Act (as added by section 111 of division B).

(10) The program for investment in clean vehicle technology under section 201 of division B.

(11) The program for State and local investment in energy efficiency and renewable energy under section 202 of division B.

(12) The program for Energy Innovation Hubs pursuant to section 205 of division B.

(13) The program for ARPA–E research pursuant to section 206 of division B.

(14) The program for energy efficiency and renewable energy worker training under section 209 of division B.

(15) The State programs for greenhouse gas reduction and climate adaptation pursuant to section 211 of division B.

(c) NONALLOCATED PROGRAMS.—The following programs are authorized under this division:

(1) The SmartWay Transportation Efficiency Program under section 822 of the Clean Air Act (as added by section 114 of this division).

(2) The carbon capture and sequestration demonstration and early deployment program under section 125 of this division.

(3) The nuclear safety and waste management programs under section 133 of this division.

(4) Water efficiency programs under subtitle D of title I of this division.

(5) The Office of Consumer Advocacy under section 151 of this division.

(6) The clean technology business competition grant program under section 152 of this division.

(7) The product carbon disclosure program under section 153 of this division.

(8) The Economic Development Climate Change Fund under section 219 of the Public Works and Economic Development Act of 1965 (as added by section 156 of this division).

(9) The program for renewable energy under section 161 of this division.

(10) The program for advanced biofuels under section 162 of this division.

(11) The program for emission reductions from public transportation vehicles under subtitle G of title I of this division.

(12) The Clean Energy and Accelerated Emission Reduction Program under section 181 of this division.

(13) The program for advanced natural gas technologies under section 182 of this division.

(14) The program for advanced energy research under subtitle A of title II of this division.

(15) The program for drinking water adaptation, technology, education, and research under subtitle B of title II of this division.

(16) The program for clean energy curriculum development grants under section 301 of this division.

(17) The program for Development of Information and Resources clearinghouse for vocational education and job training in renewable energy sectors under section 302 of this division.

(18) The green construction careers demonstration project under section 303 of this division.

TITLE I—GREENHOUSE GAS REDUCTION PROGRAMS

Subtitle A—Clean Transportation

SEC. 111. EMISSION STANDARDS.

Title VIII of the Clean Air Act (as added by section 121 of division B) is amended by adding at the end the following:

"PART B—MOBILE SOURCES

"SEC. 821. GREENHOUSE GAS EMISSION STANDARDS FOR MOBILE SOURCES.

''(a) NEW MOTOR VEHICLES AND NEW MOTOR VEHICLE ENGINES.—(1) Pursuant to section 202(a)(1), by December 31, 2010, the Administrator shall promulgate standards applicable to emissions of greenhouse gases from new heavy-duty motor vehicles or new heavy-duty motor vehicle engines, excluding such motor vehicles covered by the Tier II standards (as established by the Administrator as of the date of the enactment of this section). The Administrator may revise these standards from time to time.

''(2) Regulations issued under section 202(a)(1) applicable to emissions of greenhouse gases from new heavy-duty motor vehicles or new heavy-duty motor vehicle en-

gines, excluding such motor vehicles covered by the Tier II standards (as established by the Administrator as of the date of the enactment of this section), shall contain standards that reflect the greatest degree of emissions reduction achievable through the application of technology which the Administrator determines will be available for the model year to which such standards apply, giving appropriate consideration to cost, energy, and safety factors associated with the application of such technology. Any such regulations shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, and, at a minimum, shall apply for a period no less than 3 model years beginning no earlier than the model year commencing 4 years after such regulations are promulgated.

"(3) Regulations issued under section 202(a)(1) applicable to emissions of greenhouse gases from new heavy-duty motor vehicles or new heavy-duty motor vehicle engines, excluding such motor vehicles covered by the Tier II standards (as established by the Administrator as of the date of the enactment of this section), shall supersede and satisfy any and all of the rulemaking and compliance requirements of section 32902(k) of title 49, United States Code.

"(4) Other than as specifically set forth in paragraph (3) of this subsection, nothing in this section shall affect or otherwise increase or diminish the authority of the Secretary of Transportation to adopt regulations to improve the overall fuel efficiency of the commercial goods movement system.

"(b) NONROAD VEHICLES AND ENGINES.—(1) Pursuant to section 213(a)(4) and (5), the Administrator shall identify those classes or categories of new nonroad vehicles or engines, or combinations of such classes or categories, that, in the judgment of the Administrator, both contribute significantly to the total emissions of greenhouse gases from nonroad engines and vehicles, and provide the greatest potential for significant and cost-effective reductions in emissions of greenhouse gases. The Administrator shall promulgate standards applicable to emissions of greenhouse gases from these new nonroad engines or vehicles by December 31, 2012. The Administrator shall also promulgate standards applicable to emissions of greenhouse gases for such other classes and categories of new nonroad vehicles and engines as the Administrator determines appropriate and in the timeframe the Administrator determines appropriate. The Administrator shall base such determination, among other factors, on the relative contribution of greenhouse gas emissions, and the

costs for achieving reductions, from such classes or categories of new nonroad engines and vehicles. The Administrator may revise these standards from time to time.

"(2) Standards under section 213(a)(4) and (5) applicable to emissions of greenhouse gases from those classes or categories of new nonroad engines or vehicles identified in the first sentence of paragraph (1) of this subsection, shall achieve the greatest degree of emissions reduction achievable based on the application of technology which the Administrator determines will be available at the time such standards take effect, taking into consideration cost, energy, and safety factors associated with the application of such technology. Any such regulations shall take effect at the earliest possible date after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period, the applicable compliance dates for other standards, and other appropriate factors, including the period of time appropriate for the transfer of applicable technology from other applications, including motor vehicles, and the period of time in which previously promulgated regulations have been in effect.

"(3) For purposes of this section and standards under section 213(a)(4) or (5) applicable to emissions of

greenhouse gases, the term 'nonroad engines and vehicles' shall include non-internal combustion engines and the vehicles these engines power (such as electric engines and electric vehicles), for those non-internal combustion engines and vehicles which would be in the same category and have the same uses as nonroad engines and vehicles that are powered by internal combustion engines.

"(c) AVERAGING, BANKING, AND TRADING OF EMISSIONS CREDITS.—In establishing standards applicable to emissions of greenhouse gases pursuant to this section and sections 202(a), 213(a)(4) and (5), and 231(a), the Administrator may establish provisions for averaging, banking, and trading of greenhouse gas emissions credits within or across classes or categories of motor vehicles and motor vehicle engines, nonroad vehicles and engines (including marine vessels), and aircraft and aircraft engines, to the extent the Administrator determines appropriate and considering the factors appropriate in setting standards under those sections. Such provisions may include reasonable and appropriate provisions concerning generation, banking, trading, duration, and use of credits.

"(d) REPORTS.—The Administrator shall, from time to time, submit a report to Congress that projects the amount of greenhouse gas emissions from the transportation sector, including transportation fuels, for the years

2030 and 2050, based on the standards adopted under this section.

"(e) GREENHOUSE GASES.—Notwithstanding the provisions of section 711, hydrofluorocarbons shall be considered a greenhouse gas for purposes of this section.".

SEC. 112. GREENHOUSE GAS EMISSION REDUCTIONS THROUGH TRANSPORTATION EFFICIENCY.

(a) ENVIRONMENTAL PROTECTION AGENCY.—Title VIII of the Clean Air Act (as amended by section 111 of this division) is amended by adding at the end the following:

"PART C—TRANSPORTATION EMISSIONS

"SEC. 831. GREENHOUSE GAS EMISSION REDUCTIONS THROUGH TRANSPORTATION EFFICIENCY.

"(a) IN GENERAL.—The Administrator, in consultation with the Secretary of Transportation (referred to in this part as the 'Secretary'), shall promulgate, and update from time to time, regulations to establish—

"(1) national transportation-related greenhouse gas emission reduction goals that are commensurate with the emission reduction goals established under the Clean Energy Jobs and American Power Act and amendments made by that Act;

"(2) standardized emission models and related methods, to be used by States, metropolitan plan-

ning organizations, and air quality agencies to address emission reduction goals, including—

"(A) the development of surface transportation-related greenhouse gas emission reduction targets pursuant to sections 134 and 135 of title 23, and sections 5303 and 5304 of title 49, United States Code;

"(B) the assessment of projected surface transportation-related greenhouse gas emissions from transportation strategies;

"(C) the assessment of projected surface transportation-related greenhouse gas emissions from State and regional transportation plans;

"(D) the establishment of surface transportation-related greenhouse gas emission baselines at a national, State, and regional level; and

"(E) the measurement and assessment of actual surface transportation-related emissions to assess progress toward achievement of emission targets at the State and regional level;

"(3) methods for collection of data on transportation-related greenhouse gas emissions; and

"(4) publication and distribution of successful strategies employed by States, metropolitan planning

organizations, and other entities to reduce transportation-related greenhouse gas emissions.

"(b) ROLE OF DEPARTMENT OF TRANSPORTATION.—The Secretary, in consultation with the Administrator, shall promulgate, and update from time to time, regulations—

"(1) to improve the ability of transportation planning models and tools, including travel demand models, to address greenhouse gas emissions;

"(2) to assess projected surface transportation-related travel activity and transportation strategies from State and regional transportation plans; and

"(3) to update transportation planning requirements and approval of transportation plans as necessary to carry out this section.

"(c) CONSULTATION AND MODELS.—In promulgating the regulations, the Administrator and the Secretary—

"(1) shall consult with States, metropolitan planning organizations, and air quality agencies;

"(2) may use existing models and methodologies if the models and methodologies are widely considered to reflect the best practicable modeling or methodological approach for assessing actual and projected transportation-related greenhouse gas

emissions from transportation plans and projects; and

"(3) shall consider previously developed plans that were based on models and methodologies for reducing greenhouse gas emissions in applying those regulations to the first approvals after promulgation.

"(d) TIMING.—The Administrator and the Secretary shall—

"(1) publish proposed regulations under subsections (a) and (b) not later than 1 year after the date of enactment of this section; and

"(2) promulgate final regulations under subsections (a) and (b) not later than 18 months after the date of enactment of this section.

"(e) ASSESSMENT.—

"(1) IN GENERAL.—At least every 6 years after promulgating final regulations under subsections (a) and (b), the Administrator and the Secretary shall jointly assess current and projected progress in reducing national transportation-related greenhouse gas emissions.

"(2) REQUIREMENTS.—The assessment shall examine the contributions to emission reductions attributable to—

"(A) improvements in vehicle efficiency;

"(B) greenhouse gas performance of transportation fuels;

"(C) reductions in vehicle miles traveled;

"(D) changes in consumer demand and use of transportation management systems; and

"(E) any other greenhouse gas-related transportation policies enacted by Congress.

"(3) RESULTS OF ASSESSMENT.—The Secretary and the Administrator shall consider—

"(A) the results of the assessment conducted under this subsection; and

"(B) based on those results, whether technical or other updates to regulations required under this section and sections 134 and 135 of title 23, and sections 5303 and 5304 of title 49, United States Code, are necessary.".

(b) METROPOLITAN PLANNING ORGANIZATIONS.—

(1) TITLE 23.—Section 134 of title 23, United States Code, is amended—

(A) in subsection (a)(1)—

(i) by striking "minimizing" and inserting "reducing"; and

(ii) by inserting ", reliance on oil, impacts on the environment, transportation-

related greenhouse gas emissions,'' after ''consumption'';

(B) in subsection (h)(1)(E)—

(i) by inserting ''sustainability, and livability, reduce surface transportation-related greenhouse gas emissions and reliance on oil, adapt to the effects of climate change,'' after ''energy conservation,'';

(ii) by inserting ''and public health'' after ''quality of life''; and

(iii) by inserting '', including housing and land use patterns'' after ''development patterns'';

(C) in subsection (i)—

(i) in paragraph (4)(A)—

(I) by striking ''consult, as appropriate,'' and inserting ''cooperate'';

(II) by inserting ''transportation, public transportation, air quality, and housing, and shall consult, as appropriate, with State and local agencies responsible for'' after ''responsible for'' and

(III) by inserting ''public health,'' after ''conservation,''; and

(ii) in paragraph (5)(C)(iii), by inserting "and through the website of the metropolitan planning organization, including emission reduction targets and strategies developed under subsection (k)(6), including an analysis of the anticipated effects of the targets and strategies," after "World Wide Web"; and

(D) in subsection (k), by adding at the end the following:

"(6) TRANSPORTATION GREENHOUSE GAS REDUCTION EFFORTS.—

"(A) IN GENERAL.—Within a metropolitan planning area serving a transportation management area, the transportation planning process under this section shall address transportation-related greenhouse gas emissions by including emission reduction targets and strategies to meet those targets.

"(B) ELIGIBLE ORGANIZATIONS.—

"(i) MPOS WITHIN TMAS.—All provisions and requirements of this section, including the requirements of the transportation greenhouse gas reduction efforts, shall apply to metropolitan planning orga-

nizations that also serve as transportation management areas.

"(ii) OTHER MPOS.—A metropolitan planning organization that does not serve as a transportation management area—

"(I) may develop transportation greenhouse gas emission reduction targets and strategies to meet those targets; and

"(II) if those targets and strategies are developed, shall be subject to all applicable provisions and requirements of this section and the Clean Energy Jobs and American Power Act, including requirements of the transportation greenhouse gas reduction efforts.

"(C) ESTABLISHMENT OF TARGETS AND CRITERIA.—

"(i) IN GENERAL.—Not later than 2 years after the promulgation of the final regulations required under section 831 of the Clean Air Act, each metropolitan planning organization that also serves as a transportation management area shall de-

velop surface transportation-related greenhouse gas emission reduction targets, as well as strategies to meet those targets, in consultation with State air agencies as part of the metropolitan transportation planning process under this section.

"(ii) MULTIPLE DESIGNATIONS.—If more than 1 metropolitan planning organization has been designated within a metropolitan area, each metropolitan planning organization shall coordinate with other metropolitan planning organizations in the same metropolitan area to develop the targets and strategies described in clause (i).

"(iii) MINIMUM REQUIREMENTS.—Each metropolitan transportation plan developed by a metropolitan planning organization under clause (i) shall, within the plan, demonstrate progress in stabilizing and reducing transportation-related greenhouse gas emissions so as to contribute to the achievement of State targets pursuant to section 135(f)(9).

"(iv) REQUIREMENTS FOR TARGETS AND STRATEGIES.—The targets and strat-

egies developed under this subparagraph shall, at a minimum—

"(I) be based on the emission and travel demand models and related methodologies established in the final regulations required under section 831 of the Clean Air Act;

"(II) inventory all sources of surface transportation-related greenhouse gas emissions;

"(III) apply to those modes of surface transportation that are addressed in the planning process under this section;

"(IV) be integrated and consistent with regional transportation plans and transportation improvement programs; and

"(V) be selected through scenario analysis, and include, pursuant to the requirements of the transportation planning process under this section, transportation investment and management strategies that reduce greenhouse gas emissions from the trans-

portation sector over the life of the plan, such as—

"(aa) efforts to increase public transportation ridership, including through service improvements, capacity expansions, and access enhancement;

"(bb) efforts to increase walking, bicycling, and other forms of nonmotorized transportation;

"(cc) implementation of zoning and other land use regulations and plans to support infill, transit-oriented development, redevelopment, or mixed use development;

"(dd) travel demand management programs (including carpool, vanpool, or car-share projects), transportation pricing measures, parking policies, and programs to promote telecommuting, flexible work schedules, and satellite work centers;

"(ee) surface transportation system operation improvements, including intelligent transportation systems or other operational improvements to reduce long-term greenhouse gas emissions through reduced congestion and improved system management;

"(ff) intercity passenger rail improvements;

"(gg) intercity bus improvements;

"(hh) freight rail improvements;

"(ii) use of materials or equipment associated with the construction or maintenance of transportation projects that reduce greenhouse gas emissions;

"(jj) public facilities for supplying electricity to electric or plug-in hybrid-electric vehicles; or

"(kk) any other effort that demonstrates progress in reduc-

ing transportation-related greenhouse gas emissions in each metropolitan planning organization under this subsection.

"(D) REVIEW AND APPROVAL.—Not later than 180 days after the date of submission of a plan under this section—

"(i) the Secretary and the Administrator shall review the plan; and

"(ii) the Secretary shall approve a plan developed by a metropolitan planning organization pursuant to subparagraph (C) if—

"(I) the Secretary finds that a metropolitan planning organization has developed, submitted, and published the plan of the metropolitan planning organization pursuant to this section;

"(II) the Secretary, in consultation with the Administrator, determines that the plan is likely to achieve the targets established by the metropolitan planning organization under this subsection; and

"(III) the development of the plan complies with the minimum requirements established under clauses (iii) and (iv) of subparagraph (C).

"(E) CERTIFICATION.—Failure to comply with the requirements under subparagraph (C) shall not impact certification standards under paragraph (5).

"(7) DEFINITION OF METROPOLITAN PLANNING ORGANIZATION.—In this subsection, the term 'metropolitan planning organization' means a metropolitan planning organization described in clause (i) or (ii) of paragraph (6)(B).

"(8) SCENARIO ANALYSIS.—The term 'scenario analysis' means the use of a planning tool that—

"(A) develops a range of scenarios representing various combinations of transportation and land use strategies, and estimates of how each of those scenarios would perform in meeting the greenhouse gas emission reduction targets based on analysis of various forces (such as health, transportation, economic or environmental factors, and land use) that affect growth;

"(B) may include features such as—

"(i) the involvement of the general public, key stakeholders, and elected officials on a broad scale;

"(ii) the creation of an opportunity for those participants to educate each other as to growth trends and trade-offs, as a means to incorporate values and feedback into future plans; and

"(iii) the use of continuing efforts and ongoing processes; and

"(C) may include key elements such as—

"(i) identification of the driving forces behind planning decisions and outcomes;

"(ii) determination of patterns of interaction;

"(iii) creation of scenarios for discussion purposes;

"(iv) analysis of implications;

"(v) evaluation of scenarios; and

"(vi) use of monitoring indicators.".

(2) TITLE 49.—Section 5303 of title 49, United States Code, is amended—

(A) in subsection (a)(1)—

(i) by striking "minimizing" and inserting "reducing"; and

(ii) by inserting ", reliance on oil, impacts on the environment, transportation-related greenhouse gas emissions," after "consumption";

(B) in subsection (h)(1)(E)—

(i) by inserting "sustainability, and livability, reduce surface transportation-related greenhouse gas emissions and reliance on oil, adapt to the effects of climate change," after "energy conservation,";

(ii) by inserting "and public health" after "quality of life"; and

(iii) by inserting ", including housing and land use patterns" after "development patterns";

(C) in subsection (i)—

(i) in paragraph (4)(A)—

(I) by striking "consult, as appropriate," and inserting "cooperate";

(II) by inserting "transportation, public transportation, air quality, and housing, and shall consult, as appropriate, with State and local agencies responsible for" after "responsible for"; and

(III) by inserting ''public health,'' after ''conservation,''; and

(ii) in paragraph (5)(C)(iii), by inserting ''and through the website of the metropolitan planning organization, including emission reduction targets and strategies developed under subsection (k)(6), including an analysis of the anticipated effects of the targets and strategies,'' after ''World Wide Web''; and

(D) in subsection (k), by adding at the end the following:

''(6) TRANSPORTATION GREENHOUSE GAS REDUCTION EFFORTS.—

''(A) IN GENERAL.—Within a metropolitan planning area serving a transportation management area, the transportation planning process under this section shall address transportation-related greenhouse gas emissions by including emission reduction targets and strategies to meet those targets.

''(B) ELIGIBLE ORGANIZATIONS.—

''(i) IN GENERAL.—The requirements of the transportation greenhouse gas reduction efforts shall apply only to metro-

politan planning organizations within a transportation management area.

"(ii) DEVELOPMENT OF PLAN.—A metropolitan planning organization that does not serve as a transportation management area—

"(I) may develop transportation greenhouse gas emission reduction targets and strategies to meet those targets; and

"(II) if those targets and strategies are developed, shall be subject to all provisions and requirements of this section, including requirements of the transportation greenhouse gas reduction efforts.

"(C) ESTABLISHMENT OF TARGETS AND CRITERIA.—

"(i) IN GENERAL.—Not later than 2 years after the promulgation of the final regulations required under section 831 of the Clean Air Act, each metropolitan planning organization shall develop surface transportation-related greenhouse gas emission reduction targets, as well as

strategies to meet those targets, in consultation with State air agencies as part of the metropolitan transportation planning process under this section.

"(ii) MULTIPLE DESIGNATIONS.—If more than 1 metropolitan planning organization has been designated within a metropolitan area, each metropolitan planning organization shall coordinate with other metropolitan planning organizations in the same metropolitan area to develop the targets and strategies described in clause (i).

"(iii) MINIMUM REQUIREMENTS.—Each metropolitan transportation plan developed by a metropolitan planning organization under clause (i) shall, within the plan, demonstrate progress in stabilizing and reducing transportation-related greenhouse gas emissions so as to contribute to the achievement of State targets pursuant to section 135(f)(9) of title 23.

"(iv) REQUIREMENTS FOR TARGETS AND STRATEGIES.—The targets and strategies developed under this subparagraph shall, at a minimum—

"(I) be based on the emission models and related methodologies established in the final regulations required under section 831 of the Clean Air Act;

"(II) inventory all sources of surface transportation-related greenhouse gas emissions;

"(III) apply to those modes of surface transportation that are addressed in the planning process under this section;

"(IV) be integrated and consistent with regional transportation plans and transportation improvement programs; and

"(V) be selected through scenario analysis (as defined in section 134(k) of title 23), and include, pursuant to the requirements of the transportation planning process under this section, transportation investment and management strategies that reduce greenhouse gas emissions from the trans-

portation sector over the life of the plan, such as—

"(aa) efforts to increase public transportation ridership, including through service improvements, capacity expansions, and access enhancement;

"(bb) efforts to increase walking, bicycling, and other forms of nonmotorized transportation;

"(cc) implementation of zoning and other land use regulations and plans to support infill, transit-oriented development, redevelopment, or mixed use development;

"(dd) travel demand management programs (including carpool, vanpool, or car-share projects), transportation pricing measures, parking policies, and programs to promote telecommuting, flexible work schedules, and satellite work centers;

"(ee) surface transportation system operation improvements, including intelligent transportation systems or other operational improvements to reduce long-term greenhouse gas emissions through reduced congestion and improved system management;

"(ff) intercity passenger rail improvements;

"(gg) intercity bus improvements;

"(hh) freight rail improvements;

"(ii) use of materials or equipment associated with the construction or maintenance of transportation projects that reduce greenhouse gas emissions;

"(jj) public facilities for supplying electricity to electric or plug-in hybrid-electric vehicles; or

"(kk) any other effort that demonstrates progress in reduc-

ing transportation-related greenhouse gas emissions in each metropolitan planning organization under this subsection.

"(D) REVIEW AND APPROVAL.—Not later than 180 days after the date of submission of a plan under this section—

"(i) the Secretary and the Administrator shall review the plan; and

"(ii) the Secretary shall approve a plan developed by a metropolitan planning organization pursuant to subparagraph (C) if—

"(I) the Secretary finds that a metropolitan planning organization has developed, submitted, and published the plan of the metropolitan planning organization pursuant to this section;

"(II) the Secretary, in consultation with the Administrator, determines that the plan is likely to achieve the targets established by the metropolitan planning organization under this subsection; and

"(III) the development of the plan complies with the minimum requirements established under clauses (iii) and (iv) of subparagraph (C).

"(E) CERTIFICATION.—Failure to comply with the requirements under subparagraph (C) shall not impact certification standards under paragraph (5).

"(7) DEFINITION OF METROPOLITAN PLANNING ORGANIZATION.—In this subsection, the term 'metropolitan planning organization' means a metropolitan planning organization described in clause (i) or (ii) of paragraph (6)(B).".

(c) STATES.—

(1) TITLE 23.—Section 135 of title 23, United States Code, is amended—

(A) in subsection (d)(1)(E)—

(i) by inserting "sustainability, and livability, reduce surface transportation-related greenhouse gas emissions and reliance on oil, adapt to the effects of climate change," after "energy conservation,";

(ii) by inserting "and public health" after "quality of life"; and

(iii) by inserting ", including housing and land use patterns" after "development patterns"; and

(B) in subsection (f)—

(i) in paragraph (2)(D)(i)—

(I) by striking ", as appropriate, in consultation" and inserting "in cooperation";

(II) by inserting "State and local agencies responsible for transportation, public transportation, air quality, and housing and in consultation with" before "State, tribal"; and

(III) by inserting "public health," after "conservation,";

(ii) in paragraph (3)(B)(iii), by inserting "and through the website of the State, including emission reduction targets and strategies developed under paragraph (9) and an analysis of the anticipated effects of the targets and strategies" after "World Wide Web"; and

(iii) by adding at the end the following:

"(9) TRANSPORTATION GREENHOUSE GAS REDUCTION EFFORTS.—

"(A) IN GENERAL.—Within a State, the transportation planning process under this section, shall address transportation-related greenhouse gas emissions by including emission reduction targets and strategies to meet those targets.

"(B) ESTABLISHMENT OF TARGETS AND CRITERIA.—

"(i) IN GENERAL.—Not later than 2 years after the promulgation of the final regulations required under section 831 of the Clean Air Act, each State shall develop surface transportation-related greenhouse gas emission reduction targets, as well as strategies to meet those targets, in consultation with State air agencies as part of the transportation planning process under this section.

"(ii) MINIMUM REQUIREMENTS.—Each transportation plan developed by a State under clause (i) shall, within the plan, demonstrate progress in stabilizing and reducing transportation-related green-

house gas emissions in the State so as to contribute to the achievement of national targets pursuant to section 831(a)(1) of the Clean Air Act.

"(iii) REQUIREMENTS FOR TARGETS AND STRATEGIES.—The targets and strategies developed under this subparagraph shall, at a minimum—

"(I) be based on the emission models and related methodologies established in the final regulations required under section 831 of the Clean Air Act;

"(II) inventory all sources of surface transportation-related greenhouse gas emissions;

"(III) apply to those modes of surface transportation that are addressed in the planning process under this section;

"(IV) be integrated and consistent with statewide transportation plans and statewide transportation improvement programs; and

"(V) be selected through scenario analysis (as defined in section 134(k)), and include, pursuant to the requirements of the transportation planning process under this section, transportation investment and management strategies that reduce greenhouse gas emissions from the transportation sector over the life of the plan, such as—

"(aa) efforts to increase public transportation ridership, including through service improvements, capacity expansions, and access enhancement;

"(bb) efforts to increase walking, bicycling, and other forms of nonmotorized transportation;

"(cc) implementation of zoning and other land use regulations and plans to support infill, transit-oriented development, redevelopment, or mixed use development;

"(dd) travel demand management programs (including carpool, vanpool, or car-share projects), transportation pricing measures, parking policies, and programs to promote telecommuting, flexible work schedules, and satellite work centers;

"(ee) surface transportation system operation improvements, including intelligent transportation systems or other operational improvements to reduce congestion and improve system management;

"(ff) intercity passenger rail improvements;

"(gg) intercity bus improvements;

"(hh) freight rail improvements;

"(ii) use of materials or equipment associated with the construction or maintenance of

transportation projects that reduce greenhouse gas emissions;

"(jj) public facilities for supplying electricity to electric or plug-in hybrid-electric vehicles; or

"(kk) any other effort that demonstrates progress in reducing transportation-related greenhouse gas emissions.

"(C) COORDINATION AND CONSULTATION WITH PUBLIC AGENCIES.—Transportation greenhouse gas targets and plans pursuant to this section shall be developed—

"(i) in coordination with—

"(I) all metropolitan planning organizations covered by this section within the State; and

"(II) transportation and air quality agencies within the State; and

"(ii) in consultation with representatives of State and local housing, economic development, and land use agencies.

"(D) ENFORCEMENT.—Not later than 180 days after the date of submission of a plan under this section—

"(i) the Secretary and the Administrator shall review the plan; and

"(ii) the Secretary shall approve a plan developed by a State pursuant to subparagraph (B) if—

"(I) the Secretary finds that a State has developed, submitted, and published the plan pursuant to this section;

"(II) the Secretary, in consultation with the Administrator, determines that the plan is likely to achieve the targets established by the State under this subsection; and

"(III) the development of the plan complies with the minimum requirements established under clauses (ii) and (iii) of subparagraph (B).

"(E) PLANNING FINDING.—Failure to comply with the requirements under subparagraph (B) shall not impact the planning finding under subsection (g)(7).".

(2) TITLE 49.—Section 5304 of title 49, United States Code is amended—

(A) in subsection (d)(1)(E)—

(i) by inserting ''sustainability, and livability, reduce surface transportation-related greenhouse gas emissions and reliance on oil, adapt to the effects of climate change,'' after ''energy conservation,'';

(ii) by inserting ''and public health'' after ''quality of life''; and

(iii) by inserting '', including housing and land use patterns'' after ''development patterns''; and

(B) in subsection (f)—

(i) in paragraph (2)(D)(i)—

(I) by striking '', as appropriate, in consultation'' and inserting ''in cooperation'';

(II) by inserting ''State and local agencies responsible for transportation, public transportation, air quality, and housing and in consultation with'' before ''State, tribal''; and

(III) by inserting ''public health,'' after ''conservation,'';

(ii) in paragraph (3)(B)(iii), by inserting ''and through the website of the State, including emission reduction targets and

strategies developed under paragraph (9) and an analysis of the anticipated effects of the targets and strategies'' after ''World Wide Web''; and

(iii) by adding at the end the following:

''(9) TRANSPORTATION GREENHOUSE GAS REDUCTION EFFORTS.—

''(A) IN GENERAL.—Within a State, the transportation planning process under this section, shall address transportation-related greenhouse gas emissions by including emission reduction targets and strategies to meet those targets.

''(B) ESTABLISHMENT OF TARGETS AND CRITERIA.—

''(i) IN GENERAL.—Not later than 2 years after the promulgation of the final regulations required under section 831 of the Clean Air Act, each State shall develop surface transportation-related greenhouse gas emission reduction targets, as well as strategies to meet those targets, in consultation with State air agencies as part of

the transportation planning process under this section.

"(ii) MINIMUM REQUIREMENTS.—Each transportation plan developed by a State under clause (i) shall, within the plan, demonstrate progress in stabilizing and reducing transportation-related greenhouse gas emissions in the State so as to contribute to the achievement of national targets pursuant to section 831(a)(1) of the Clean Air Act.

"(iii) REQUIREMENTS FOR TARGETS AND STRATEGIES.—The targets and strategies developed under this subparagraph shall, at a minimum—

"(I) be based on the emission models and related methodologies established in the final regulations required under section 831 of the Clean Air Act;

"(II) inventory all sources of surface transportation-related greenhouse gas emissions;

"(III) apply to those modes of surface transportation that are ad-

dressed in the planning process under this section;

"(IV) be integrated and consistent with statewide transportation plans and statewide transportation improvement programs; and

"(V) be selected through scenario analysis (as defined in section 134(k) of title 23), and include, pursuant to the requirements of the transportation planning process under this section, transportation investment and management strategies that reduce greenhouse gas emissions from the transportation sector over the life of the plan, such as—

"(aa) efforts to increase public transportation ridership, including through service improvements, capacity expansions, and access enhancement;

"(bb) efforts to increase walking, bicycling, and other forms of nonmotorized transportation;

"(cc) implementation of zoning and other land use regulations and plans to support infill, transit-oriented development, redevelopment, or mixed use development;

"(dd) travel demand management programs (including carpool, vanpool, or car-share projects), transportation pricing measures, parking policies, and programs to promote telecommuting, flexible work schedules, and satellite work centers;

"(ee) surface transportation system operation improvements, including intelligent transportation systems or other operational improvements to reduce congestion and improve system management;

"(ff) intercity passenger rail improvements;

"(gg) intercity bus improvements;

"(hh) freight rail improvements;

"(ii) use of materials or equipment associated with the construction or maintenance of transportation projects that reduce greenhouse gas emissions;

"(jj) public facilities for supplying electricity to electric or plug-in hybrid-electric vehicles; or

"(kk) any other effort that demonstrates progress in reducing transportation-related greenhouse gas emissions.

"(C) COORDINATION AND CONSULTATION WITH PUBLIC AGENCIES.—Transportation greenhouse gas targets and plans pursuant to this section shall be developed—

"(i) in coordination with—

"(I) all metropolitan planning organizations covered by this section within the State; and

"(II) transportation and air quality agencies within the State; and

"(ii) in consultation with representatives of State and local housing, economic development, and land use agencies.

"(D) ENFORCEMENT.—Not later than 180 days after the date of submission of a plan under this section—

"(i) the Secretary and the Administrator shall review the plan; and

"(ii) the Secretary shall approve a plan developed by a State pursuant to subparagraph (B) if—

"(I) the Secretary finds that a State has developed, submitted, and published the plan pursuant to this section;

"(II) the Secretary, in consultation with the Administrator, determines that the plan is likely to achieve the targets established by the State under this subsection; and

"(III) the development of the plan complies with the minimum requirements established under clauses (ii) and (iii) of subparagraph (B).

"(E) PLANNING FINDING.—Failure to comply with the requirements under subparagraph (B) shall not impact the planning finding under subsection (g)(7).".

(d) APPLICABILITY.—Section 304 of the Clean Air Act (42 U.S.C. 7604) shall not apply to the planning provisions of this section or any amendment made by this section.

(e) LAND USE AUTHORITY.—Nothing in this section or an amendment made by this section—

(1) infringes on the existing authority of local governments to plan or control land use; or

(2) provides or transfers authority over land use to any other entity.

SEC. 113. TRANSPORTATION GREENHOUSE GAS EMISSION REDUCTION PROGRAM GRANTS.

Part C of title VIII of the Clean Air Act (as amended by section 112) is amended by adding at the end the following:

"SEC. 832. TRANSPORTATION GREENHOUSE GAS EMISSION REDUCTION PROGRAM GRANTS.

"(a) IN GENERAL.—The Secretary of Transportation (referred to in this section as the 'Secretary') shall provide grants to States and metropolitan planning organizations

to carry out the purposes of this section for each fiscal year—

"(1) to support the developing and updating of transportation greenhouse gas reduction targets and strategies; and

"(2) to provide financial assistance to implement plans approved pursuant to—

"(A) sections 134(k)(6) and 135(f)(9) of title 23, United States Code; and

"(B) sections 5303(k)(6) and 5304(f)(9) of title 49, United States Code.

"(b) PLANNING GRANTS.—

"(1) IN GENERAL.—Subject to paragraph (2), the Secretary shall allocate not more than 5 percent of the funds available to carry out this section for a fiscal year for metropolitan planning organizations to develop and update transportation plans, including targets and strategies for greehouse gas emission reduction under—

"(A) sections 134(k)(6) and 135(f)(9) of title 23, United States Code; and

"(B) sections 5303(k)(6) and 5304(f)(9) of title 49, United States Code.

"(2) ELIGIBLE ORGANIZATIONS.—The Secretary shall distribute the funds available in (1) to

metropolitan planning organizations (as defined in section 134(k)(7) of title 23, United States Code) in the proportion that—

"(A) the population within such a metropolitan planning organization; bears to

"(B) the total population of all such metropolitan planning organizations.

"(c) PERFORMANCE GRANTS.—

"(1) IN GENERAL.—After allocating funds pursuant to subsection (b)(1), the Secretary shall use the remainder of amounts made available to carry out this section to provide grants to States and metropolitan planning organizations.

"(2) CRITERIA.—In providing grants under this subsection, the Secretary, in consultation with the Administrator, shall develop criteria for providing the grants, taking into consideration, with respect to areas to be covered by the grants—

"(A) the quantity of total greenhouse gas emissions to be reduced as a result of implementation of a plan, within a covered area, as determined by methods established under section 831(a);

"(B) the quantity of total greenhouse gas emissions to be reduced per capita as a result

of implementation of a plan, within the covered area, as determined by methods established under section 831(a);

"(C) the cost-effectiveness of reducing greenhouse gas emissions during the life of the plan;

"(D) progress toward achieving emission reductions target established under—

"(i) sections 134(k)(6) and 135(f)(9) of title 23, United States Code; and

"(ii) sections 5303(k)(6) and 5304(f)(9) of title 49, United States Code;

"(E) reductions in greenhouse gas emissions previously achieved by States and metropolitan planning organizations during the 5-year period beginning on the date of enactment of this Act;

"(F) plans that increase transportation options and mobility, particularly for low-income individuals, minorities, the elderly, households without motor vehicles, cost-burdened households, and the disabled; and

"(G) other factors, including innovative approaches, minimization of costs, and consideration of economic development, revenue genera-

tion, consumer fuel cost-savings, and other economic, environmental and health benefits, as the Secretary determines to be appropriate.

"(d) REQUIREMENT FOR REDUCED EMISSIONS.—A performance grant under subsection (c) may be used only to fund strategies that demonstrate a reduction in greenhouse gas emissions that is sustainable over the life of the applicable transportation plan.

"(e) COST-SHARING.—The Federal share of the costs of a project receiving Federal financial assistance under this section shall be 80 percent.

"(f) COMPLIANCE WITH APPLICABLE LAWS.—

"(1) IN GENERAL.—Subject to paragraph (2), a project receiving funds under this section shall comply with all applicable Federal laws (including regulations), including—

"(A) subchapter IV of chapter 31 of title 40, United States Code; and

"(B) applicable requirements of titles 23 and 49, United States Code.

"(2) ELIGIBILITY.—Project eligibility shall be determined in accordance with this section.

"(3) DETERMINATION OF APPLICABLE MODAL REQUIREMENTS.—The Secretary shall—

"(A) have the discretion to designate the specific modal requirements that shall apply to a project; and

"(B) be guided by the predominant modal characteristics of the project in the event that a project has cross-modal application.

"(g) ADDITIONAL REQUIREMENTS.—

"(1) IN GENERAL.—As a condition on the receipt of financial assistance under this section, the interests of public transportation employees affected by the assistance shall be protected under arrangements that the Secretary of Labor determines—

"(A) to be fair and equitable; and

"(B) to provide benefits equal to the benefits established under section 5333(b) of title 49, United States Code.

"(2) WAGES AND BENEFITS.—Laborers and mechanics employed on projects funded with amounts made available under this section shall be paid wages and benefits not less than those determined by the Secretary of Labor under subchapter IV of chapter 31 of title 40, United States Code, to be prevailing in the same locality.

"(h) MISCELLANEOUS.—

"(1) ROAD-USE AND CONGESTION PRICING MEASURES.—All projects funded by amounts made available under this section shall be eligible to receive amounts collected through road-use and congestion pricing measures.

"(2) LIMITATIONS.—The Administrator may not approve any transportation plan for a project that would be inconsistent with existing design, procurement, and construction guidelines established by the Department of Transportation.

"(3) SUBGRANTEES.—With the approval of the Secretary, recipients of funding under this section may enter into agreements providing for the transfer of funds to noneligible public entities (such as local governments, air quality agencies, zoning commissions, special districts and transit agencies) that have statutory responsibility or authority for actions necessary to implement the strategies pursuant to—

"(A) sections 134(k)(6) and 135(f)(9) of title 23, United States Code; and

"(B) sections 5303(k)(6) and 5304(f)(9) of title 49, United States Code.".

SEC. 114. SMARTWAY TRANSPORTATION EFFICIENCY PROGRAM.

Part B of title VIII of the Clean Air Act (as amended by section 111) is amended by adding at the end the following:

"SEC. 822. SMARTWAY TRANSPORTATION EFFICIENCY PROGRAM.

"(a) IN GENERAL.—There is established within the Environmental Protection Agency a SmartWay Transportation Efficiency Program to quantify, demonstrate, and promote the benefits of technologies, products, fuels, and operational strategies that reduce petroleum consumption, air pollution, and greenhouse gas emissions from the mobile source sector.

"(b) GENERAL DUTIES.—Under the program established under this section, the Administrator shall carry out each of the following:

"(1) Development of measurement protocols to evaluate the energy consumption and greenhouse gas impacts from technologies and strategies in the mobile source sector, including those for passenger transport and goods movement.

"(2) Development of qualifying thresholds for certifying, verifying, or designating energy-efficient, low-greenhouse gas SmartWay technologies and

strategies for each mode of passenger transportation and goods movement.

"(3) Development of partnership and recognition programs to promote best practices and drive demand for energy-efficient, low-greenhouse gas transportation performance.

"(4) Promotion of the availability of, and encouragement of the adoption of, SmartWay certified or verified technologies and strategies, and publication of the availability of financial incentives, such as assistance from loan programs and other Federal and State incentives.

"(c) SMARTWAY TRANSPORT FREIGHT PARTNERSHIP.—The Administrator shall establish a SmartWay Transport Partnership program with shippers and carriers of goods to promote energy-efficient, low-greenhouse gas transportation. In carrying out such partnership, the Administrator shall undertake each of the following:

"(1) Verification of the energy and greenhouse gas performance of participating freight carriers, including those operating rail, trucking, marine, and other goods movement operations.

"(2) Publication of a comprehensive energy and greenhouse gas performance index of freight modes (including rail, trucking, marine, and other modes of

transporting goods) and individual freight companies so that shippers can choose to deliver their goods more efficiently.

"(3) Development of tools for—

"(A) carriers to calculate their energy and greenhouse gas performance; and

"(B) shippers to calculate the energy and greenhouse gas impacts of moving their products and to evaluate the relative impacts from transporting their goods by different modes and corporate carriers.

"(4) Provision of recognition opportunities for participating shipper and carrier companies demonstrating advanced practices and achieving superior levels of greenhouse gas performance.

"(d) IMPROVING FREIGHT GREENHOUSE GAS PERFORMANCE DATABASES.—The Administrator shall, in coordination with the Secretary of Commerce and other appropriate agencies, define and collect data on the physical and operational characteristics of the Nation's truck population, with special emphasis on data related to energy efficiency and greenhouse gas performance to inform the performance index published under subsection (c)(2) of this section, and other means of goods transport as nec-

essary, at least every 5 years as part of the economic census required under title 13, United States Code.

"(e) ESTABLISHMENT OF FINANCING PROGRAM.—The Administrator shall establish a SmartWay Financing Program to competitively award funding to eligible entities identified by the Administrator in accordance with the program requirements in subsection (g).

"(f) PURPOSES.—Under the SmartWay Financing Program, eligible entities shall—

"(1) use funds awarded by the Administrator to provide flexible loan and/or lease terms that increase approval rates or lower the costs of loans and/or leases in accordance with guidance developed by the Administrator;

"(2) make such loans and/or leases available to public and private entities for the purpose of adopting low-greenhouse gas technologies or strategies for the mobile source sector that are designated by the Administrator; and

"(3) use funds provided by the Administrator for electrification of freight transportation systems in major national goods movement corridors, giving priority to electrification of transportation systems in areas that are gateways for high volumes of international and national freight transport and require

substantial criteria pollutant emission reductions in order to attain national ambient air quality standards.

"(g) PROGRAM REQUIREMENTS.—The Administrator shall determine program design elements and requirements, including—

"(1) the type of financial mechanism with which to award funding, in the form of grants and/or contracts;

"(2) the designation of eligible entities to receive funding, such as State, tribal, and local governments, regional organizations comprised of governmental units, nonprofit organizations, or for-profit companies;

"(3) criteria for evaluating applications from eligible entities, including anticipated—

"(A) cost-effectiveness of loan or lease program on a metric-ton-of-greenhouse gas-saved-per-dollar basis; and

"(B) ability to promote the loan or lease program and associated technologies and strategies to the target audience; and

"(4) reporting requirements for entities that receive awards, including—

"(A) actual cost-effectiveness and greenhouse gas savings from the loan or lease program based on a methodology designated by the Administrator;

"(B) the total number of applications and number of approved applications; and

"(C) terms granted to loan and lease recipients compared to prevailing market practices and/or rates.

"(h) AUTHORIZATION OF APPROPRIATIONS.—Such sums as necessary are authorized to be appropriated to the Administrator to carry out this section.".

Subtitle B—Carbon Capture and Sequestration

SEC. 121. NATIONAL STRATEGY.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator, in consultation with the Secretary of Energy, the Secretary of the Interior, and the heads of such other relevant Federal agencies as the President may designate, shall submit to Congress a report establishing a unified and comprehensive strategy to address the key legal, regulatory, and other barriers to the commercial-scale deployment of carbon capture and storage.

(b) BARRIERS.—The report under this section shall—

(1) identify the regulatory, legal, and other gaps and barriers that—

(A) could be addressed by a Federal agency using existing statutory authority;

(B) require Federal legislation, if any; or

(C) would be best addressed at the State, tribal, or regional level;

(2) identify regulatory implementation challenges, including challenges relating to approval of State and tribal programs and delegation of authority for permitting; and

(3) recommend rulemakings, Federal legislation, or other actions that should be taken to further evaluate and address those barriers.

(c) FINDING.—Congress finds that it is in the public interest to achieve widespread, commercial-scale deployment of carbon capture and storage in the United States and throughout Asia before January 1, 2030.

SEC. 122. REGULATIONS FOR GEOLOGICAL SEQUESTRATION SITES.

(a) COORDINATED CERTIFICATION AND PERMITTING PROCESS.—Part A of title VIII of the Clean Air Act (as

amended by section 124 of this division) is amended by adding at the end the following:

"SEC. 813. GEOLOGICAL STORAGE SITES.

"(a) COORDINATED PROCESS.—

"(1) IN GENERAL.—The Administrator shall establish a coordinated approach to certifying and permitting geological storage, taking into consideration all relevant statutory authorities.

"(2) REQUIREMENTS.—In establishing such approach, the Administrator shall—

"(A) take into account, and reduce redundancy with, the requirements of section 1421 of the Safe Drinking Water Act (42 U.S.C. 300h), including the rulemaking for geological storage wells described in the proposed rule entitled 'Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide (CO2) Geologic Sequestration (GS) Wells' (73 Fed. Reg. 43492 (July 25, 2008)); and

"(B) to the maximum extent practicable, reduce the burden on certified entities and implementing authorities.

"(b) REGULATIONS.—Not later than 2 years after the date of enactment of this title, the Administrator shall

promulgate regulations to protect human health and the environment by minimizing the risk of escape to the atmosphere of carbon dioxide injected for purposes of geological storage.

"(c) REQUIREMENTS.—The regulations under subsection (b) shall include—

"(1) a process to obtain certification for geological storage under this section; and

"(2) requirements for—

"(A) monitoring, recordkeeping, and reporting for emissions associated with injection into, and escape from, geological storage sites, taking into account any requirements or protocols developed under section 713;

"(B) public participation in the certification process that maximizes transparency;

"(C) the sharing of data among States, Indian tribes, and the Environmental Protection Agency; and

"(D) other elements or safeguards necessary to achieve the purpose described in subsection (b).

"(d) REPORT.—

"(1) IN GENERAL.—Not later than 2 years after the date of promulgation of regulations pursu-

ant to subsection (b), and not less frequently than once every 3 years thereafter, the Administrator shall submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works of the Senate a report describing geological storage in the United States, and, to the extent relevant, other countries in North America.

"(2) INCLUSIONS.—Each report under paragraph (1) shall include—

"(A) data regarding injection, emissions to the atmosphere, if any, and performance of active and closed geological storage sites, including those at which enhanced hydrocarbon recovery operations occur;

"(B) an evaluation of the performance of relevant Federal environmental regulations and programs in ensuring environmentally protective geological storage practices;

"(C) recommendations on how those programs and regulations should be improved or made more effective; and

"(D) other relevant information.".

(b) SAFE DRINKING WATER ACT STANDARDS.—Section 1421 of the Safe Drinking Water Act (42 U.S.C. 300h) is amended by adding at the end the following:

"(e) CARBON DIOXIDE GEOLOGICAL STORAGE WELLS.—

"(1) IN GENERAL.—Not later than 1 year after the date of enactment of this subsection, the Administrator shall promulgate regulations under subsection (a) for carbon dioxide geological storage wells.

"(2) FINANCIAL RESPONSIBILITY.—

"(A) IN GENERAL.—The regulations under paragraph (1) shall include requirements for maintaining evidence of financial responsibility, including financial responsibility for emergency and remedial response, well plugging, site closure, and post-injection site care.

"(B) REGULATIONS.—Financial responsibility may be established for carbon dioxide geological wells in accordance with regulations promulgated by the Administrator by any 1, or any combination, of the following:

"(i) Insurance.

"(ii) Guarantee.

"(iii) Trust.

"(iv) Standby trust.

"(v) Surety bond.

"(vi) Letter of credit.

"(vii) Qualification as a self-insurer.

"(viii) Any other method satisfactory to the Administrator.".

SEC. 123. STUDIES AND REPORTS.

(a) STUDY OF LEGAL FRAMEWORK FOR GEOLOGICAL STORAGE SITES.—

(1) ESTABLISHMENT OF TASK FORCE.—

(A) IN GENERAL.—As soon as practicable, but not later than 180 days after the date of enactment of this Act, the Administrator shall establish a task force, to be composed of an equal number of—

(i) subject matter experts;

(ii) nongovernmental organizations with expertise regarding environmental policy;

(iii) academic experts with expertise in environmental law;

(iv) State and tribal officials with environmental expertise;

(v) representatives of State and tribal attorneys general;

(vi) representatives of the Environmental Protection Agency, the Department of the Interior, the Department of Energy, the Department of Transportation, and other relevant Federal agencies; and

(vii) members of the private sector.

(B) STUDY.—The task force established under subparagraph (A) shall conduct a study of—

(i) existing Federal environmental statutes, State environmental statutes, and State common law that apply to geological storage sites for carbon dioxide, including the ability of those laws to serve as risk management tools;

(ii) the existing statutory framework, including Federal and State laws, that apply to harm and damage to the environment or public health at closed sites at which carbon dioxide injection has been used for enhanced hydrocarbon recovery;

(iii) the statutory framework, environmental health and safety considerations, implementation issues, and financial implications of potential models for Federal,

State, or private sector assumption of liabilities and financial responsibilities with respect to closed geological storage sites;

(iv) private sector mechanisms, including insurance and bonding, that may be available to manage environmental, health, and safety risks from closed geological storage sites; and

(v) the subsurface mineral rights, water rights, and property rights issues associated with geological storage of carbon dioxide, including issues specific to Federal land.

(2) REPORT.—Not later than 18 months after the date of enactment of this Act, the task force established under paragraph (1)(A) shall submit to Congress a report describing the results of the study conducted under that paragraph, including any consensus recommendations of the task force.

(b) ENVIRONMENTAL STATUTES.—

(1) STUDY.—The Administrator shall conduct a study of the means by which, and under what circumstances, the environmental statutes for which the Environmental Protection Agency has responsi-

bility would apply to carbon dioxide injection and geological storage activities.

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

SEC. 124. PERFORMANCE STANDARDS FOR COAL-FUELED POWER PLANTS.

(a) IN GENERAL.—Part A of title VIII of the Clean Air Act (as added by section 121 of division B) is amended by adding at the end the following:

"SEC. 812. PERFORMANCE STANDARDS FOR NEW COAL-FIRED POWER PLANTS.

''(a) DEFINITIONS.—For purposes of this section:

''(1) COVERED EGU.—The term 'covered EGU' means a utility unit that is required to have a permit under section 503(a) and is authorized under State or Federal law to derive at least 30 percent of its annual heat input from coal, petroleum coke, or any combination of these fuels.

''(2) INITIALLY PERMITTED.—The term 'initially permitted' means that the owner or operator has received a preconstruction approval or permit under this Act, for the covered EGU as a new (not a modified) source, but administrative review or ap-

peal of such approval or permit has not been exhausted. A subsequent modification of any such approval or permits, ongoing administrative or court review, appeals, or challenges, or the existence or tolling of any time to pursue further review, appeals, or challenges shall not affect the date on which a covered EGU is considered to be initially permitted under this paragraph.

''(b) STANDARDS.—(1) A covered EGU that is initially permitted on or after January 1, 2020, shall achieve an emission limit that is a 65 percent reduction in emissions of the carbon dioxide produced by the unit, as measured on an annual basis, or meet such more stringent standard as the Administrator may establish pursuant to subsection (c).

''(2) A covered EGU that is initially permitted after January 1, 2009, and before January 1, 2020, shall, by the applicable compliance date established under this paragraph, achieve an emission limit that is a 50 percent reduction in emissions of the carbon dioxide produced by the unit, as measured on an annual basis. Compliance with the requirement set forth in this paragraph shall be required by the earliest of the following:

''(A) Four years after the date the Administrator has published pursuant to subsection (d) a re-

port that there are in commercial operation in the United States electric generating units or other stationary sources equipped with carbon capture and sequestration technology that, in the aggregate—

"(i) have a total of at least 4 gigawatts of nameplate generating capacity of which—

"(I) at least 3 gigawatts must be electric generating units; and

"(II) up to 1 gigawatt may be industrial applications, for which capture and sequestration of 3,000,000 tons of carbon dioxide per year on an aggregate annualized basis shall be considered equivalent to 1 gigawatt;

"(ii) include at least 2 electric generating units, each with a nameplate generating capacity of 250 megawatts or greater, that capture, inject, and sequester carbon dioxide into geologic formations other than oil and gas fields; and

"(iii) are capturing and sequestering in the aggregate at least 12,000,000 tons of carbon dioxide per year, calculated on an aggregate annualized basis.

"(B) January 1, 2025.

"(3) If the deadline for compliance with paragraph (2) is January 1, 2025, the Administrator may extend the deadline for compliance by a covered EGU by up to 18 months if the Administrator makes a determination, based on a showing by the owner or operator of the unit, that it will be technically infeasible for the unit to meet the standard by the deadline. The owner or operator must submit a request for such an extension by no later than January 1, 2022, and the Administrator shall provide for public notice and comment on the extension request.

"(c) REVIEW AND REVISION OF STANDARDS.—Not later than 2025 and at 5-year intervals thereafter, the Administrator shall review the standards for new covered EGUs under this section and shall, by rule, reduce the maximum carbon dioxide emission rate for new covered EGUs to a rate which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

"(d) REPORTS.—Not later than 18 months after the date of enactment of this title and semiannually thereafter, the Administrator shall publish a report on the

nameplate capacity of units (determined pursuant to subsection (b)(2)(A)) in commercial operation in the United States equipped with carbon capture and sequestration technology, including the information described in subsection (b)(2)(A) (including the cumulative generating capacity to which carbon capture and sequestration retrofit projects meeting the criteria described in section 775(b)(1)(A)(ii) and (b)(1)(A)(iv)(II) has been applied and the quantities of carbon dioxide captured and sequestered by such projects).

''(e) REGULATIONS.—Not later than 2 years after the date of enactment of this title, the Administrator shall promulgate regulations to carry out the requirements of this section.''.

SEC. 125. CARBON CAPTURE AND SEQUESTRATION DEMONSTRATION AND EARLY DEPLOYMENT PROGRAM.

(a) DEFINITIONS.—For purposes of this section:

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

(2) DISTRIBUTION UTILITY.—The term ''distribution utility'' means an entity that distributes electricity directly to retail consumers under a legal, regulatory, or contractual obligation to do so.

(3) ELECTRIC UTILITY.—The term ''electric utility'' has the meaning provided by section 3 of the Federal Power Act (16 U.S.C. 796).

(4) FOSSIL FUEL-BASED ELECTRICITY.—The term ''fossil fuel-based electricity'' means electricity that is produced from the combustion of fossil fuels.

(5) FOSSIL FUEL.—The term ''fossil fuel'' means coal, petroleum, natural gas or any derivative of coal, petroleum, or natural gas.

(6) CORPORATION.—The term ''Corporation'' means the Carbon Storage Research Corporation established in accordance with this section.

(7) QUALIFIED INDUSTRY ORGANIZATION.—The term ''qualified industry organization'' means the Edison Electric Institute, the American Public Power Association, the National Rural Electric Cooperative Association, a successor organization of such organizations, or a group of owners or operators of distribution utilities delivering fossil fuel-based electricity who collectively represent at least 20 percent of the volume of fossil fuel-based electricity delivered by distribution utilities to consumers in the United States.

(8) RETAIL CONSUMER.—The term ''retail consumer'' means an end-user of electricity.

(b) CARBON STORAGE RESEARCH CORPORATION.—

(1) ESTABLISHMENT.—

(A) REFERENDUM.—Qualified industry organizations may conduct, at their own expense, a referendum among the owners or operators of distribution utilities delivering fossil fuel-based electricity for the creation of a Carbon Storage Research Corporation. Such referendum shall be conducted by an independent auditing firm agreed to by the qualified industry organizations. Voting rights in such referendum shall be based on the quantity of fossil fuel-based electricity delivered to consumers in the previous calendar year or other representative period as determined by the Secretary pursuant to subsection (f). Upon approval of those persons representing two-thirds of the total quantity of fossil fuel-based electricity delivered to retail consumers, the Corporation shall be established unless opposed by the State regulatory authorities pursuant to subparagraph (B). All distribution utilities voting in the referendum shall certify to the independent auditing firm the quantity of fossil fuel-based electricity represented by their vote.

(B) STATE REGULATORY AUTHORITIES.—Upon its own motion or the petition of a qualified industry organization, each State regulatory authority shall consider its support or opposition to the creation of the Corporation under subparagraph (A). State regulatory authorities may notify the independent auditing firm referred to in subparagraph (A) of their views on the creation of the Corporation within 180 days after the date of enactment of this Act. If 40 percent or more of the State regulatory authorities submit to the independent auditing firm written notices of opposition, the Corporation shall not be established notwithstanding the approval of the qualified industry organizations as provided in subparagraph (A).

(2) TERMINATION.—The Corporation shall be authorized to collect assessments and conduct operations pursuant to this section for a 10-year period from the date 6 months after the date of enactment of this Act. After such 10-year period, the Corporation is no longer authorized to collect assessments and shall be dissolved on the date 15 years after such date of enactment, unless the period is extended by an Act of Congress.

(3) GOVERNANCE.—The Corporation shall operate as a division or affiliate of the Electric Power Research Institute (referred to in this section as ''EPRI'') and be managed by a Board of not more than 15 voting members responsible for its operations, including compliance with this section. EPRI, in consultation with the Edison Electric Institute, the American Public Power Association and the National Rural Electric Cooperative Association shall appoint the Board members under clauses (i), (ii), and (iii) of subparagraph (A) from among candidates recommended by those organizations. At least a majority of the Board members appointed by EPRI shall be representatives of distribution utilities subject to assessments under subsection (d).

(A) MEMBERS.—The Board shall include at least 1 representative of each of the following:

(i) Investor-owned utilities.

(ii) Utilities owned by a State agency, a municipality, and an Indian tribe.

(iii) Rural electric cooperatives.

(iv) Fossil fuel producers.

(v) Nonprofit environmental organizations.

(vi) Independent generators or wholesale power providers.

(vii) Consumer groups.

(viii) The National Energy Technology laboratory of the Department of Energy.

(ix) The Environmental Protection Agency.

(B) NONVOTING MEMBERS.—The Board shall also include as additional nonvoting Members the Secretary of Energy or his designee and 2 representatives of State regulatory authorities as defined in section 3 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2602), each designated by the National Association of State Regulatory Utility Commissioners from States that are not within the same transmission interconnection.

(4) COMPENSATION.—Corporation Board members shall receive no compensation for their services, nor shall Corporation Board members be reimbursed for expenses relating to their service.

(5) TERMS.—Corporation Board members shall serve terms of 4 years and may serve not more than 2 full consecutive terms. Members filling unexpired

terms may serve not more than a total of 8 consecutive years. Former members of the Corporation Board may be reappointed to the Corporation Board if they have not been members for a period of 2 years. Initial appointments to the Corporation Board shall be for terms of 1, 2, 3, and 4 years, staggered to provide for the selection of 3 members each year.

(6) STATUS OF CORPORATION.—The Corporation shall not be considered to be an agency, department, or instrumentality of the United States, and no officer or director or employee of the Corporation shall be considered to be an officer or employee of the United States Government, for purposes of title 5 or title 31 of the United States Code, or for any other purpose, and no funds of the Corporation shall be treated as public money for purposes of chapter 33 of title 31, United States Code, or for any other purpose.

(c) FUNCTIONS AND ADMINISTRATION OF THE CORPORATION.—

(1) IN GENERAL.—The Corporation shall establish and administer a program to accelerate the commercial availability of carbon dioxide capture and storage technologies and methods, including technologies which capture and store, or capture and

convert, carbon dioxide. Under such program competitively awarded grants, contracts, and financial assistance shall be provided and entered into with eligible entities. Except as provided in paragraph (8), the Corporation shall use all funds derived from assessments under subsection (d) to issue grants and contracts to eligible entities.

(2) PURPOSE.—The purposes of the grants, contracts, and assistance under this subsection shall be to support commercial-scale demonstrations of carbon capture or storage technology projects capable of advancing the technologies to commercial readiness. Such projects should encompass a range of different coal and other fossil fuel varieties, be geographically diverse, involve diverse storage media, and employ capture or storage, or capture and conversion, technologies potentially suitable either for new or for retrofit applications. The Corporation shall seek, to the extent feasible, to support at least 5 commercial-scale demonstration projects integrating carbon capture and sequestration or conversion technologies.

(3) ELIGIBLE ENTITIES.—Entities eligible for grants, contracts or assistance under this subsection may include distribution utilities, electric utilities

and other private entities, academic institutions, national laboratories, Federal research agencies, State and tribal research agencies, nonprofit organizations, or consortiums of 2 or more entities. Pilot-scale and similar small-scale projects are not eligible for support by the Corporation. Owners or developers of projects supported by the Corporation shall, where appropriate, share in the costs of such projects. Projects supported by the Corporation shall meet the eligibility criteria of section 780(b) of the Clean Air Act.

(4) GRANTS FOR EARLY MOVERS.—Fifty percent of the funds raised under this section shall be provided in the form of grants to electric utilities that had, prior to the award of any grant under this section, committed resources to deploy a large scale electricity generation unit with integrated carbon capture and sequestration or conversion applied to a substantial portion of the unit's carbon dioxide emissions. Grant funds shall be provided to defray costs incurred by such electricity utilities for at least 5 such electricity generation units.

(5) ADMINISTRATION.—The members of the Board of Directors of the Corporation shall elect a Chairman and other officers as necessary, may es-

tablish committees and subcommittees of the Corporation, and shall adopt rules and bylaws for the conduct of business and the implementation of this section. The Board shall appoint an Executive Director and professional support staff who may be employees of the Electric Power Research Institute (EPRI). After consultation with the Technical Advisory Committee established under subsection (j), the Secretary, and the Director of the National Energy Technology Laboratory to obtain advice and recommendations on plans, programs, and project selection criteria, the Board shall establish priorities for grants, contracts, and assistance; publish requests for proposals for grants, contracts, and assistance; and award grants, contracts, and assistance competitively, on the basis of merit, after the establishment of procedures that provide for scientific peer review by the Technical Advisory Committee. The Board shall give preference to applications that reflect the best overall value and prospect for achieving the purposes of the section, such as those which demonstrate an integrated approach for capture and storage or capture and conversion technologies. The Board members shall not participate in making

grants or awards to entities with whom they are affiliated.

(6) USES OF GRANTS, CONTRACTS, AND ASSISTANCE.—A grant, contract, or other assistance provided under this subsection may be used to purchase carbon dioxide when needed to conduct tests of carbon dioxide storage sites, in the case of established projects that are storing carbon dioxide emissions, or for other purposes consistent with the purposes of this section. The Corporation shall make publicly available at no cost information learned as a result of projects which it supports financially.

(7) INTELLECTUAL PROPERTY.—The Board shall establish policies regarding the ownership of intellectual property developed as a result of Corporation grants and other forms of technology support. Such policies shall encourage individual ingenuity and invention.

(8) ADMINISTRATIVE EXPENSES.—Up to 5 percent of the funds collected in any fiscal year under subsection (d) may be used for the administrative expenses of operating the Corporation (not including costs incurred in the determination and collection of the assessments pursuant to subsection (d)).

(9) PROGRAMS AND BUDGET.—Before August 1 each year, the Corporation, after consulting with the Technical Advisory Committee and the Secretary and the Director of the Department's National Energy Technology Laboratory and other interested parties to obtain advice and recommendations, shall publish for public review and comment its proposed plans, programs, project selection criteria, and projects to be funded by the Corporation for the next calendar year. The Corporation shall also publish for public review and comment a budget plan for the next calendar year, including the probable costs of all programs, projects, and contracts and a recommended rate of assessment sufficient to cover such costs. The Secretary may recommend programs and activities the Secretary considers appropriate. The Corporation shall include in the first publication it issues under this paragraph a strategic plan or roadmap for the achievement of the purposes of the Corporation, as set forth in paragraph (2).

(10) RECORDS; AUDITS.—The Corporation shall keep minutes, books, and records that clearly reflect all of the acts and transactions of the Corporation and make public such information. The books of the Corporation shall be audited by a certified public ac-

1 countant at least once each fiscal year and at such
2 other times as the Corporation may designate. Cop-
3 ies of each audit shall be provided to the Congress,
4 all Corporation board members, all qualified indus-
5 try organizations, each State regulatory authority
6 and, upon request, to other members of the industry.
7 If the audit determines that the Corporation's prac-
8 tices fail to meet generally accepted accounting prin-
9 ciples the assessment collection authority of the Cor-
10 poration under subsection (d) shall be suspended
11 until a certified public accountant renders a subse-
12 quent opinion that the failure has been corrected.
13 The Corporation shall make its books and records
14 available for review by the Secretary or the Comp-
15 troller General of the United States.
16 (11) PUBLIC ACCESS.—The Corporation
17 Board's meetings shall be open to the public and
18 shall occur after at least 30 days advance public no-
19 tice. Meetings of the Board of Directors may be
20 closed to the public where the agenda of such meet-
21 ings includes only confidential matters pertaining to
22 project selection, the award of grants or contracts,
23 personnel matters, or the receipt of legal advice. The
24 minutes of all meetings of the Corporation shall be

made available to and readily accessible by the public.

(12) ANNUAL REPORT.—Each year the Corporation shall prepare and make publicly available a report which includes an identification and description of all programs and projects undertaken by the Corporation during the previous year. The report shall also detail the allocation or planned allocation of Corporation resources for each such program and project. The Corporation shall provide its annual report to the Congress, the Secretary, each State regulatory authority, and upon request to the public. The Secretary shall, not less than 60 days after receiving such report, provide to the President and Congress a report assessing the progress of the Corporation in meeting the objectives of this section.

(d) ASSESSMENTS.—

(1) AMOUNT.—(A) In all calendar years following its establishment, the Corporation shall collect an assessment on distribution utilities for all fossil fuel-based electricity delivered directly to retail consumers (as determined under subsection (f)). The assessments shall reflect the relative carbon dioxide emission rates of different fossil fuel-based elec-

1 tricity, and initially shall be not less than the fol-
2 lowing amounts for coal, natural gas, and oil:

Fuel type	Rate of assessment per kilowatt hour
Coal	$0.00043
Natural Gas	$0.00022
Oil	$0.00032.

3 (B) The Corporation is authorized to adjust the
4 assessments on fossil fuel-based electricity to reflect
5 changes in the expected quantities of such electricity
6 from different fuel types, such that the assessments
7 generate not less than $1.0 billion and not more
8 than $1.1 billion annually. The Corporation is au-
9 thorized to supplement assessments through addi-
10 tional financial commitments.

11 (2) INVESTMENT OF FUNDS.—Pending dis-
12 bursement pursuant to a program, plan, or project,
13 the Corporation may invest funds collected through
14 assessments under this subsection, and any other
15 funds received by the Corporation, only in obliga-
16 tions of the United States or any agency thereof, in
17 general obligations of any State or any political sub-
18 division thereof, in any interest-bearing account or
19 certificate of deposit of a bank that is a member of
20 the Federal Reserve System, or in obligations fully
21 guaranteed as to principal and interest by the
22 United States.

(3) REVERSION OF UNUSED FUNDS.—If the Corporation does not disburse, dedicate or assign 75 percent or more of the available proceeds of the assessed fees in any calendar year 7 or more years following its establishment, due to an absence of qualified projects or similar circumstances, it shall reimburse the remaining undedicated or unassigned balance of such fees, less administrative and other expenses authorized by this section, to the distribution utilities upon which such fees were assessed, in proportion to their collected assessments.

(e) ERCOT.—

(1) ASSESSMENT, COLLECTION, AND REMITTANCE.—(A) Notwithstanding any other provision of this section, within ERCOT, the assessment provided for in subsection (d) shall be—

(i) levied directly on qualified scheduling entities, or their successor entities;

(ii) charged consistent with other charges imposed on qualified scheduling entities as a fee on energy used by the load-serving entities; and

(iii) collected and remitted by ERCOT to the Corporation in the amounts and in the same manner as set forth in subsection (d).

(B) The assessment amounts referred to in subparagraph (A) shall be—

(i) determined by the amount and types of fossil fuel-based electricity delivered directly to all retail customers in the prior calendar year beginning with the year ending immediately prior to the period described in subsection (b)(2); and

(ii) take into account the number of renewable energy credits retired by the load-serving entities represented by a qualified scheduling entity within the prior calendar year.

(2) ADMINISTRATION EXPENSES.—Up to 1 percent of the funds collected in any fiscal year by ERCOT under the provisions of this subsection may be used for the administrative expenses incurred in the determination, collection and remittance of the assessments to the Corporation.

(3) AUDIT.—ERCOT shall provide a copy of its annual audit pertaining to the administration of the provisions of this subsection to the Corporation.

(4) DEFINITIONS.—For the purposes of this subsection:

(A) The term ''ERCOT'' means the Electric Reliability Council of Texas.

(B) The term ''load-serving entities'' has the meaning adopted by ERCOT Protocols and in effect on the date of enactment of this Act.

(C) The term ''qualified scheduling entities'' has the meaning adopted by ERCOT Protocols and in effect on the date of enactment of this Act.

(D) The term ''renewable energy credit'' has the meaning as promulgated and adopted by the Public Utility Commission of Texas pursuant to section 39.904(b) of the Public Utility Regulatory Act of 1999, and in effect on the date of enactment of this Act.

(f) DETERMINATION OF FOSSIL FUEL-BASED ELECTRICITY DELIVERIES.—

(1) FINDINGS.—The Congress finds that:

(A) The assessments under subsection (d) are to be collected based on the amount of fossil fuel-based electricity delivered by each distribution utility.

(B) Since many distribution utilities purchase all or part of their retail consumer's electricity needs from other entities, it may not be practical to determine the precise fuel mix for

the power sold by each individual distribution utility.

(C) It may be necessary to use average data, often on a regional basis with reference to Regional Transmission Organization (''RTO'') or NERC regions, to make the determinations necessary for making assessments.

(2) DOE PROPOSED RULE.—The Secretary, acting in close consultation with the Energy Information Administration, shall issue for notice and comment a proposed rule to determine the level of fossil fuel electricity delivered to retail customers by each distribution utility in the United States during the most recent calendar year or other period determined to be most appropriate. Such proposed rule shall balance the need to be efficient, reasonably precise, and timely, taking into account the nature and cost of data currently available and the nature of markets and regulation in effect in various regions of the country. Different methodologies may be applied in different regions if appropriate to obtain the best balance of such factors.

(3) FINAL RULE.—Within 6 months after the date of enactment of this Act, and after opportunity for comment, the Secretary shall issue a final rule

1 under this subsection for determining the level and
2 type of fossil fuel-based electricity delivered to retail
3 customers by each distribution utility in the United
4 States during the appropriate period. In issuing
5 such rule, the Secretary may consider opportunities
6 and costs to develop new data sources in the future
7 and issue recommendations for the Energy Informa-
8 tion Administration or other entities to collect such
9 data. After notice and opportunity for comment the
10 Secretary may, by rule, subsequently update and
11 modify the methodology for making such determina-
12 tions.

13 (4) ANNUAL DETERMINATIONS.—Pursuant to
14 the final rule issued under paragraph (3), the Sec-
15 retary shall make annual determinations of the
16 amounts and types for each such utility and publish
17 such determinations in the Federal Register. Such
18 determinations shall be used to conduct the ref-
19 erendum under subsection (b) and by the Corpora-
20 tion in applying any assessment under this sub-
21 section.

22 (5) REHEARING AND JUDICIAL REVIEW.—The
23 owner or operator of any distribution utility that be-
24 lieves that the Secretary has misapplied the method-
25 ology in the final rule in determining the amount

and types of fossil fuel electricity delivered by such distribution utility may seek rehearing of such determination within 30 days of publication of the determination in the Federal Register. The Secretary shall decide such rehearing petitions within 30 days. The Secretary's determinations following rehearing shall be final and subject to judicial review in the United States Court of Appeals for the District of Columbia.

(g) COMPLIANCE WITH CORPORATION ASSESSMENTS.—The Corporation may bring an action in the appropriate court of the United States to compel compliance with an assessment levied by the Corporation under this section. A successful action for compliance under this subsection may also require payment by the defendant of the costs incurred by the Corporation in bringing such action.

(h) MIDCOURSE REVIEW.—Not later than 5 years following establishment of the Corporation, the Comptroller General of the United States shall prepare an analysis, and report to Congress, assessing the Corporation's activities, including project selection and methods of disbursement of assessed fees, impacts on the prospects for commercialization of carbon capture and storage technologies, adequacy of funding, and administration of funds. The report shall also make such recommendations

as may be appropriate in each of these areas. The Corporation shall reimburse the Government Accountability Office for the costs associated with performing this mid-course review.

(i) RECOVERY OF COSTS.—

(1) IN GENERAL.—A distribution utility whose transmission, delivery, or sales of electric energy are subject to any form of rate regulation shall not be denied the opportunity to recover the full amount of the prudently incurred costs associated with complying with this section, consistent with applicable State or Federal law.

(2) RATEPAYER REBATES.—Regulatory authorities that approve cost recovery pursuant to paragraph (1) may order rebates to ratepayers to the extent that distribution utilities are reimbursed undedicated or unassigned balances pursuant to subsection (d)(3).

(j) TECHNICAL ADVISORY COMMITTEE.—

(1) ESTABLISHMENT.—There is established an advisory committee, to be known as the ''Technical Advisory Committee''.

(2) MEMBERSHIP.—The Technical Advisory Committee shall be comprised of not less than 7 members appointed by the Board from among aca-

demic institutions, national laboratories, independent research institutions, and other qualified institutions. No member of the Committee shall be affiliated with EPRI or with any organization having members serving on the Board. At least one member of the Committee shall be appointed from among officers or employees of the Department of Energy recommended to the Board by the Secretary of Energy.

(3) CHAIRPERSON AND VICE CHAIRPERSON.—The Board shall designate one member of the Technical Advisory Committee to serve as Chairperson of the Committee and one to serve as Vice Chairperson of the Committee.

(4) COMPENSATION.—The Board shall provide compensation to members of the Technical Advisory Committee for travel and other incidental expenses and such other compensation as the Board determines to be necessary.

(5) PURPOSE.—The Technical Advisory Committee shall provide independent assessments and technical evaluations, as well as make non-binding recommendations to the Board, concerning Corporation activities, including but not limited to the following:

(A) Reviewing and evaluating the Corporation's plans and budgets described in subsection (c)(9), as well as any other appropriate areas, which could include approaches to prioritizing technologies, appropriateness of engineering techniques, monitoring and verification technologies for storage, geological site selection, and cost control measures.

(B) Making annual non-binding recommendations to the Board concerning any of the matters referred to in subparagraph (A), as well as what types of investments, scientific research, or engineering practices would best further the goals of the Corporation.

(6) PUBLIC AVAILABILITY.—All reports, evaluations, and other materials of the Technical Advisory Committee shall be made available to the public by the Board, without charge, at time of receipt by the Board.

(k) LOBBYING RESTRICTIONS.—No funds collected by the Corporation shall be used in any manner for influencing legislation or elections, except that the Corporation may recommend to the Secretary and the Congress changes in this section or other statutes that would further the purposes of this section.

(l) DAVIS-BACON COMPLIANCE.—The Corporation shall ensure that entities receiving grants, contracts, or other financial support from the Corporation for the project activities authorized by this section are in compliance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the ''Davis-Bacon Act'').

Subtitle C—Nuclear and Advanced Technologies

SEC. 131. FINDINGS AND POLICY.

(a) FINDINGS.—Congress finds that—

(1) in 2008, 104 nuclear power plants produced 19.6 percent of the electricity generated in the United States, slightly less than the electricity generated by natural gas;

(2) nuclear energy is the largest provider of clean, low-carbon, electricity, almost 8 times larger than all renewable power production combined, excluding hydroelectric power;

(3) nuclear energy supplies consistent, base-load electricity, independent of environmental conditions;

(4) by displacing fossil fuels that would otherwise be used for electricity production, nuclear power plants virtually eliminate emissions of greenhouse

gases and criteria pollutants associated with acid rain, smog, or ozone;

(5) nuclear power generation continues to require robust efforts to address issues of safety, waste, and proliferation;

(6) even if every nuclear plant is granted a 20-year extension, all currently operating nuclear plants will be retired by 2055;

(7) long lead times for nuclear power plant construction indicate that action to stimulate the nuclear power industry should not be delayed;

(8) the high upfront capital costs of nuclear plant construction remain a substantial obstacle, despite theoretical potential for significant cost reduction;

(9) translating theoretical cost reduction potential into actual reduced construction costs remains a significant industry challenge that can be overcome only through demonstrated performance;

(10) as of January 2009, 17 companies and consortia have submitted applications to the Nuclear Regulatory Commission for 26 new reactors in the United States;

(11) those proposed reactors will use the latest in nuclear technology for efficiency and safety, more

advanced than the technology of the 1960s and 1970s found in the reactors currently operating in the United States;

(12) increased resources for the Nuclear Regulatory Commission and reform of the licensing process have improved the safety and timeliness of the regulatory environment;

(13) the United States has not built a new reactor since the 1970s and, as a result, will need to revitalize and retool the institutions and infrastructure necessary to construct, maintain, and support new reactors, including improvements in manufacturing of nuclear components and training for the next generation nuclear workforce; and

(14) those new reactors will launch a new era for the nuclear industry, and translate into tens of thousands of jobs.

(b) STATEMENT OF POLICY.—It is the policy of the United States, given the importance of transitioning to a clean energy, low-carbon economy, to facilitate the continued development and growth of a safe and clean nuclear energy industry, through—

(1) reductions in financial and technical barriers to construction and operation; and

(2) incentives for the development of a well-trained workforce and the growth of safe domestic nuclear and nuclear-related industries.

SEC. 132. NUCLEAR WORKER TRAINING.

(a) DEFINITION OF APPLICABLE PERIOD.—In this section, the term ''applicable period'' means—

(1) the 5-year period beginning on January 1, 2012; and

(2) each 5-year period beginning on each January 1 thereafter.

(b) USE OF FUNDS.—Of amounts made available to carry out this section for the calendar years in each applicable period—

(1) the Secretary of Energy shall use such amounts for each applicable period as the Secretary of Energy determines to be necessary to increase the number and amounts of nuclear science talent expansion grants and nuclear science competitiveness grants provided under section 5004 of the America COMPETES Act (42 U.S.C. 16532); and

(2) the Secretary of Labor, in consultation with nuclear energy entities and organized labor, shall use such amounts for each applicable period as the Secretary of Labor determines to be necessary to carry out programs expanding workforce training to

meet the high demand for workers skilled in nuclear power plant construction and operation, including programs for—

(A) electrical craft certification;

(B) preapprenticeship career technical education for industrialized skilled crafts that are useful in the construction of nuclear power plants;

(C) community college and skill center training for nuclear power plant technicians;

(D) training of construction management personnel for nuclear power plant construction projects; and

(E) regional grants for integrated nuclear energy workforce development programs.

SEC. 133. NUCLEAR SAFETY AND WASTE MANAGEMENT PROGRAMS.

(a) NUCLEAR FACILITY LONG-TERM OPERATIONS RESEARCH AND DEVELOPMENT PROGRAM.—

(1) ESTABLISHMENT.—As soon as practicable after the date of enactment of this Act, the Secretary of Energy (referred to in this section as the ''Secretary'') shall establish a research and development program—

(A) to address the reliability, availability, productivity, component aging, safety, and security of nuclear power plants;

(B) to improve the performance of nuclear power plants;

(C) to sustain the health and safety of employees of nuclear power plants;

(D) to assess the feasibility of nuclear power plants to continue to provide clean and economic electricity safely, substantially beyond the first license extension period of the nuclear power plants, which will—

(i) significantly contribute to the energy security of the United States; and

(ii) help protect the environment of the United States; and

(E) to support significant carbon reductions, lower overall costs that are required to reduce carbon emissions, and increase energy security.

(2) CONDUCT OF PROGRAM.—

(A) IN GENERAL.—In carrying out the program established under paragraph (1), the Secretary shall—

(i) build a fundamental scientific basis to understand, predict, and measure changes in materials, systems, structures, equipment, and components as the materials, systems, structures, equipment, and components age through continued operations in long-term service environments;

(ii) develop new safety analysis tools and methods to enhance the performance and safety of nuclear power plants;

(iii) develop advanced online monitoring, control, and diagnostics technologies to prevent equipment failures and improve the safety of nuclear power plants;

(iv) establish a technical basis for advanced fuel designs (including silicon carbide fuel cladding) to increase the safety margins of nuclear power plants; and

(v) examine issues, including—

(I) issues relating to material degradation, plant aging, and technology upgrades; and

(II) any other issue that would impact decisions to extend the lifespan of nuclear power plants.

(B) TECHNICAL SUPPORT.—In carrying out the program established under paragraph (1), the Secretary shall provide to the Chairman of the Nuclear Regulatory Commission information collected under the program—

(i) to help ensure informed decisions regarding the extension of the life of nuclear power plants beyond a 60-year lifespan; and

(ii) for the licensing and long-term management, and safe and economical operation, of nuclear power plants.

(b) SPENT NUCLEAR WASTE DISPOSAL RESEARCH AND DEVELOPMENT PROGRAM.—

(1) ESTABLISHMENT.—As soon as practicable after the date of enactment of this Act, the Secretary shall establish a research and development program to improve the understanding of nuclear spent fuel management and the entire nuclear fuel cycle life.

(2) CONDUCT OF PROGRAM.—In carrying out the program established under paragraph (1), the Secretary shall carry out science-based research and development activities to pursue dramatic improvements in a range of nuclear spent fuel management

options, including short-term and long-term storage and disposal, and proliferation-resistant nuclear spent fuel recycling.

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

Subtitle D—Water Efficiency

SEC. 141. WATERSENSE.

(a) IN GENERAL.—There is established within the Environmental Protection Agency a WaterSense program to identify and promote water-efficient products, buildings, landscapes, facilities, processes, and services, so as—

(1) to reduce water use;

(2) to reduce the strain on water, wastewater, and stormwater infrastructure;

(3) to conserve energy used to pump, heat, transport, and treat water; and

(4) to preserve water resources for future generations, through voluntary labeling of, or other forms of communications about, products, buildings, landscapes, facilities, processes, and services that meet the highest water efficiency and performance criteria.

(b) DUTIES.—The Administrator shall—

(1) establish—

(A) a WaterSense label to be used for certain items; and

(B) the procedure by which an item may be certified to display the WaterSense label;

(2) promote WaterSense-labeled products, buildings, landscapes, facilities, processes, and services in the market place as the preferred technologies and services for—

(A) reducing water use; and

(B) ensuring product and service performance;

(3) work to enhance public awareness of the WaterSense label through public outreach, education, and other means;

(4) preserve the integrity of the WaterSense label by—

(A) establishing and maintaining performance criteria so that products, buildings, landscapes, facilities, processes, and services labeled with the WaterSense label perform as well or better than less water-efficient counterparts;

(B) overseeing WaterSense certifications made by third parties;

(C) conducting reviews of the use of the WaterSense label in the marketplace and taking

1 corrective action in any case in which misuse of
2 the label is identified; and
3 (D) carrying out such other measures as
4 the Administrator determines to be appropriate;
5 (5) regularly review and, if appropriate, update
6 WaterSense criteria for categories of products, build-
7 ings, landscapes, facilities, processes, and services,
8 at least once every 4 years;
9 (6) to the maximum extent practicable, regu-
10 larly estimate and make available to the public the
11 production and relative market shares of, and the
12 savings of water, energy, and capital costs of water,
13 wastewater, and stormwater infrastructure attrib-
14 utable to the use of WaterSense-labeled products,
15 buildings, landscapes, facilities, processes, and serv-
16 ices, at least annually;
17 (7) solicit comments from interested parties and
18 the public prior to establishing or revising a
19 WaterSense category, specification, installation cri-
20 terion, or other criterion (or prior to effective dates
21 for any such category, specification, installation cri-
22 terion, or other criterion);
23 (8) provide reasonable notice to interested par-
24 ties and the public of any changes (including effec-
25 tive dates), on the adoption of a new or revised cat-

egory, specification, installation criterion, or other criterion, along with—

(A) an explanation of the changes; and

(B) as appropriate, responses to comments submitted by interested parties and the public;

(9) provide appropriate lead time (as determined by the Administrator) prior to the applicable effective date for a new or significant revision to a category, specification, installation criterion, or other criterion, taking into account the timing requirements of the manufacturing, marketing, training, and distribution process for the specific product, building and landscape, or service category addressed;

(10) identify and, if appropriate, implement other voluntary approaches in commercial, institutional, residential, industrial, and municipal sectors to encourage recycling and reuse technologies to improve water efficiency or lower water use; and

(11) where appropriate, apply the WaterSense label to water-using products that are labeled by the Energy Star program implemented by the Administrator and the Secretary of Energy.

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

(1) $7,500,000 for fiscal year 2010;

(2) $10,000,000 for fiscal year 2011;

(3) $20,000,000 for fiscal year 2012;

(4) $50,000,000 for fiscal year 2013; and

(5) for each subsequent fiscal year, the applicable amount during the preceding fiscal year, as adjusted to reflect changes for the 12-month period ending the preceding November 30 in the Consumer Price Index for All Urban Consumers published by the Bureau of Labor Statistics of the Department of Labor.

SEC. 142. FEDERAL PROCUREMENT OF WATER-EFFICIENT PRODUCTS.

(a) DEFINITIONS.—In this section:

(1) AGENCY.—The term ''Agency'' has the meaning given the term in section 7902(a) of title 5, United States Code.

(2) FEMP-DESIGNATED PRODUCT.—The term ''FEMP-designated product'' means a product that is designated under the Federal Energy Management Program of the Department of Energy as

being among the highest 25 percent of equivalent products for efficiency.

(3) PRODUCT, BUILDING, LANDSCAPE, FACILITY, PROCESS, AND SERVICE.—The terms ''product'', ''building'', ''landscape'', ''facility'', ''process'', and ''service'' do not include—

(A) any water-using product, building, landscape, facility, process, or service designed or procured for combat or combat-related missions; or

(B) any product, building, landscape, facility, process, or service already covered by the Federal procurement regulations established under section 553 of the National Energy Conservation Policy Act (42 U.S.C. 8259b).

(4) WATERSENSE PRODUCT, BUILDING, LANDSCAPE, FACILITY, PROCESS, OR SERVICE.—The term ''WaterSense product, building, landscape, facility, process, or service'' means a product, building, landscape, facility, process, or service that is labeled for water efficiency under the WaterSense program.

(5) WATERSENSE PROGRAM.—The term ''WaterSense program'' means the program established by section 141.

(b) PROCUREMENT OF WATER-EFFICIENT PRODUCTS.—

(1) REQUIREMENT.—

(A) IN GENERAL.—To meet the requirements of an agency for a water-using product, building, landscape, facility, process, or service, the head of an Agency shall, except as provided in paragraph (2), procure—

(i) a WaterSense product, building, landscape, facility, process, or service; or

(ii) a FEMP-designated product.

(B) SENSE OF CONGRESS REGARDING INSTALLATION PREFERENCES.—It is the sense of Congress that a WaterSense irrigation system should, to the maximum extent practicable, be installed and audited by a WaterSense-certified irrigation professional to ensure optimal performance.

(2) EXCEPTIONS.—The head of an Agency shall not be required to procure a WaterSense product, building, landscape, facility, process, or service or FEMP-designated product under paragraph (1) if the head of the Agency finds in writing that—

(A) a WaterSense product, building, landscape, facility, process, or service or FEMP-des-

ignated product is not cost-effective over the life of the product, building, landscape, facility, process, or service, taking energy, water, and wastewater service cost savings into account; or

(B) no WaterSense product, building, landscape, facility, process, or service or FEMP-designated product is reasonably available that meets the functional requirements of the Agency.

(3) PROCUREMENT PLANNING.—

(A) IN GENERAL.—The head of an Agency shall incorporate criteria used for evaluating WaterSense products, buildings, landscapes, facilities, processes, and services and FEMP-designated products into—

(i) the specifications for all procurements involving water-using products, buildings, landscapes, facilities, processes, and systems, including guide specifications, project specifications, and construction, renovation, and services contracts that include provision of water-using products, buildings, landscapes, facilities, processes, and systems; and

(ii) the factors for the evaluation of offers received for the procurement.

(B) LISTING OF WATER-EFFICIENT PRODUCTS IN FEDERAL CATALOGS.—WaterSense products, buildings, landscapes, facilities, processes, and systems and FEMP-designated products shall be clearly identified and prominently displayed in any inventory or listing of products by the General Services Administration or the Defense Logistics Agency.

(C) ADDITIONAL MEASURES.—The head of an Agency shall consider, to the maximum extent practicable, additional measures for reducing Agency water use, including water reuse technologies, leak detection and repair, and use of waterless products that perform similar functions to existing water-using products.

(c) RETROFIT PROGRAMS.—The head of each Agency, working in coordination with the Administrator and the heads of such other Agencies as the President may designate, shall develop standards and implementation procedures for a building water efficiency retrofit program, which shall include the following elements:

(1) EVALUATION OF PRODUCTS AND SYSTEMS.—Not later than 270 days after the date of

enactment of this Act, each Agency shall evaluate water-consuming products and systems in buildings operated by such Agency and identify opportunities for retrofit and replacement of such products and systems with high-efficiency equipment, such as zero-water-consumption equipment, high-efficiency toilets, high-efficiency shower heads, and high-efficiency faucets, and other products that are certified as Watersense products or FEMP-designated products.

(2) RETROFIT PLAN.—Not later than 360 days after the date of enactment of this Act, each Agency shall, in coordination with other appropriate Agencies and officials, prepare a water efficiency retrofit plan that shall, to the maximum extent practicable, maximize retrofitting of water-consuming products and systems and replacement with high-efficiency equipment described in paragraph (1).

(d) GUIDELINES.—Not later than 180 days after the date of enactment of this Act, the Administrator, working in coordination with the Secretary of Energy and the heads of such other Agencies as the President may designate, shall issue guidelines to carry out this section.

SEC. 143. STATE RESIDENTIAL WATER EFFICIENCY AND CONSERVATION INCENTIVES PROGRAM.

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE ENTITY.—The term ''eligible entity'' means a State government, local or county government, tribal government, wastewater or sewerage utility, municipal water authority, energy utility, water utility, or nonprofit organization that meets the requirements of subsection (b).

(2) INCENTIVE PROGRAM.—The term ''incentive program'' means a program for administering financial incentives for consumer purchase and installation of water-efficient products, buildings (including New Water-Efficient Homes), landscapes, processes, or services described in subsection (b)(1).

(3) RESIDENTIAL WATER-EFFICIENT PRODUCT, BUILDING, LANDSCAPE, PROCESS, OR SERVICE.—

(A) IN GENERAL.—The term ''residential water-efficient product, building, landscape, process, or service'' means a product, building, landscape, process, or service for a residence or its landscape that is rated for water efficiency and performance—

(i) by the WaterSense program; or

(ii) if a WaterSense specification does not exist, by the Energy Star program or

an incentive program approved by the Administrator.

(B) INCLUSIONS.—The term ''residential water-efficient product, building, landscape, process, or service'' includes—

(i) faucets;

(ii) irrigation technologies and services;

(iii) point-of-use water treatment devices;

(iv) reuse and recycling technologies;

(v) toilets;

(vi) clothes washers;

(vii) dishwashers;

(viii) showerheads;

(ix) xeriscaping and other landscape conversions that replace irrigated turf; and

(x) New Water Efficient Homes certified by the WaterSense program.

(4) WATERSENSE PROGRAM.—The term ''WaterSense program'' means the program established by section 141.

(b) ELIGIBLE ENTITIES.—An entity shall be eligible to receive an allocation under subsection (c) if the entity—

(1) establishes (or has established) an incentive program to provide financial incentives to residential consumers for the purchase of residential water-efficient products, buildings, landscapes, processes, or services;

(2) submits an application for the allocation at such time, in such form, and containing such information as the Administrator may require; and

(3) provides assurances satisfactory to the Administrator that the entity will use the allocation to supplement, but not supplant, funds made available to carry out the incentive program.

(c) AMOUNT OF ALLOCATIONS.—For each fiscal year, the Administrator shall determine the amount to allocate to each eligible entity to carry out subsection (d), taking into consideration—

(1) the population served by the eligible entity during the most recent calendar year for which data are available;

(2) the targeted population of the incentive program of the eligible entity, such as general households, low-income households, or first-time homeowners, and the probable effectiveness of the incentive program for that population;

(3) for existing programs, the effectiveness of the program in encouraging the adoption of water-efficient products, buildings, landscapes, facilities, processes, and services;

(4) any allocation to the eligible entity for a preceding fiscal year that remains unused; and

(5) the per capita water demand of the population served by the eligible entity during the most recent calendar year for which data are available and the accessibility of water supplies to such entity.

(d) USE OF ALLOCATED FUNDS.—Funds allocated to an eligible entity under subsection (c) may be used to pay up to 50 percent of the cost of establishing and carrying out an incentive program.

(e) FIXTURE RECYCLING.—Eligible entities are encouraged to promote or implement fixture recycling programs to manage the disposal of older fixtures replaced due to the incentive program under this section.

(f) ISSUANCE OF INCENTIVES.—

(1) IN GENERAL.—Financial incentives may be provided to residential consumers that meet the requirements of the applicable incentive program.

(2) MANNER OF ISSUANCE.—An eligible entity may—

(A) issue all financial incentives directly to residential consumers; or

(B) with approval of the Administrator, delegate all or part of financial incentive administration to other organizations, including local governments, municipal water authorities, water utilities, and non-profit organizations.

(3) AMOUNT.—The amount of a financial incentive shall be determined by the eligible entity, taking into consideration—

(A) the amount of any Federal or State incentive available for the purchase of the residential water-efficient product or service;

(B) the amount necessary to change consumer behavior to purchase water-efficient products and services; and

(C) the consumer expenditures for onsite preparation, assembly, and original installation of the product.

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

(1) $100,000,000 for fiscal year 2010;

(2) $150,000,000 for fiscal year 2011;

(3) $200,000,000 for fiscal year 2012;

(4) $150,000,000 for fiscal year 2013;

(5) $100,000,000 for fiscal year 2014; and

(6) for each subsequent fiscal year, the applicable amount during the preceding fiscal year, as adjusted to reflect changes for the 12-month period ending the preceding November 30 in the Consumer Price Index for All Urban Consumers published by the Bureau of Labor Statistics of the Department of Labor.

Subtitle E—Miscellaneous

SEC. 151. OFFICE OF CONSUMER ADVOCACY.

(a) OFFICE.—

(1) ESTABLISHMENT.—There is established an Office of Consumer Advocacy to serve as an advocate for the public interest.

(2) DIRECTOR.—The Office shall be headed by a Director to be appointed by the President, who is admitted to the Federal Bar, with experience in public utility proceedings, and by and with the advice and consent of the Senate.

(3) DUTIES.—The Office may—

(A) represent, and appeal on behalf of, energy customers on matters concerning rates or service of public utilities and natural gas com-

panies under the jurisdiction of the Commission—

(i) at hearings of the Commission;

(ii) in judicial proceedings in the courts of the United States; and

(iii) at hearings or proceedings of other Federal regulatory agencies and commissions;

(B) monitor and review energy customer complaints and grievances on matters concerning rates or service of public utilities and natural gas companies under the jurisdiction of the Commission;

(C) investigate independently, or within the context of formal proceedings, the services provided by, the rates charged by, and the valuation of the properties of, public utilities and natural gas companies under the jurisdiction of the Commission;

(D) develop means, such as public dissemination of information, consultative services, and technical assistance, to ensure, to the maximum extent practicable, that the interests of energy consumers are adequately represented in the

course of any hearing or proceeding described in subparagraph (A);

(E) collect data concerning rates or service of public utilities and natural gas companies under the jurisdiction of the Commission; and

(F) prepare and issue reports and recommendations.

(4) COMPENSATION AND POWERS.—The Director may—

(A) employ and fix the compensation of such staff personnel as is deemed necessary; and

(B) procure temporary and intermittent services as needed.

(5) ACCESS TO INFORMATION.—Each department, agency, and instrumentality of the Federal Government is authorized and directed to furnish to the Director such reports and other information as he deems necessary to carry out his functions under this section.

(b) CONSUMER ADVOCACY ADVISORY COMMITTEE.—

(1) ESTABLISHMENT.—The Director shall establish an advisory committee to be known as Consumer Advocacy Advisory Committee (in this section referred to as the ''Advisory Committee'') to review

rates, services, and disputes and to make recommendations to the Director.

(2) COMPOSITION.—The Director shall appoint 5 members to the Advisory Committee including—

(A) 2 individuals representing State Utility Consumer Advocates; and

(B) 1 individual, from a nongovernmental organization, representing consumers.

(3) MEETINGS.—The Advisory Committee shall meet at such frequency as may be required to carry out its duties.

(4) REPORTS.—The Director shall provide for publication of recommendations of the Advisory Committee on the public website established for the Office.

(5) DURATION.—Notwithstanding any other provision of law, the Advisory Committee shall continue in operation during the period in which the Office exists.

(6) APPLICATION OF FACA.—Except as otherwise specifically provided, the Advisory Committee shall be subject to the Federal Advisory Committee Act.

(c) DEFINITIONS.—In this section:

(1) COMMISSION.—The term ''Commission'' means the Federal Energy Regulatory Commission.

(2) ENERGY CUSTOMER.—The term ''energy customer'' means a residential customer or a small commercial customer that receives products or services from a public utility or natural gas company under the jurisdiction of the Commission.

(3) NATURAL GAS COMPANY.—The term ''natural gas company'' has the meaning given the term in section 2 of the Natural Gas Act (15 U.S.C. 717a).

(4) OFFICE.—The term ''Office'' means the Office of Consumer Advocacy established by subsection (a)(1).

(5) PUBLIC UTILITY.—The term ''public utility'' has the meaning given the term in section 201(e) of the Federal Power Act (16 U.S.C. 824(e)).

(6) SMALL COMMERCIAL CUSTOMER.—The term ''small commercial customer'' means a commercial customer that has a peak demand of not more than 1,000 kilowatts per hour.

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

(e) SAVINGS CLAUSE.—Nothing in this section affects the rights or obligations of State Utility Consumer Advocates.

SEC. 152. CLEAN TECHNOLOGY BUSINESS COMPETITION GRANT PROGRAM.

(a) IN GENERAL.—The Administrator may provide grants to organizations to conduct business competitions that provide incentives, training, and mentorship to entrepreneurs and early stage start-up companies throughout the United States to meet high-priority economic, environmental, and energy goals in areas including air quality, energy efficiency and renewable energy, transportation, water quality and conservation, green buildings, and waste management.

(b) PURPOSES.—

(1) IN GENERAL.—The competitions described in subsection (a) shall have the purposes of—

(A) accelerating the development and deployment of clean technology businesses and green jobs;

(B) stimulating green economic development;

(C) providing business training and mentoring to early stage clean technology companies; and

(D) strengthening the competitiveness of United States clean technology industry in world trade markets.

(2) PRIORITY.—Priority shall be given to business competitions that—

(A) are led by the private sector;

(B) encourage regional and interregional cooperation; and

(C) can demonstrate market-driven practices and the creation of cost-effective green jobs through an annual publication of competition activities and directory of companies.

(c) ELIGIBILITY.—

(1) IN GENERAL.—To be eligible for a grant under this section, an organization shall be any sponsored entity of an organization described in subparagraph (A) that is operated as a nonprofit entity.

(2) PRIORITY.—In making grants under this section, the Administrator shall give priority to organizations that can demonstrate broad funding support from private and other non-Federal funding sources to leverage Federal investment.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $20,000,000.

SEC. 153. PRODUCT CARBON DISCLOSURE PROGRAM.

(a) EPA STUDY.—The Administrator shall conduct a study to determine the feasibility of establishing a national program for measuring, reporting, publicly disclosing, and labeling products or materials sold in the United States for their carbon content, and shall, not later than 18 months after the date of enactment of this Act, transmit a report to Congress which shall include the following:

(1) A determination of whether a national product carbon disclosure program and labeling program would be effective in achieving the intended goals of achieving greenhouse gas reductions and an examination of existing programs globally and their strengths and weaknesses.

(2) Criteria for identifying and prioritizing sectors and products and processes that should be covered in such program or programs.

(3) An identification of products, processes, or sectors whose inclusion could have a substantial carbon impact (prioritizing industrial products such as iron and steel, aluminum, cement, chemicals, and paper products, and also including food, beverage, hygiene, cleaning, household cleaners, construction, metals, clothing, semiconductor, and consumer electronics).

(4) Suggested methodology and protocols for measuring the carbon content of the products across the entire carbon lifecycle of such products for use in a carbon disclosure program and labeling program.

(5) A review of existing greenhouse gas product accounting standards, methodologies, and practices including the Greenhouse Gas Protocol, ISO 14040/44, ISO 14067, and Publically Available Specification 2050, and including a review of the strengths and weaknesses of each.

(6) A survey of secondary databases including the Manufacturing Energy Consumption Survey, an evaluation of the quality of data for use in a product carbon disclosure program and product carbon labeling program, an identification of gaps in the data relative to the potential purposes of a national product carbon disclosure program and product carbon labeling program, and development of recommendations for addressing these data gaps.

(7) An assessment of the utility of comparing products and the appropriateness of product carbon standards.

(8) An evaluation of the information needed on a label for clear and accurate communication, in-

cluding what pieces of quantitative and qualitative information need to be disclosed.

(9) An evaluation of the appropriate boundaries of the carbon lifecycle analysis for different sectors and products.

(10) An analysis of whether default values should be developed for products whose producer does not participate in the program or does not have data to support a disclosure or label and a determination of the best ways to develop such default values.

(11) A recommendation of certification and verification options necessary to assure the quality of the information and avoid greenwashing or the use of insubstantial or meaningless environmental claims to promote a product.

(12) An assessment of options for educating consumers about product carbon content and the product carbon disclosure program and product carbon labeling program.

(13) An analysis of the costs and timelines associated with establishing a national product carbon disclosure program and product carbon labeling program, including options for a phased approach. Costs should include those for businesses associated

with the measurement of carbon footprints and those associated with creating a product carbon label and managing and operating a product carbon labeling program, and options for minimizing these costs.

(14) An evaluation of incentives (such as financial incentives, brand reputation, and brand loyalty) to determine whether reductions in emissions can be accelerated through encouraging more efficient manufacturing or by encouraging preferences for lower-emissions products to substitute for higher-emissions products whose level of performance is no better.

(b) DEVELOPMENT OF NATIONAL CARBON DISCLOSURE PROGRAM.—Upon conclusion of the study, and not later than 3 years after the date of enactment of this Act, the Administrator shall establish a national product carbon disclosure program, participation in which shall be voluntary, and which may involve a product carbon label with broad applicability to the wholesale and consumer markets to enable and encourage knowledge about carbon content by producers and consumers and to inform efforts to reduce energy consumption (carbon dioxide equivalent emissions) nationwide. In developing such a program, the Administrator shall—

(1) consider the results of the study conducted under subsection (a);

(2) consider existing and planned programs and proposals and measurement standards (including the Publicly Available Specification 2050, standards to be developed by the World Resource Institute/World Business Council for Sustainable Development, the International Standards Organization, and the bill AB19 pending in the California legislature as of the date of enactment of this Act);

(3) consider the compatibility of a national product carbon disclosure program with existing programs;

(4) utilize incentives and other means to spur the adoption of product carbon disclosure and product carbon labeling;

(5) develop protocols and parameters for a product carbon disclosure program, including a methodology and formula for assessing, verifying, and potentially labeling a product's greenhouse gas content, and for data quality requirements to allow for product comparison;

(6) create a means to—

(A) document best practices;

(B) ensure clarity and consistency;

(C) work with suppliers, manufacturers, and retailers to encourage participation;

(D) ensure that protocols are consistent and comparable across like products; and

(E) evaluate the effectiveness of the program;

(7) make publicly available information on product carbon content to ensure transparency;

(8) provide for public outreach, including a consumer education program to increase awareness;

(9) develop training and education programs to help businesses learn how to measure and communicate their carbon footprint and easy tools and templates for businesses to use to reduce cost and time to measure their products' carbon lifecycle;

(10) consult with the Secretary of Energy, the Secretary of Commerce, the Federal Trade Commission, and other Federal agencies, as necessary;

(11) gather input from stakeholders through consultations, public workshops, or hearings with representatives of consumer product manufacturers, consumer groups, and environmental groups;

(12) utilize systems for verification and product certification that will ensure that claims manufacturers make about their products are valid;

(13) create a process for reviewing the accuracy of product carbon label information and protecting

the product carbon label in the case of a change in the product's energy source, supply chain, ingredients, or other factors, and specify the frequency to which data should be updated; and

(14) develop a standardized, easily understandable carbon label, if appropriate, and create a process for responding to inaccuracies and misuses of such a label.

(c) REPORT TO CONGRESS.—Not later than 5 years after the program is established pursuant to subsection (b), the Administrator shall report to Congress on the effectiveness and impact of the program, the level of voluntary participation, and any recommendations for additional measures.

(d) DEFINITIONS.—In this section:

(1) The term ''carbon content'' means the quantity of greenhouse gas emissions and the warming impact of those emissions on the atmosphere expressed in carbon dioxide equivalent associated with a product's value chain.

(2) The term ''carbon footprint'' means the level of greenhouse gas emissions produced by a particular activity, service, or entity.

(3) The term ''carbon lifecycle'' means the greenhouse gas emissions that are released as part

of the processes of creating, producing, processing, manufacturing, modifying, transporting, distributing, storing, using, recycling, or disposing of goods and services.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Administrator—

(1) to carry out the study required by subsection (a), $5,000,000; and

(2) to carry out the program required under subsection (b), $25,000,000 for each of fiscal years 2010 through 2025.

SEC. 154. STATE RECYCLING PROGRAMS.

(a) ESTABLISHMENT.—The Administrator shall establish a State Recycling Program governing the use of funds by States in accordance with this Act.

(b) USE OF FUNDING.—

(1) IN GENERAL.—States receiving funding to carry out this section shall use the proceeds to carry out recycling programs in accordance with this section.

(2) COUNTY AND MUNICIPAL PROGRAMS.—Not less than ¼ of the funding made available to a State to carry out this section shall be distributed by the State to county and municipal recycling programs as described in subsection (c)(1), to be used exclusively

to support recycling purposes and associated source reduction purposes, including to provide incentives—

(A) for recycling-related technology that—

(i) reduces or avoids greenhouse gas emissions;

(ii) increases collection rates; and

(iii) improves the quality of recyclable material that is separated from solid waste;

(B) for energy-efficiency projects for transportation fleets and recycling equipment used to collect and sort recyclable material separated from solid waste;

(C) for recycling program-related expenses, including—

(i) education and job training;

(ii) development and implementation of variable rate (commonly referred to as ''pay-as-you-throw'') recycling programs and anaerobic digestion programs;

(iii) promotion of public space recycling programs;

(iv) approaches for assuring compliance with recycling requirements; and

(v) development or implementation of best practices for municipal solid waste reduction programs; and

(D) to ensure that recyclable material is not sent for disposal or incineration during fluctuating markets.

(3) RECYCLING FACILITIES.—Not less than ¼ of the funding made available to a State to carry out this section shall be distributed by the State to eligible recycling facilities as described in subsection (c)(2) to be used exclusively to support the recycling purposes and associated source reduction purposes of the facilities, including to provide—

(A) incentives for the demonstration or deployment of recycling-related technology and equipment that reduce or avoid greenhouse gas emissions;

(B) incentives to facilities that increase the quantity and quality of recyclable material that is recycled versus sent for disposal or incineration;

(C) funding for research, management, and removal of impediments to recycling, including—

(i) radioactive material; and

(ii) devices or materials that contain polychlorinated biphenyls, mercury, or chlorofluorocarbons;

(D) funding for research on, and development and deployment of, new technologies to more efficiently and effectively recycle items such as automobile shredder residue, cathode ray tubes, plastics, and tires; and

(E) incentives to recycle materials identified by the Administrator that are not being recycled at a recycling facility.

(4) MANUFACTURING FACILITIES.—Not less than ¼ of the funding made available to a State to carry out this section shall be distributed by the State to eligible manufacturing facilities as described in subsection (c)(3) to be used exclusively to support recycling purposes, including to provide incentives for the demonstration or deployment of—

(A) manufacturing-related technology and equipment that would increase the use of recyclable material and avoid or reduce greenhouse gas emissions;

(B) radiation detection equipment and the costs associated with recovery of detected radiated recyclable material;

(C) technologies that will detect and separate contaminants, including mercury-, lead-, and cadmium-containing devices;

(D) strategies and technologies to remove impediments to recovering recyclable material; and

(E) strategies and technologies to improve the energy efficiency of technology and equipment used to manufacture recyclable material.

(c) ELIGIBILITY REQUIREMENTS.—

(1) COUNTY AND MUNICIPALITY PROGRAMS.—Funds provided under subsection (b)(2) shall be provided on a competitive basis to county and municipal recycling programs that—

(A) have within the solid waste management plans of the programs a recycling management plan that includes an education outreach program for the individuals and entities served by the program constituency that highlights the lifecycle benefits of recycling; and

(B) collect at least 5 recyclable materials, such as—

(i) ferrous and nonferrous metal;

(ii) aluminum;

(iii) plastic;

(iv) tires and rubber;

(v) household electronic equipment;

(vi) glass;

(vii) scrap food;

(viii) recoverable fiber or paper; and

(ix) textiles;

(C) demonstrate, not later than 3 years after the date of receipt of funds under this subtitle, reasonable progress toward achieving—

(i) a collection rate goal of at least 30 percent of the total recyclable materials available from the solid waste stream in the requesting State, county, or municipal program; or

(ii) a 10-percent increase of collected recyclable materials compared to the total solid waste stream in the requesting State, county, or municipal program; and

(D)(i) own, operate, or contract to operate—

(I) a curbside recyclables collection program;

(II) a redemption center or drop-off facility for recyclables; and

(III) a materials recovery facility; and

(ii) have in place a quality, environmental, health, and safety management system (such as that of the International Standards Organization or an equivalent) that includes goals to reduce the operational carbon baselines of the programs.

(2) RECYCLING FACILITY.—Funds provided under subsection (b)(3) shall be provided on a competitive basis to a recycling facility that—

(A) processes recyclable material into commercial specification-grade commodities for use as raw material feed stock at recovery facilities, including for use as—

(i) a replacement or substitute for a virgin raw material; or

(ii) a replacement or substitute for a product made, in whole or in part, from a virgin raw material;

(B) has a verifiable carbon baseline; and

(C) has an environmental, health and safety, and quality management system (such as that of the International Standards Organization or an equivalent) that includes goals to reduce the operational carbon baseline of the recycling facility per unit of material processed.

(3) MANUFACTURING FACILITY.—Funds provided under subsection (b)(4) shall be provided on a competitive basis to a manufacturing facility that—

(A) can report on a verifiable carbon baseline that is consistent with applicable reporting requirements; and

(B) has an environmental, health and safety, and quality management system (such as that of the International Standards Organization or an equivalent) that includes goals to reduce the operational carbon baseline of the manufacturing facility per unit of material processed.

(d) REPORTING.—Each State that distributes funds under this section shall submit to the Administrator, in accordance with such requirements as the Administrator may prescribe, a report that includes—

(1) a list of entities receiving funding under this section, including entities receiving such funding from units of local government pursuant to subsection (b)(2);

(2) the amount of funding received by each such recipient;

(3) the specific purposes for which the funding was conveyed to each such recipient; and

(4) documentation of the quantity of net recyclable material that was collected and processed and greenhouse gas emissions that were reduced or avoided accordingly, through use of the funding, based on a lifecycle calculation developed by the Administrator.

(e) METHODOLOGY AND DECISIONMAKING.—The Administrator, as appropriate—

(1) shall develop and periodically update lifecycle methods to quantify the relationship between waste management decisions, including recycling and waste reduction, greenhouse gas reductions, and energy use reductions, for purposes that include—

(A) helping to support decisions under Federal, State, and municipal recycling and waste management programs, including—

(i) estimating greenhouse gas and energy benefits of increasing collection or adding new materials to recycling programs;

(ii) comparing the benefits of recycling and waste reduction to other greenhouse gas and energy use reduction strategies;

(iii) optimizing waste management strategies to maximize greenhouse gas reductions and energy use reductions; and

(iv) public education; and

(B) designing products to optimize waste reduction and recycling opportunities and use of recycled materials in the manufacturing process;

(2) may collect data to support the development of the methods described in paragraph (1); and

(3) to improve national consistency, shall, in consultation with appropriate State and local representatives and municipal recycling programs, identify best practices to promote improvement in, and support State efforts in improving, municipal recycling and resource recovery programs.

SEC. 155. SUPPLEMENTAL AGRICULTURE AND FORESTRY GREENHOUSE GAS REDUCTION AND RENEWABLE ENERGY PROGRAM.

(a) AGRICULTURAL GREENHOUSE GAS REDUCTIONS.—

(1) ESTABLISHMENT.—

(A) IN GENERAL.—The Secretary of Agriculture (referred to in this section as the ''Secretary''), in coordination with the Secretary of

the Interior, shall establish a Greenhouse Gas Reduction Incentives Program (referred to in this section as the ''program'') to provide financial assistance to owners and operators of agricultural land (including land on which specialty crops are produced and private or public land used for grazing) and forest land for projects and activities that measurably increase carbon sequestration or reduce greenhouse gas emissions.

(B) SHARED AUTHORITY.—The Secretary shall delegate to the Secretary of the Interior the authority to carry out projects on land under the jurisdiction of or operated by the Department of the Interior.

(2) PRIORITY.—In carrying out the program, the Secretary shall give priority to projects or activities that—

(A) reduce greenhouse gas emissions or increase sequestration of greenhouse gases, and achieve significant other environmental benefits, such as the improvements of water or air quality or natural resources; and

(B) reduce greenhouse gas emissions or sequester carbon in agricultural and forestry op-

erations where there are limited recognized opportunities to achieve such emission reductions or sequestration.

(3) ELIGIBLE PROJECTS AND ACTIVITIES.—Eligible projects and payments shall include those that—

(A) reflect the comparable amount that the owners or operators would receive in the offset market if not for compliance with environmental laws that preclude the owners and operators from being eligible for receiving an offset credit under a Federal law enacted for the purpose of regulating greenhouse gas emissions;

(B) provide greenhouse gas emission benefits, but do not receive an offset credit or qualify for an early action allowance under a Federal law enacted for the purpose of regulating greenhouse gas emissions, including projects and activities that provide an opportunity to demonstrate and test new or uncertain methods to reduce or sequester emissions;

(C) reward early adopters, including producers that practice no-till agriculture, and ensure that individuals and entities that took action prior to the implementation of a Federal

law enacted for the purpose of regulating greenhouse gas emissions are not placed at a competitive disadvantage, including giving special consideration to owners or operators located in jurisdictions with more stringent environmental laws (including regulations), compliance with which precludes the owners or operators from participating such an offset market;

(D) provide incentives for supplemental greenhouse gas emission reductions on private forest land of the United States;

(E) prevent any conversion of land, including native grassland, native prairie, rangeland, cropland, or forested land, that would increase greenhouse gas emissions or a loss of carbon sequestration; or

(F) support action on Federal, State, or tribal land.

(4) REQUIREMENTS.—Financial incentives and support provided by the Secretary for a project or activity under this section shall, to the maximum extent practicable—

(A) be directly proportional to the quantity and duration of greenhouse gas emissions reduced or carbon sequestered (except with re-

spect to projects and activities that provide adaptation benefits); and

(B) complement and leverage existing conservation, forestry, and energy program expenditures to provide measurable emission reduction and sequestration benefits that otherwise may not take place or continue to exist.

(5) ELIGIBILITY.—An owner or operator shall not be prohibited from participating in the program established under this section due to participation of the owner or operator in other Federal or State conservation or agricultural assistance programs.

(6) FORMS OF ASSISTANCE.—The Secretary may use any of the following to provide assistance under this section:

(A) Conservation easements.

(B) Carbon sequestration and mitigation contracts between the owner or operator and the Secretary for the performance of projects or activities that reduce greenhouse gas emissions or sequester carbon.

(C) Financial incentives through timber harvest contracts.

(D) Financial incentives through grazing contracts.

(E) Grants.

(F) Such other forms of assistance as the Secretary determines to be appropriate.

(7) REVERSALS.—The Secretary shall specify methods to address intentional or unintentional reversal of carbon sequestration or greenhouse gas emission reductions that occur during the term of a contract or easement under this section.

(8) ACCOUNTING SYSTEMS.—In carrying out this section, the Secretary shall develop and implement—

(A) a national accounting system for carbon stocks, sequestration, and greenhouse gas emissions that may be used to assess progress in implementing this section at a national level; and

(B) credible reporting and accounting systems to ensure that incentives provided under this section are achieving stated objectives.

(9) PROGRAM MEASUREMENT, MONITORING, AND VERIFICATION.—The Secretary, in consultation with the Administrator—

(A) shall establish and implement protocols that provide reasonable monitoring and verification of compliance with terms associated

with assistance provided under this section, including field sampling of actual performance, to develop annual estimates of emission reductions achieved under the program;

(B) shall report annually the total number of tons of carbon dioxide sequestered or the total number of tons of emissions avoided through incentives provided under this section; and

(C) not later than 2 years after the date of enactment of this Act, and at least every 18 months thereafter, submit to Congress and make available to the public on the website of the Department of Agriculture a report that includes—

(i) an estimate of annual and cumulative reductions generated through the program under this section, determined using standardized measures (including economic efficiency); and

(ii) a summary of any changes to the program, in accordance with this section, that will be made as a result of program measurement, monitoring, and verification conducted under this section.

(b) RESEARCH PROGRAM.—The Secretary shall establish by rule a program to conduct research to develop additional projects and activities for crops to find additional techniques and methods to reduce greenhouse gas emissions or sequester greenhouse gases that may or may not meet criteria for a Federal law enacted for the purpose of regulating greenhouse gas emissions.

SEC. 156. ECONOMIC DEVELOPMENT CLIMATE CHANGE FUND.

(a) IN GENERAL.—Title II of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3141 et seq.) is amended by adding at the end the following:

"SEC. 219. ECONOMIC DEVELOPMENT CLIMATE CHANGE FUND.

''(a) IN GENERAL.—On the application of an eligible recipient, the Secretary may provide technical assistance, make grants, enter into contracts, or otherwise provide amounts for projects—

''(1) to promote energy efficiency to enhance economic competitiveness;

''(2) to increase the use of renewable energy resources to support sustainable economic development and job growth;

"(3) to support the development of conventional energy resources to produce alternative transportation fuels, electricity and heat;

"(4) to develop energy efficient or environmentally sustainable infrastructure;

"(5) to promote environmentally sustainable economic development practices and models;

"(6) to support development of energy efficiency and alternative energy development plans, studies or analysis, including enhancement of new and existing Comprehensive Economic Development Strategies funded under this Act; and

"(7) to supplement other Federal grants, loans, or loan guarantees for purposes described in paragraphs (1) through (6).

"(b) FEDERAL SHARE.—The Federal share of the cost of any project carried out under this section shall not exceed 80 percent, except that the Federal share of a Federal grant, loan, or loan guarantee provided under subsection (a)(7) may be 100 percent.

"(c) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $50,000,000 for each of fiscal years 2009 through 2013, to remain available until expended.".

(b) CONFORMING AMENDMENT.—The table of contents contained in section 1(b) of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3141 et seq.) is amended by inserting after the item relating to section 218 the following:

"Sec. 219. Economic Development Climate Change Fund.".

SEC. 157. STUDY OF RISK-BASED PROGRAMS ADDRESSING VULNERABLE AREAS.

(a) IN GENERAL.—The Administrator, or the heads of such other Federal agencies as the President may designate, shall conduct a study and, not later than 2 years after the date of enactment of this Act, submit to Congress a report regarding risk-based policies and programs addressing vulnerable areas.

(b) REQUIREMENTS.—The report shall

(1) review and assess Federal predisaster mitigation, emergency response, and flood insurance policies and programs that affect areas vulnerable to the impacts of climate change;

(2) describe strategies for better addressing such vulnerabilities and provide implementation recommendations;

(3) assess whether the policies and programs described in paragraph (1) support the State response and adaptation goals and objectives identified under this Act;

(4) identify, and make recommendations to resolve, inconsistencies in Federal policies and programs in effect as of the date of enactment of this Act that address areas vulnerable to climate change; and

(5) identify annual cost savings to the Federal Government associated with the implementation of the strategies and recommendations contained in the report.

Subtitle F—Energy Efficiency and Renewable Energy

SEC. 161. RENEWABLE ENERGY.

(a) DEFINITIONS.—In this section:

(1) RENEWABLE ENERGY.—The term ''renewable energy'' means electric energy generated from solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project.

(2) RENEWABLE PORTFOLIO STANDARD.—The term '''renewable portfolio standard''' means a State statute that requires electricity providers to

obtain a minimum percentage of their power from renewable energy resources by a certain date.

(b) GRANTS.—The Administrator, in consultation with the Secretaries of Energy, Interior, and Agriculture, may provide grants for projects to increase the quantity of energy a State uses from renewable sources under State renewable portfolio standard laws.

(c) ELIGIBILITY.—The Administrator shall review for approval projects applications that are—

(1) submitted by State and local governments, Indian tribes, public utilities, regional energy co-operatives, or individual energy producers from states with a binding Renewable Portfolio Standard; or

(2) submitted by State and local governments, Indian tribes, public utilities, or regional energy co-operatives from States with nonbinding goals for adoption of renewable energy requirements.

(d) PRIORITY.—The Administrator shall give priority to project applications that are—

(1) submitted by States with a binding renewable portfolio standard;

(2) cost-effective in achieving greater renewable energy production in each State.

(e) CERTIFICATION.—

(1) IN GENERAL.—The Administrator shall notify in writing the Governor of each eligible State as described in section (c) at the time at which the Administrator begins review of a project application received from an eligible entity within the State.

(2) CERTIFICATION.—The Governor shall certify in writing within 30 days of receipt of the Administrator's notification described in subsection (1) that the project application—

(A) will assist the State in reaching renewable portfolio standard targets under applicable state laws; and

(B) has secured non-Federal funding sources that, in conjunction with the requested grant amount, will be sufficient to complete the renewable energy project.

(f) RULEMAKING.—

(1) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Administrator shall initiate rulemaking procedures necessary to implement this section.

(2) FINAL RULES; ACCEPTANCE OF APPLICATIONS.—Not later than 90 days after the close of the public comment period relating to the rule-

making described in paragraph (1), the Administrator shall—

(A) promulgate final regulations to carry out this section; and

(B) begin accepting project applications for review.

(g) REPORTING.—Not later than 180 days after the date of enactment of this Act, and every 180 days thereafter, the Administrator shall submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works of the Senate a report specifying, with respect to the program under this section—

(1) the project applications received;

(2) the project applications approved;

(3) the amount of funding allocated per project; and

(4) the cumulative benefits of the grant program.

(h) GRANT AMOUNT.—A grant provided under this section may be in an amount that does not exceed 50 percent of the total cost of the renewable energy project to be funded by the grant.

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

SEC. 162. ADVANCED BIOFUELS.

(a) DEFINITIONS.—In this section:

(1) ADVANCED BIOFUEL.—The term ''advanced biofuel'' shall have such meaning as is given the term by the Administrator in regulations promulgated under subsection (c).

(2) ELIGIBLE ENTITY.—The term ''eligible entity'' means an individual, corporate entity, unit of State or local government, Indian tribe, farm cooperative, institution of higher learning, rural electric cooperative, or public utility.

(b) GRANTS.—The Administrator, in consultation with the Secretary of Agriculture and the Secretary of Energy, may provide grants to support research and development of advanced biofuels.

(c) REGULATIONS.—

(1) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the Administrator shall promulgate regulations to carry out this section (including a definition of the term ''advanced biofuel'' for the purpose of providing assistance under this section).

(2) REQUIREMENTS.—The regulations promulgated under paragraph (1) shall—

(A) provide that the Administrator shall make grants available to eligible entities to support—

(i) research regarding the production of advanced biofuels;

(ii) the development of new advanced biofuel production and capacity-building technologies;

(iii) the development and construction of commercial-scale advanced biofuel production facilities; and

(iv) the expanded production of advanced biofuels;

(B) provide that, to receive a grant under this section, an eligible entity shall submit to the Administrator—

(i) a project proposal with detailed project information, as determined by the Administrator; and

(ii) such records as the Administrator may require as evidence of the production of advanced biofuels or the importance and

1 necessity of advanced biofuels research and
2 new technologies; and
3 (C) include appropriate cost-sharing re-
4 quirements developed by the Administrator for
5 grant awards for authorized uses of funds
6 under this section.
7 (3) PRIORITY.—The Administrator shall give
8 priority to eligible entities based on—
9 (A) technical and economic feasibility of a
10 project proposal;
11 (B) cost-effectiveness of a project proposal;
12 (C) the use of innovative technologies in a
13 project proposal;
14 (D) the availability of non-Federal re-
15 sources, including private resources, to fund the
16 project proposal; and
17 (E) whether the project proposed can be
18 replicated.
19 **SEC. 163. ENERGY EFFICIENCY IN BUILDING CODES.**
20 (a) ENERGY EFFICIENCY TARGETS.—
21 (1) RULEMAKING TO ESTABLISH TARGETS.—
22 The Administrator, or such other agency head or
23 heads as may be designated by the President, in
24 consultation with the Director of the National Insti-
25 tute of Standards and Technology, shall promulgate

regulations establishing building code energy efficiency targets for the national average percentage improvement of buildings' energy performance. Such regulations shall establish a national building code energy efficiency target for residential buildings and commercial buildings when built to a code meeting the target, beginning not later than January 1, 2014 and applicable each calendar year through December 31, 2030.

(b) NATIONAL ENERGY EFFICIENCY BUILDING CODES.—

(1) RULEMAKING TO ESTABLISH NATIONAL CODES.—The Administrator, or such other agency head or heads as may be designated by the President, shall promulgate regulations establishing national energy efficiency building codes for residential and commercial buildings. Such regulations shall be sufficient to meet the national building code energy efficiency targets established under subsection (a) in the most cost-effective manner, and may include provisions for State adoption of the national building code standards and certification of State programs

(c) ANNUAL REPORTS.—The Administrator, or such other agency head or heads as may be designated by the

President, shall annually submit to Congress, and publish in the Federal Register, a report on—

(1) the status of national energy efficiency building codes;

(2) the status of energy efficiency building code adoption and compliance in the States;

(3) the implementation of and compliance with regulations promulgated under this section;

(4) the status of Federal and State enforcement of building codes; and

(5) impacts of action under this section, and potential impacts of further action, on lifetime energy use by buildings, including resulting energy and cost savings.

SEC. 164. RETROFIT FOR ENERGY AND ENVIRONMENTAL PERFORMANCE.

(a) DEFINITIONS.—For purposes of this section:

(1) ASSISTED HOUSING.—The term ''assisted housing'' means those properties receiving project-based assistance pursuant to section 202 of the Housing Act of 1959 (12 U.S.C. 1701q), section 811 of the Cranston-Gonzalez National Affordable Housing Act (42 U.S.C. 8013), section 8 of the United States Housing Act of 1937 (42 U.S.C. 1437f), or similar programs.

(2) NONRESIDENTIAL BUILDING.—The term ''nonresidential building'' means a building with a primary use or purpose other than residential housing, including any building used for commercial offices, schools, academic and other public and private institutions, nonprofit organizations including faith-based organizations, hospitals, hotels, and other nonresidential purposes. Such buildings shall include mixed-use properties used for both residential and nonresidential purposes in which more than half of building floor space is nonresidential.

(3) PERFORMANCE-BASED BUILDING RETROFIT PROGRAM.—The term ''performance-based building retrofit program'' means a program that determines building energy efficiency success based on actual measured savings after a retrofit is complete, as evidenced by energy invoices or evaluation protocols.

(4) PRESCRIPTIVE BUILDING RETROFIT PROGRAM.—The term ''prescriptive building retrofit program'' means a program that projects building retrofit energy efficiency success based on the known effectiveness of measures prescribed to be included in a retrofit.

(5) PUBLIC HOUSING.—The term ''public housing'' means properties receiving assistance under

section 9 of the United States Housing Act of 1937 (42 U.S.C. 1437g).

(6) RECOMMISSIONING; RETROCOMMISSIONING.—The terms ''recommissioning'' and ''retrocommissioning'' have the meaning given those terms in section 543(f)(1) of the National Energy Conservation Policy Act (42 U.S.C. 8253(f)(1)).

(7) RESIDENTIAL BUILDING.—The term ''residential building'' means a building whose primary use is residential. Such buildings shall include single-family homes (both attached and detached), owner-occupied units in larger buildings with their own dedicated space-conditioning systems, apartment buildings, multi-unit condominium buildings, public housing, assisted housing, and buildings used for both residential and nonresidential purposes in which more than half of building floor space is residential.

(8) STATE ENERGY PROGRAM.—The term ''State Energy Program'' means the program under part D of title III of the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.).

(b) ESTABLISHMENT.—The Administrator shall develop and implement, in consultation with the Secretary

of Energy, standards for a national energy and environmental building retrofit policy for single-family and multifamily residences. The Administrator shall develop and implement, in consultation with the Secretary of Energy and the Director of Commercial High-Performance Green Buildings, standards for a national energy and environmental building retrofit policy for nonresidential buildings. The programs to implement the residential and nonresidential policies based on the standards developed under this section shall together be known as the Retrofit for Energy and Environmental Performance (REEP) program.

(c) PURPOSE.—The purpose of the REEP program is to facilitate the retrofitting of existing buildings across the United States to achieve maximum cost-effective energy efficiency improvements and significant improvements in water use and other environmental attributes.

(d) FEDERAL ADMINISTRATION.—

(1) EXISTING PROGRAMS.—In creating and operating the REEP program—

(A) the Administrator shall make appropriate use of existing programs, including the Energy Star program and in particular the Environmental Protection Agency Energy Star for Buildings program; and

(B) the Administrator shall consult with the Secretary of Energy regarding appropriate use of existing programs, including delegating authority to the Director of Commercial High-Performance Green Buildings appointed under section 421 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17081).

(2) CONSULTATION AND COORDINATION.—The Administrator shall consult with and coordinate with the and the Secretary of Energy and the Secretary of Housing and Urban Development in carrying out the REEP program with regard to retrofitting of public housing and assisted housing. As a result of such consultation, the Administrator shall establish standards to ensure that retrofits of public housing and assisted housing funded pursuant to this section are cost-effective, including opportunities to address the potential co-performance of repair and replacement needs that may be supported with other forms of Federal assistance. Owners of public housing or assisted housing receiving funding through the REEP program shall agree to continue to provide affordable housing consistent with the provisions of the authorizing legislation governing each program for an additional period commensurate with the

1 funding received, as determined in accordance with
2 guidelines established by the Secretary of Housing
3 and Urban Development.

4 (3) ASSISTANCE.—The Administrator shall pro-
5 vide consultation and assistance to State and local
6 agencies for the establishment of revolving loan
7 funds, loan guarantees, or other forms of financial
8 assistance under this section.

9 (e) STATE AND LOCAL ADMINISTRATION.—

10 (1) DESIGNATION AND DELEGATION.—A State
11 may designate one or more agencies or entities, in-
12 cluding those regulated by the State, to carry out
13 the purposes of this section, but shall designate one
14 entity or individual as the principal point of contact
15 for the Administrator regarding the REEP Pro-
16 gram. The designated State agency, agencies, or en-
17 tities may delegate performance of appropriate ele-
18 ments of the REEP program, upon their request
19 and subject to State law, to counties, municipalities,
20 appropriate public agencies, and other divisions of
21 local government, as well as to entities regulated by
22 the State. In making any such designation or delega-
23 tion, a State shall give priority to entities that ad-
24 minister existing comprehensive retrofit programs,
25 including those under the supervision of State utility

regulators. States shall maintain responsibility for meeting the standards and requirements of the REEP program. In any State that elects not to administer the REEP program, a unit of local government may propose to do so within its jurisdiction, and if the Administrator finds that such local government is capable of administering the program, the Administrator may provide assistance to that local government, prorated according to the population of the local jurisdiction relative to the population of the State, for purposes of the REEP program.

(2) EMPLOYMENT.—States and local government entities may administer a REEP program in a manner that authorizes public or regulated investor-owned utilities, building auditors and inspectors, contractors, nonprofit organizations, for-profit companies, and other entities to perform audits and retrofit services under this section. A State may provide incentives for retrofits without direct participation by the State or its agents, so long as the resulting savings are measured and verified. A State or local administrator of a REEP program shall seek to ensure that sufficient qualified entities are available to support retrofit activities so that building

owners have a competitive choice among qualified auditors, raters, contractors, and providers of services related to retrofits. Nothing in this section is intended to deny the right of a building owner to choose the specific providers of retrofit services to engage for a retrofit project in that owner's building.

(3) EQUAL INCENTIVES FOR EQUAL IMPROVEMENT.—In general, the States should strive to offer the same levels of incentives for retrofits that meet the same efficiency improvement goals, regardless of whether the State, its agency or entity, or the building owner has conducted the retrofit achieving the improvement, provided the improvement is measured and verified.

(f) ELEMENTS OF REEP PROGRAM.—The Administrator, in consultation with the Secretary of Energy, shall establish goals, guidelines, practices, and standards for accomplishing the purpose stated in subsection (c), and shall annually review and, as appropriate, revise such goals, guidelines, practices, and standards. The program under this section shall include the following:

(1) Residential Energy Services Network (RESNET) or Building Performance Institute (BPI) analyst certification of residential building energy and environment auditors, inspectors, and rat-

ers, or an equivalent certification system as determined by the Administrator.

(2) BPI certification or licensing by States of residential building energy and environmental retrofit contractors, or an equivalent certification or licensing system as determined by the Administrator.

(3) Provision of BPI, RESNET, or other appropriate information on equipment and procedures, as determined by the Administrator, that contractors can use to test the energy and environmental efficiency of buildings effectively (such as infrared photography and pressurized testing, and tests for water use and indoor air quality).

(4) Provision of clear and effective materials to describe the testing and retrofit processes for typical buildings.

(5) Guidelines for offering and managing prescriptive building retrofit programs and performance-based building retrofit programs for residential and nonresidential buildings.

(6) Guidelines for applying recommissioning and retrocommissioning principles to improve a building's operations and maintenance procedures.

(7) A requirement that building retrofits conducted pursuant to a REEP program utilize, espe-

cially in all air-conditioned buildings, roofing materials with high solar energy reflectance, unless inappropriate due to green roof management, solar energy production, or for other reasons identified by the Administrator, in order to reduce energy consumption within the building, increase the albedo of the building's roof, and decrease the heat island effect in the area of the building, without reduction of otherwise applicable ceiling insulation standards.

(8) Determination of energy savings in a performance-based building retrofit program through—

(A) for residential buildings, comparison of before and after retrofit scores on the Home Energy Rating System (HERS) Index, where the final score is produced by an objective third party;

(B) for nonresidential buildings, Environmental Protection Agency Portfolio Manager benchmarks; or

(C) for either residential or nonresidential buildings, use of an Administrator-approved simulation program by a contractor with the appropriate certification, subject to appropriate software standards and verification of at least

15 percent of all work done, or such other percentage as the Administrator may determine.

(9) Guidelines for utilizing the Energy Star Portfolio Manager, the Home Energy Rating System (HERS) rating system, Home Performance with Energy Star program approvals, and any other tools associated with the retrofit program.

(10) Requirements and guidelines for post-retrofit inspection and confirmation of work and energy savings.

(11) Detailed descriptions of funding options for the benefit of State and local governments, along with model forms, accounting aids, agreements, and guides to best practices.

(12) Guidance on opportunities for—

(A) rating or certifying retrofitted buildings as Energy Star buildings, or as green buildings under a recognized green building rating system;

(B) assigning Home Energy Rating System (HERS) or similar ratings; and

(C) completing any applicable building performance labels.

(13) Sample materials for publicizing the program to building owners, including public service announcements and advertisements.

(14) Processes for tracking the numbers and locations of buildings retrofitted under the REEP program, with information on projected and actual savings of energy and its value over time.

(g) REQUIREMENTS.—As a condition of receiving assistance for the REEP program pursuant to this Act, a State or qualifying local government shall—

(1) adopt the standards for training, certification of contractors, certification of buildings, and post-retrofit inspection as developed by the Administrator for residential and nonresidential buildings, respectively, except as necessary to match local conditions, needs, efficiency opportunities, or other local factors, or to accord with State laws or regulations, and then only after the Administrator approves such a variance;

(2) establish fiscal controls and accounting procedures (which conform to generally accepted government accounting principles) sufficient to ensure proper accounting during appropriate accounting periods for payments received and disbursements, and for fund balances;

(3) agree to make 10 percent of assistance received to carry out this section available on a preferential basis for retrofit projects proposed for public housing and assisted housing, provided that—

(A) none of such funds shall be used for demolition of such housing;

(B) such retrofits not shall not be used to justify any increase in rents charged to residents of such housing; and

(C) owners of such housing shall agree to continue to provide affordable housing consistent with the provisions of the authorizing legislation governing each program for an additional period commensurate with the funding received; and

(4) the Administrator shall conduct or require each State to have such independent financial audits of REEP-related funding as the Administrator considers necessary or appropriate to carry out the purposes of this section.

(h) OPTIONS TO SUPPORT REEP PROGRAM.—The assistance provided under this section shall support the implementation through State REEP programs of alternate means of creating incentives for, or reducing financial

1 barriers to, improved energy and environmental perform-
2 ance in buildings, consistent with this section, including—
3 (1) implementing prescriptive building retrofit
4 programs and performance-based building retrofit
5 programs;
6 (2) providing credit enhancement, interest rate
7 subsidies, loan guarantees, or other credit support;
8 (3) providing initial capital for public revolving
9 fund financing of retrofits;
10 (4) providing funds to support utility-operated
11 retrofit programs with repayments over time
12 through utility rates, calibrated to create net positive
13 cash flow to the building owner, and transferable
14 from one building owner to the next with the build-
15 ing's utility services;
16 (5) providing funds to local government pro-
17 grams to provide REEP services and financial as-
18 sistance; and
19 (6) other means proposed by State and local
20 agencies, subject to the approval of the Adminis-
21 trator.
22 (i) SUPPORT FOR PROGRAM.—
23 (1) INITIAL AWARD LIMITS.—Except as pro-
24 vided in paragraph (2), State and local REEP pro-
25 grams may make per-building direct expenditures

for retrofit improvements, or their equivalent in indirect or other forms of financial support, from funds made available to carry out this section, in amounts not to exceed the following amounts per unit:

(A) RESIDENTIAL BUILDING PROGRAM.—

(i) AWARDS.—For residential buildings—

(I) support for a free or low-cost detailed building energy audit that prescribes measures sufficient to achieve at least a 20 percent reduction in energy use, by providing an incentive equal to the documented cost of such audit, but not more than $200, in addition to any earned by achieving a 20 percent or greater efficiency improvement;

(II) a total of $1,000 for a combination of measures, prescribed in an audit conducted under subclause (I), designed to reduce energy consumption by more than 10 percent, and $2,000 for a combination of measures prescribed in such an audit, designed

to reduce energy consumption by more than 20 percent;

(III) $3,000 for demonstrated savings of 20 percent, pursuant to a performance-based building retrofit program; and

(IV) $1,000 for each additional 5 percentage points of energy savings achieved beyond savings for which funding is provided under subclause (II) or (III).

Funding shall not be provided under clauses (II) and (III) for the same energy savings.

(ii) MAXIMUM PERCENTAGE.—Awards under clause (i) shall not exceed 50 percent of retrofit costs for each building. For buildings with multiple residential units, awards under clause (i) shall not be greater than 50 percent of the total cost of retrofitting the building, prorated among individual residential units on the basis of relative costs of the retrofit. In the case of public housing and assisted housing, the 50 percent contribution matching the con-

tribution from REEP program funds may come from any other source, including other Federal funds.

(iii) ADDITIONAL AWARDS.—Additional awards may be provided for purposes of increasing energy efficiency, for buildings achieving at least 20 percent energy savings using funding provided under clause (i), in the form of grants of not more than $600 for measures projected or measured (using an appropriate method approved by the Administrator) to achieve at least 35 percent potable water savings through equipment or systems with an estimated service life of not less than 7 years, and not more than an additional $20 may be provided for each additional one percent of such savings, up to a maximum total grant of $1,200.

(B) NONRESIDENTIAL BUILDING PROGRAM.—

(i) AWARDS.—For nonresidential buildings—

(I) support for a free or low-cost detailed building energy audit that

prescribes, as part of a energy-reducing measures sufficient to achieve at least a 20 percent reduction in energy use, by providing an incentive equal to the documented cost of such audit, but not more than $500, in addition to any award earned by achieving a 20 percent or greater efficiency improvement;

(II) $0.15 per square foot of retrofit area for demonstrated energy use reductions from 20 percent to 30 percent;

(III) $0.75 per square foot for demonstrated energy use reductions from 30 percent to 40 percent;

(IV) $1.60 per square foot for demonstrated energy use reductions from 40 percent to 50 percent; and

(V) $2.50 per square foot for demonstrated energy use reductions exceeding 50 percent.

(ii) MAXIMUM PERCENTAGE.—Amounts provided under subclauses (II) through (V) of clause (i) combined shall

not exceed 50 percent of the total retrofit cost of a building. In nonresidential buildings with multiple units, such awards shall be prorated among individual units on the basis of relative costs of the retrofit.

(iii) ADDITIONAL AWARDS.—Additional awards may be provided, for buildings achieving at least 20 percent energy savings using funding provided under clause (i), as follows:

(I) WATER.—For purposes of increasing energy efficiency, grants may be made for whole building potable water use reduction (using an appropriate method approved by the Administrator) for up to 50 percent of the total retrofit cost, including amounts up to—

(aa) $24.00 per thousand gallons per year of potable water savings of 40 percent or more;

(bb) $27.00 per thousand gallons per year of potable water savings of 50 percent or more; and

(cc) $30.00 per thousand gallons per year of potable water savings of 60 percent or more.

(II) ENVIRONMENTAL IMPROVEMENTS.—Additional awards of up to $1,000 may be granted for the inclusion of other environmental attributes that the Administrator, in consultation with the Secretary, identifies as contributing to energy efficiency. Such attributes may include, but are not limited to waste diversion and the use of environmentally preferable materials (including salvaged, renewable, or recycled materials, and materials with no or low-VOC content). The Administrator may recommend that States develop such standards as are necessary to account for local or regional conditions that may affect the feasibility or availability of identified resources and attributes.

(iv) INDOOR AIR QUALITY MINIMUM.—Nonresidential buildings receiving incentives under this section must satisfy at a

minimum the most recent version of ASHRAE Standard 62.1 for ventilation, or the equivalent as determined by the Administrator. A State may issue a waiver from this requirement to a building project on a showing that such compliance is infeasible due to the physical constraints of the building's existing ventilation system, or such other limitations as may be specified by the Administrator.

(C) DISASTER DAMAGED BUILDINGS.—Any source of funds, including Federal funds provided through the Robert T. Stafford Disaster Relief and Emergency Assistance Act, shall qualify as the building owner's 50 percent contribution, in order to match the contribution of REEP funds, so long as the REEP funds are only used to improve the energy efficiency of the buildings being reconstructed. In addition, the appropriate Federal agencies providing assistance to building owners through the Robert T. Stafford Disaster Relief and Emergency Assistance Act shall make information available, following a disaster, to building owners rebuilding disaster damaged buildings with assistance

from the Act, that REEP funds may be used for energy efficiency improvements.

(D) HISTORIC BUILDINGS.—Notwithstanding subparagraphs (A) and (B), a building in or eligible for the National Register of Historic Places shall be eligible for awards under this paragraph in amounts up to 120 percent of the amounts set forth in subparagraphs (A) and (B).

(E) SUPPLEMENTAL SUPPORT.—State and local governments may supplement the per-building expenditures under this paragraph with funding from other sources.

(2) ADJUSTMENT.—The Administrator may adjust the specific dollar amounts provided under paragraph (1) in years subsequent to the second year after the date of enactment of this Act, and every 2 years thereafter, as the Administrator determines necessary to achieve optimum cost-effectiveness and to maximize incentives to achieve energy efficiency within the total building award amounts provided in that paragraph, and shall publish and hold constant such revised limits for at least 2 years.

(j) REPORT TO CONGRESS.—The Administrator shall conduct an annual assessment of the achievements of the

REEP program in each State, shall prepare an annual report of such achievements and any recommendations for program modifications, and shall provide such report to Congress at the end of each fiscal year during which funding or other resources were made available to the States for the REEP Program.

Subtitle G—Emission Reductions From Public Transportation Vehicles

SEC. 171. SHORT TITLE.

This subtitle may be cited as the ''Green Taxis Act of 2009''.

SEC. 172. STATE FUEL ECONOMY REGULATION FOR TAXICABS.

Section 32919 of title 49, United States Code, is amended by adding at the end the following new subsection:

''(d) TAXICABS.—Notwithstanding subsection (a), a State or political subdivision of a State may prescribe requirements for fuel economy for taxicabs and other automobiles if such requirements are at least as stringent as applicable Federal requirements and if such taxicabs and other automobiles—

"(1) are automobiles that are capable of transporting not more than 10 individuals, including the driver;

"(2) are commercially available or are designed and manufactured pursuant to a contract with such State or political subdivision of such State;

"(3) are operated for hire pursuant to an operating or regulatory license, permit, or other authorization issued by such State or political subdivision of such State;

"(4) provide local transportation for a fare determined on the basis of the time or distance traveled or a combination of time and distance traveled; and

"(5) do not exclusively provide transportation to and from airports.".

SEC. 173. STATE REGULATION OF MOTOR VEHICLE EMISSIONS FOR TAXICABS.

Section 209 of the Clean Air Act (42 U.S.C. 7543) is amended by adding at the end the following new subsection:

"(f) TAXICABS.—(1) Notwithstanding subsection (a), a State or political subdivision thereof may adopt and enforce standards for the control of emissions from new motor vehicles that are taxicabs and other vehicles if such

standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards and if such taxicabs and other vehicles—

"(A) are passenger motor vehicles that are capable of transporting not more than 10 individuals, including the driver;

"(B) are commercially available or are designed and manufactured pursuant to a contract with such State or political subdivision thereof;

"(C) are operated for hire pursuant to an operating or regulatory license, permit, or other authorization issued by such State or political subdivision thereof;

"(D) provide local transportation for a fare determined on the basis of the time or distance traveled or a combination of time and distance traveled; and

"(E) do not exclusively provide transportation to and from airports.

"(2) If each standard of a State or political subdivision thereof is at least as stringent as the comparable applicable Federal standard, such standard of such State or political subdivision thereof shall be deemed at least as

protective of health and welfare as such Federal standards for purposes of this subsection.''.

Subtitle H—Clean Energy and Natural Gas

SEC. 181. CLEAN ENERGY AND ACCELERATED EMISSION REDUCTION PROGRAM.

(a) ESTABLISHMENT.—

(1) IN GENERAL.—The Administrator shall establish a program to promote dispatchable power generation projects that can accelerate the reduction of power sector carbon dioxide and other greenhouse gas emissions.

(2) USE OF FUNDS.—Funds provided under this section shall be used by the Administrator to make incentive payments to owners or operators of eligible projects.

(b) REGULATIONS.—Not later than 90 days after the date of enactment of this Act, the Administrator shall promulgate regulations providing for incentives, pursuant to the requirements of this section.

(c) GOAL.—Not later than 3 years after the date of enactment of this Act, the Administrator shall provide incentives for eligible projects that generate 300,000 gigawatt-hours of electricity per year.

(d) CRITERIA FOR ELIGIBLE PROJECTS.—To be eligible for funding under this section a project must—

(1) reduce emissions below the 2007 average greenhouse gas emissions per megawatt-hour of the United States electric power sector by the quantity specified in subsection (f); and

(2) not receive an investment or production credit in—

(A) the year in which the project is placed in service; or

(B) calendar year 2009, notwithstanding the year in which the project was placed in service.

(e) PRIORITY.—The Administrator shall give priority to eligible projects from the following categories:

(1) Power generation projects designed to integrate intermittent renewable power into the bulk-power system.

(2) Energy storage projects used to support renewable energy.

(3) Power generation projects with carbon capture and sequestration that are not eligible for other assistance under this Act.

(4) Projects that achieve the greatest reduction in greenhouse gas emissions per dollar of incentive payment.

(f) EMISSION REDUCTION CRITERIA.—For the purposes of subsection (d), the applicable emission reduction quantity shall be determined in accordance with the following table:

Calendar years	Percentage below 2007 average greenhouse gas emissions per MWh of United States electric power sector
2010 through 2020	25 percent
2021 through 2025	40 percent
2026 through 2030	65 percent

(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Administrator such sums as are necessary to carry out this section for each of fiscal years 2010 through 2030.

SEC. 182. ADVANCED NATURAL GAS TECHNOLOGIES.

(a) DEFINITIONS.—In this section:

(1) CORPORATION.—

(A) IN GENERAL.—The term ''corporation'' means any corporation, joint-stock company, partnership, limited liability company, association, business trust, or other organized group of persons, regardless of incorporation.

(B) EXCLUSION.—The term ''corporation'' does not include a municipality.

(2) ELIGIBLE ENTITY.—

(A) IN GENERAL.—The term ''eligible entity'' means an entity that is eligible to receive a grant under subsection (b).

(B) INCLUSIONS.—The term ''eligible entity'' includes a corporation, an eligible research entity, an industry entity, a municipality, a municipal natural gas distribution system, and a natural gas distribution company.

(3) ELIGIBLE RESEARCH ENTITY.—

(A) IN GENERAL.—The term ''eligible research entity'' means an entity that is experienced in planning, conducting, and implementing natural gas research, development, demonstration, and deployment projects.

(B) INCLUSIONS.—The term ''eligible research entity'' includes a research institution and an institution of higher education.

(4) INDUSTRY ENTITY.—

(A) IN GENERAL.—The term ''industry entity'' means the persons and municipalities collectively engaged in the delivery of natural gas for consumption in the United States (such as natural gas distribution companies and municipal natural gas distribution systems).

(B) EXCLUSION.—The term ''industry entity'' does not include any natural gas customer.

(5) MUNICIPALITY.—The term ''municipality'' means a city, county, or other political subdivision or agency of a State.

(6) MUNICIPAL NATURAL GAS DISTRIBUTION SYSTEM.—The term ''municipal natural gas distribution system'' means a municipality engaged in the business of delivering natural gas for consumption to residential, commercial, industrial, and other natural gas customers.

(7) NATURAL GAS.—

(A) IN GENERAL.—The term ''natural gas'' means a mixture of hydrocarbon and non-hydrocarbon gases, primarily methane, that have been produced from geological formations or by any other means.

(B) INCLUSION.—The term ''natural gas'' includes renewable biogas.

(8) NATURAL GAS DISTRIBUTION COMPANY.—The term ''natural gas distribution company'' means a person engaged in the business of distributing natural gas for consumption to residential, commercial, industrial, or other natural gas customers.

(b) GRANT PROGRAMS.—

(1) NATURAL GAS ELECTRICITY GENERATION GRANTS.—The Administrator, in consultation with Secretary of Energy, may provide to eligible entities research and development grants to support the deployment of low greenhouse-gas-emitting end-use technologies, including carbon capture and sequestration technologies, for natural gas electricity generation.

(2) NATURAL GAS RESIDENTIAL AND COMMERCIAL TECHNOLOGY GRANTS.—The Administrator shall establish a program to provide to eligible entities grants to advance the commercial demonstration or early development of low greenhouse-gas-emitting end-use technologies fueled by natural gas, including carbon capture and storage, for residential and commercial purposes, through research, development, demonstration, and deployment of those technologies.

(c) REPORTING.—Not later than 180 days after the date of enactment of this Act, and every 180 days thereafter, the Secretary of Energy shall submit to the Committee on Energy and Commerce of the House of Representatives and the Senate Committees on Energy and Natural Resources and Environment and Public Works of

the Senate a report that describes the status and results of activities carried out under subsection (b).

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

TITLE II—RESEARCH

Subtitle A—Energy Research

SEC. 201. ADVANCED ENERGY RESEARCH.

(a) IN GENERAL.—The Administrator shall establish a program to provide grants for advanced energy research.

(b) DISTRIBUTION.—The Administrator shall distribute grants on a competitive basis to institutions of higher education, companies, research foundations, trade and industry research collaborations, or consortia of such entities, or other appropriate research and development entities.

(c) SELECTION OF PROPOSALS.—In selecting proposals for funding under this section, the Administrator shall prioritize applications that—

(1) enhance the economic and energy security of the United States through the development of energy technologies that result in—

(A) reductions of imports of energy from foreign sources;

(B) reductions of energy-related emissions, including greenhouse gases; and

(C) improvements in the energy efficiency of all economic sectors; and

(2) ensure that the United States maintains a technological lead in developing and deploying advanced energy technologies.

(d) RESPONSIBILITIES.—The Administrator shall be responsible for assessing the success of programs and terminating programs carried out under this section that are not achieving the goals of the programs.

(e) ASSISTANCE.—Assistance provided under this section shall be used to supplement, and not to supplant, any other Federal resources available to carry out activities described in this section.

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

Subtitle B—Drinking Water Adaptation, Technology, Education, and Research

SEC. 211. EFFECTS OF CLIMATE CHANGE ON DRINKING WATER UTILITIES.

(a) FINDINGS.—Congress finds that—

(1) the consensus among climate scientists is overwhelming that climate change is occurring more rapidly than can be attributed to natural causes, and that significant impacts to the water supply are already occurring;

(2) among the first and most critical of those impacts will be change to patterns of precipitation around the world, which will affect water availability for the most basic drinking water and domestic water needs of populations in many areas of the United States;

(3) drinking water utilities throughout the United States, as well as those in Europe, Australia, and Asia, are concerned that extended changes in precipitation will lead to extended droughts;

(4) supplying water is highly energy-intensive and will become more so as climate change forces more utilities to turn to alternative supplies;

(5) energy production consumes a significant percentage of the fresh water resources of the United States;

(6) since 2003, the drinking water industry of the United States has sponsored, through a non-profit water research foundation, various studies to

assess the impacts of climate change on drinking water supplies;

(7) those studies demonstrate the need for a comprehensive program of research into the full range of impacts on drinking water utilities, including impacts on water supplies, facilities, and customers;

(8) that nonprofit water research foundation is also coordinating internationally with other drinking water utilities on shared research projects and has hosted international workshops with counterpart European and Asian water research organizations to develop a unified research agenda for applied research on adaptive strategies to address climate change impacts;

(9) research data in existence as of the date of enactment of this Act—

(A) summarize the best available scientific evidence on climate change;

(B) identify the implications of climate change for the water cycle and the availability and quality of water resources; and

(C) provide general guidance on planning and adaptation strategies for water utilities; and

(10) given uncertainties about specific climate changes in particular areas, drinking water utilities need to prepare for a wider range of likely possibilities in managing and delivery of water.

(b) IN GENERAL.—The Administrator, in cooperation with the Secretary of Commerce, the Secretary of Energy, and the Secretary of the Interior, shall establish and provide funding for a program of directed and applied research, to be conducted through a nonprofit drinking water research foundation and sponsored by water utilities, to assist the utilities in adapting to the effects of climate change.

(c) RESEARCH AREAS.—The research conducted in accordance with subsection (b) shall include research into—

(1) water quality impacts and solutions, including research—

(A) to address probable impacts on raw water quality resulting from—

(i) erosion and turbidity from extreme precipitation events;

(ii) watershed vegetation changes; and

(iii) increasing ranges of pathogens, algae, and nuisance organisms resulting from warmer temperatures; and

(B) on mitigating increasing damage to watersheds and water quality by evaluating extreme events, such as wildfires and hurricanes, to learn and develop management approaches to mitigate—

(i) permanent watershed damage;

(ii) quality and yield impacts on source waters; and

(iii) increased costs of water treatment;

(2) impacts on groundwater supplies from carbon sequestration, including research to evaluate potential water quality consequences of carbon sequestration in various regional aquifers, soil conditions, and mineral deposits;

(3) water quantity impacts and solutions, including research—

(A) to evaluate climate change impacts on water resources throughout hydrological basins of the United States;

(B) to improve the accuracy and resolution of climate change models at a regional level;

(C) to identify and explore options for increasing conjunctive use of aboveground and underground storage of water; and

(D) to optimize operation of existing and new reservoirs in diminished and erratic periods of precipitation and runoff;

(4) infrastructure impacts and solutions for water treatment and wastewater treatment facilities and underground pipelines, including research—

(A) to evaluate and mitigate the impacts of sea level rise on—

(i) near-shore facilities;

(ii) soil drying and subsidence;

(iii) reduced flows in water and wastewater pipelines; and

(iv) extreme flows in wastewater systems; and

(B) on ways of increasing the resilience of existing infrastructure, planning cost-effective responses to adapt to climate change, and developing new design standards for future infrastructure that include the use of energy conservation measures and renewable energy in new construction to the maximum extent practicable;

(5) desalination, water reuse, and alternative supply technologies, including research—

(A) to improve and optimize existing membrane technologies, and to identify and develop breakthrough technologies, to enable the use of seawater, brackish groundwater, treated wastewater, and other impaired sources;

(B) into new sources of water through more cost-effective water treatment practices in recycling and desalination; and

(C) to improve technologies for use in—

(i) managing and minimizing the volume of desalination and reuse concentrate streams; and

(ii) minimizing the environmental impacts of seawater intake at desalination facilities;

(6) energy efficiency and greenhouse gas minimization, including research—

(A) on optimizing the energy efficiency of water supply and wastewater operations and improving water efficiency in energy production and management; and

(B) to identify and develop renewable, carbon-neutral energy options for the water supply and wastewater industry;

(7) regional and hydrological basin cooperative water management solutions, including research into—

(A) institutional mechanisms for greater regional cooperation and use of water exchanges, banking, and transfers; and

(B) the economic benefits of sharing risks of shortage across wider areas;

(8) utility management, decision support systems, and water management models, including research—

(A) into improved decision support systems and modeling tools for use by water utility managers to assist with increased water supply uncertainty and adaptation strategies posed by climate change;

(B) to provide financial tools, including new rate structures, to manage financial resources and investments, because increased conservation practices may diminish revenue and increase investments in infrastructure; and

(C) to develop improved systems and models for use in evaluating—

(i) successful alternative methods for conservation and demand management; and

(ii) climate change impacts on groundwater resources;

(9) reducing greenhouse gas emissions and improving energy demand management, including research to improve energy efficiency in water collection, production, transmission, treatment, distribution, and disposal to provide more sustainability and means to assist drinking water utilities in reducing the production of greenhouse gas emissions in the collection, production, transmission, treatment, distribution, and disposal of drinking water;

(10) water conservation and demand management, including research—

(A) to develop strategic approaches to water demand management that offer the lowest-cost, noninfrastructural options to serve growing populations or manage declining supplies, primarily through—

(i) efficiencies in water use and reallocation of the saved water;

(ii) demand management tools;

(iii) economic incentives; and

(iv) water-saving technologies; and

(B) into efficiencies in water management through integrated water resource management that incorporates—

(i) supply-side and demand-side processes;

(ii) continuous adaptive management; and

(iii) the inclusion of stakeholders in decisionmaking processes; and

(11) communications, education, and public acceptance, including research—

(A) into improved strategies and approaches for communicating with customers, decisionmakers, and other stakeholders about the implications of climate change on water supply and water management;

(B) to develop effective communication approaches—

(i) to gain public acceptance of alternative water supplies and new policies and practices, including conservation and demand management; and

(ii) to gain public recognition and acceptance of increased costs; and

(C) to create and maintain a clearinghouse of climate change information for water utilities, academic researchers, stakeholders, government agencies, and research organizations.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $25,000,000 for each of fiscal years 2010 through 2020.

TITLE III—TRANSITION AND ADAPTATION

Subtitle A—Green Jobs and Worker Transition

PART 1—GREEN JOBS

SEC. 301. CLEAN ENERGY CURRICULUM DEVELOPMENT GRANTS.

(a) AUTHORIZATION.—The Secretary of Education is authorized to award grants, on a competitive basis, to eligible partnerships to develop programs of study (containing the information described in section 122(c)(1)(A) of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2342)), that are focused on emerging careers and jobs in the fields of clean energy, renewable energy, energy efficiency, climate change mitigation, and climate change adaptation. The Secretary of Education shall consult with the Secretary of Labor and the

Secretary of Energy prior to the issuance of a solicitation for grant applications.

(b) ELIGIBLE PARTNERSHIPS.—For purposes of this section, an eligible partnership shall include—

(1) at least 1 local educational agency eligible for funding under section 131 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2351) or an area career and technical education school or education service agency described in such section;

(2) at least 1 postsecondary institution eligible for funding under section 132 of such Act (20 U.S.C. 2352); and

(3) representatives of the community including business, labor organizations, and industry that have experience in fields as described in subsection (a).

(c) APPLICATION.—An eligible partnership seeking a grant under this section shall submit an application to the Secretary at such time and in such manner as the Secretary may require. Applications shall include—

(1) a description of the eligible partners and partnership, the roles and responsibilities of each partner, and a demonstration of each partner's capacity to support the program;

(2) a description of the career area or areas within the fields as described in subsection (a) to be developed, the reason for the choice, and evidence of the labor market need to prepare students in that area;

(3) a description of the new or existing program of study and both secondary and postsecondary components;

(4) a description of the students to be served by the new program of study;

(5) a description of how the program of study funded by the grant will be replicable and disseminated to schools outside of the partnership, including urban and rural areas;

(6) a description of applied learning that will be incorporated into the program of study and how it will incorporate or reinforce academic learning;

(7) a description of how the program of study will be delivered;

(8) a description of how the program will provide accessibility to students, especially economically disadvantaged, low performing, and urban and rural students;

(9) a description of how the program will address placement of students in nontraditional fields

as described in section 3(20) of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302(20)); and

(10) a description of how the applicant proposes to consult or has consulted with a labor organization, labor management partnership, apprenticeship program, or joint apprenticeship and training program that provides education and training in the field of study for which the applicant proposes to develop a curriculum.

(d) PRIORITY.—The Secretary shall give priority to applications that—

(1) use online learning or other innovative means to deliver the program of study to students, educators, and instructors outside of the partnership; and

(2) focus on low performing students and special populations as defined in section 3(29) of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302(29)).

(e) PEER REVIEW.—The Secretary shall convene a peer review process to review applications for grants under this section and to make recommendations regarding the selection of grantees. Members of the peer review committee shall include—

(1) educators who have experience implementing curricula with comparable purposes; and

(2) business and industry experts in fields as described in subsection (a).

(f) USES OF FUNDS.—Grants awarded under this section shall be used for the development, implementation, and dissemination of programs of study (as described in section 122(c)(1)(A) of the Carl D. Perkins Career and Technical Education Act (20 U.S.C. 2342(c)(1)(A))) in career areas related to clean energy, renewable energy, energy efficiency, climate change mitigation, and climate change adaptation.

SEC. 302. DEVELOPMENT OF INFORMATION AND RESOURCES CLEARINGHOUSE FOR VOCATIONAL EDUCATION AND JOB TRAINING IN RENEWABLE ENERGY SECTORS.

(a) DEVELOPMENT OF CLEARINGHOUSE.—Not later than 18 months after the date of enactment of this Act, the Secretary of Labor, in collaboration with the Secretary of Energy and the Secretary of Education, shall develop an internet based information and resources clearinghouse to aid career and technical education and job training programs for the renewable energy sectors. In establishing the clearinghouse, the Secretary shall—

(1) collect and provide information that addresses the consequences of rapid changes in technology and regional disparities for renewable energy training programs and provides best practices for training and education in light of such changes and disparities;

(2) place an emphasis on facilitating collaboration between the renewable energy industry and job training programs and on identifying industry and technological trends and best practices, to better help job training programs maintain quality and relevance; and

(3) place an emphasis on assisting programs that cater to high-demand middle-skill, trades, manufacturing, contracting, and consulting careers.

(b) SOLICITATION AND CONSULTATION.—In developing the clearinghouse pursuant to subsection (a), the Secretary shall solicit information and expertise from businesses and organizations in the renewable energy sector and from institutions of higher education, career and technical schools, and community colleges that provide training in the renewable energy sectors. The Secretary shall solicit a comprehensive peer review of the clearinghouse by such entities not less than once every 2 years. Nothing

in this subsection should be interpreted to require the divulgence of proprietary or competitive information.

(c) CONTENTS OF CLEARINGHOUSE.—

(1) SEPARATE SECTION FOR EACH RENEWABLE ENERGY SECTOR.—The clearinghouse shall contain separate sections developed for each of the following renewable energy sectors:

(A) Solar energy systems.

(B) Wind energy systems.

(C) Energy transmission systems.

(D) Geothermal systems of energy and heating.

(E) Energy efficiency technical training.

(2) ADDITIONAL REQUIREMENTS.—In addition to the information required in subsection (a), each section of the clearinghouse shall include information on basic environmental science and processes needed to understand renewable energy systems, Federal government and industry resources, and points of contact to aid institutions in the development of placement programs for apprenticeships and post graduation opportunities, and information and tips about a green workplace, energy efficiency, and relevant environmental topics and information on available industry recognized certifications in each area.

(d) DISSEMINATION.—The clearinghouse shall be made available via the Internet to the general public. Notice of the completed clearinghouse and any major revisions thereto shall also be provided—

(1) to each Member of Congress; and

(2) on the websites of the Departments of Education, Energy, and Labor.

(e) REVISION.—The Secretary of Labor shall revise and update the clearinghouse on a regular basis to ensure its relevance.

SEC. 303. GREEN CONSTRUCTION CAREERS DEMONSTRATION PROJECT.

(a) ESTABLISHMENT AND AUTHORITY.—The Secretary of Labor, in consultation with the Secretary of Energy, shall, not later than 180 days after the enactment of this Act, establish a Green Construction Careers demonstration project by rules, regulations, and guidance in accordance with the provisions of this section. The purpose of the demonstration project shall be to promote middle class careers and quality employment practices in the green construction sector among targeted workers and to advance efficiency and performance on construction projects related to this Act. In order to advance these purposes, the Secretary shall identify projects, including residential retrofitting projects, funded directly by or assisted

in whole or in part by or through the Federal Government pursuant to this Act or by any other entity established in accordance with this Act, to which all of the following shall apply.

(b) REQUIREMENTS.—The Secretaries may establish such terms and conditions for the demonstration projects as the Secretaries determine are necessary to meet the purposes of subsection (a), including establishing minimum proportions of hours to be worked by targeted workers on such projects. The Secretaries may require the contractors and subcontractors performing construction services on the project to comply with the terms and conditions as a condition of receiving funding or assistance from the Federal Government under this Act.

(c) EVALUATION.—The Secretaries shall evaluate the demonstration projects against the purposes of this section at the end of 3 years from initiation of the demonstration project. If the Secretaries determine that the demonstration projects have been successful, the Secretaries may identify further projects to which of the provisions of this section shall apply.

(d) GAO REPORT.—The Comptroller General shall prepare and submit a report to the Committee on Health, Education, Labor, and Pensions and the Committee on Energy and Natural Resources of the Senate and the

Committee on Education and Labor and the Committee on Energy and Commerce of the House of Representatives not later than 5 years after the date of enactment of this Act, which shall advise the committees of the results of the demonstration projects and make appropriate recommendations.

(e) DEFINITION AND DESIGNATION OF TARGETED WORKERS.—As used in this section, the term ''targeted worker'' means an individual who resides in the same labor market area (as defined in section 101(18) of the Workforce Investment Act of 1998 (29 U.S.C. 2801(18))) as the project and who—

(1) is a member of a targeted group, within the meaning of section 51 of the Internal Revenue Code of 1986, other than an individual described in subsection (d)(1)(C) of such section;

(2)(A) resides in a census tract in which not less than 20 percent of the households have incomes below the Federal poverty guidelines; or

(B) is a member of a family that received a total family income that, during the 2-year period prior to employment on the project or admission to the pre-apprenticeship program, did not exceed 200 percent of the Federal poverty guidelines (exclusive of unemployment compensation, child support pay-

ments, payments described in section 101(25)(A) of the Workforce Investment Act (29 U.S.C. 2801(25)(A)), and old-age and survivors insurance benefits received under section 202 of the Social Security Act (42 U.S.C. 402); or

(3) is a displaced homemaker, as such term is defined in section 3(10) of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302(10)).

(f) QUALIFIED PRE-APPRENTICESHIP PROGRAM.—A qualified pre-apprenticeship program is a pre-apprenticeship program that has demonstrated an ability to recruit, train, and prepare for admission to apprenticeship programs individuals who are targeted workers.

(g) QUALIFIED APPRENTICESHIP AND OTHER TRAINING PROGRAMS.—

(1) PARTICIPATION BY EACH CONTRACTOR REQUIRED.—Each contractor and subcontractor that seeks to provide construction services on projects identified by the Secretaries pursuant to subsection (a) shall submit adequate assurances with its bid or proposal that it participates in a qualified apprenticeship or other training program, with a written arrangement with a qualified pre-apprenticeship program, for each craft or trade classification of worker

that it intends to employ to perform work on the project.

(2) DEFINITION OF QUALIFIED APPRENTICE SHIP OR OTHER TRAINING PROGRAM.—

(A) IN GENERAL.—For purposes of this section, the term ''qualified apprenticeship or other training program'' means an apprenticeship or other training program that qualifies as an employee welfare benefit plan, as defined in section 3(1) of the Employee Retirement Income Security Act of 1974 (29 U.S.C. 1002(1)).

(B) CERTIFICATION OF OTHER PROGRAMS IN CERTAIN LOCALITIES.—In the event that the Secretary of Labor certifies that a qualified apprenticeship or other training program (as defined in subparagraph (A)) for a craft or trade classification of workers that a prospective contractor or subcontractor intends to employ, is not operated in the locality where the project will be performed, an apprenticeship or other training program that is not an employee welfare benefit plan (as defined in such section) may be certified by the Secretary as a qualified apprenticeship or other training program pro-

vided it is registered with the Office of Apprenticeship of the Department of Labor, or a State apprenticeship agency recognized by the Office of Apprenticeship for Federal purposes.

(h) FACILITATING COMPLIANCE.—The Secretary may require Federal contracting agencies, recipients of Federal assistance, and any other entity established in accordance with this Act to require contractors to enter into an agreement in a manner comparable with the standards set forth in sections 3 and 4 of Executive Order 13502 in order to achieve the purposes of this section, including any requirements established by subsection (b).

(i) LIMITATION.—The requirements of this section shall not apply to any project funded under this Act in American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, the Commonwealth of Puerto Rico, or the United States Virgin Islands, unless participation is requested by the governor of such territories within 1 year of the promulgation of rules under this Act.

PART 2—CLIMATE CHANGE WORKER ADJUSTMENT ASSISTANCE

SEC. 311. PETITIONS, ELIGIBILITY REQUIREMENTS, AND DETERMINATIONS.

(a) PETITIONS.—

(1) FILING.—A petition for certification of eligibility to apply for adjustment assistance for a group of workers under this part may be filed by any of the following:

(A) The group of workers.

(B) The certified or recognized union or other duly authorized representative of such workers.

(C) Employers of such workers, one-stop operators or one-stop partners (as defined in section 101 of the Workforce Investment Act of 1998 (29 U.S.C. 2801)), including State employment security agencies, or the State dislocated worker unit established under title I of such Act, on behalf of such workers.

The petition shall be filed simultaneously with the Secretary of Labor and with the Governor of the State in which such workers' employment site is located.

(2) ACTION BY GOVERNORS.—Upon receipt of a petition filed under paragraph (1), the Governor shall—

(A) ensure that rapid response activities and appropriate core and intensive services (as described in section 134 of the Workforce In-

vestment Act of 1998 (29 U.S.C. 2864)) authorized under other Federal laws are made available to the workers covered by the petition to the extent authorized under such laws; and

(B) assist the Secretary in the review of the petition by verifying such information and providing such other assistance as the Secretary may request.

(3) ACTION BY THE SECRETARY.—Upon receipt of the petition, the Secretary shall promptly publish notice in the Federal Register and on the website of the Department of Labor that the Secretary has received the petition and initiated an investigation.

(4) HEARINGS.—If the petitioner, or any other person found by the Secretary to have a substantial interest in the proceedings, submits not later than 10 days after the date of the Secretary's publication under paragraph (3) a request for a hearing, the Secretary shall provide for a public hearing and afford such interested persons an opportunity to be present, to produce evidence, and to be heard.

(b) ELIGIBILITY.—

(1) IN GENERAL.—A group of workers shall be certified by the Secretary as eligible to apply for ad-

justment assistance under this part pursuant to a petition filed under subsection (a) if—

(A) the group of workers is employed in—

(i) energy producing and transforming industries;

(ii) industries dependent upon energy industries;

(iii) energy-intensive manufacturing industries;

(iv) consumer goods manufacturing; or

(v) other industries whose employment the Secretary determines has been adversely affected by any requirement of title VII of the Clean Air Act;

(B) the Secretary determines that a significant number or proportion of the workers in such workers' employment site have become totally or partially separated, or are threatened to become totally or partially separated from employment; and

(C) the sales, production, or delivery of goods or services have decreased as a result of any requirement of title VII of the Clean Air Act, including—

(i) the shift from reliance upon fossil fuels to other sources of energy, including renewable energy, that results in the closing of a facility or layoff of employees at a facility that mines, produces, processes, or utilizes fossil fuels to generate electricity;

(ii) a substantial increase in the cost of energy required for a manufacturing facility to produce items whose prices are competitive in the marketplace, to the extent the cost is not offset by assistance provided to the facility pursuant to title VII of the Clean Air Act; or

(iii) other documented occurrences that the Secretary determines are indicators of an adverse impact on an industry described in subparagraph (A) as a result of any requirement of title VII of the Clean Air Act.

(2) WORKERS IN PUBLIC AGENCIES.—A group of workers in a public agency shall be certified by the Secretary as eligible to apply for climate change adjustment assistance pursuant to a petition filed if the Secretary determines that a significant number

or proportion of the workers in the public agency have become totally or partially separated from employment, or are threatened to become totally or partially separated as a result of any requirement of title VII of the Clean Air Act.

(3) ADVERSELY AFFECTED SERVICE WORKERS.—A group of workers shall be certified as eligible to apply for climate change adjustment assistance pursuant to a petition filed if the Secretary determines that—

(A) a significant number or proportion of the service workers at an employment site where a group of workers has been certified by the Secretary as eligible to apply for adjustment assistance under this part pursuant to paragraph (1) have become totally or partially separated from employment, or are threatened to become totally or partially separated; and

(B) a loss of business in the firm providing service workers to an employment site is directly attributable to one or more of the documented occurrences listed in paragraph (1)(C).

(c) AUTHORITY TO INVESTIGATE AND COLLECT INFORMATION.—

(1) IN GENERAL.—The Secretary shall, in determining whether to certify a group of workers under subsection (d), obtain information the Secretary determines to be necessary to make the certification, through questionnaires and in such other manner as the Secretary determines appropriate from—

(A) the workers' employer;

(B) officials of certified or recognized unions or other duly authorized representatives of the group of workers; or

(C) one-stop operators or one-stop partners (as defined in section 101 of the Workforce Investment Act of 1998 (29 U.S.C. 2801)).

(2) VERIFICATION OF INFORMATION.—The Secretary shall require an employer, union, or one-stop operator or partner to certify all information obtained under paragraph (1) from the employer, union, or one-stop operator or partner (as the case may be) on which the Secretary relies in making a determination under subsection (d), unless the Secretary has a reasonable basis for determining that such information is accurate and complete without being certified.

(3) PROTECTION OF CONFIDENTIAL INFORMATION.—The Secretary may not release information obtained under paragraph (1) that the Secretary considers to be confidential business information unless the employer submitting the confidential business information had notice, at the time of submission, that the information would be released by the Secretary, or the employer subsequently consents to the release of the information. Nothing in this paragraph shall be construed to prohibit the Secretary from providing such confidential business information to a court in camera or to another party under a protective order issued by a court.

(d) DETERMINATION BY THE SECRETARY OF LABOR.—

(1) IN GENERAL.—As soon as possible after the date on which a petition is filed under subsection (a), but in any event not later than 40 days after that date, the Secretary, in consultation with the Secretary of Energy and the Administrator, as necessary, shall determine whether the petitioning group meets the requirements of subsection (b) and shall issue a certification of eligibility to apply for assistance under this part covering workers in any group which meets such requirements. Each certifi-

cation shall specify the date on which the total or partial separation began or threatened to begin. Upon reaching a determination on a petition, the Secretary shall promptly publish a summary of the determination in the Federal Register and on the website of the Department of Labor, together with the Secretary's reasons for making such determination.

(2) ONE-YEAR LIMITATION.—A certification under this section shall not apply to any worker whose last total or partial separation from the employment site before the worker's application under section 312(a) occurred more than 1 year before the date of the petition on which such certification was granted.

(3) REVOCATION OF CERTIFICATION.—Whenever the Secretary determines, with respect to any certification of eligibility of the workers of an employment site, that total or partial separations from such site are no longer a result of the factors specified in subsection (b)(1), the Secretary shall terminate such certification and promptly have notice of such termination published in the Federal Register and on the website of the Department of Labor, together with the Secretary's reasons for making such

determination. Such termination shall apply only with respect to total or partial separations occurring after the termination date specified by the Secretary.

(e) INDUSTRY NOTIFICATION OF ASSISTANCE.—Upon receiving a notification of a determination under subsection (d) with respect to a domestic industry the Secretary of Labor shall notify the representatives of the domestic industry affected by the determination, employers publicly identified by name during the course of the proceeding relating to the determination, and any certified or recognized union or, to the extent practicable, other duly authorized representative of workers employed by such representatives of the domestic industry, of—

(1) the adjustment assistance, training, and other benefits available under this part;

(2) the manner in which to file a petition and apply for such benefits;

(3) the availability of assistance in filing such petitions;

(4) notify the Governor of each State in which one or more employers in such industry are located of the Secretary's determination and the identity of the employers; and

(5) upon request, provide any assistance that is necessary to file a petition under subsection (a).

(f) BENEFIT INFORMATION TO WORKERS, PROVIDERS OF TRAINING.—

(1) IN GENERAL.—The Secretary shall provide full information to workers about the adjustment assistance, training, and other benefits available under this part and about the petition and application procedures, and the appropriate filing dates, for such assistance, training and services. The Secretary shall provide whatever assistance is necessary to enable groups of workers to prepare petitions or applications for program benefits. The Secretary shall make every effort to insure that cooperating State agencies fully comply with the agreements entered into under section 312(a) and shall periodically review such compliance. The Secretary shall inform the State Board for Vocational Education or equivalent agency, the one-stop operators or one-stop partners (as defined in section 101 of the Workforce Investment Act of 1998 (29 U.S.C. 2801)), and other public or private agencies, institutions, and employers, as appropriate, of each certification issued under subsection (d) and of projections, if available, of the needs for training under as a result of such certification.

(2) NOTICE BY MAIL.—The Secretary shall provide written notice through the mail of the benefits available under this part to each worker whom the Secretary has reason to believe is covered by a certification made under subsection (d)—

(A) at the time such certification is made, if the worker was partially or totally separated from the adversely affected employment before such certification; or

(B) at the time of the total or partial separation of the worker from the adversely affected employment, if subparagraph (A) does not apply.

(3) NEWSPAPERS; WEBSITE.—The Secretary shall publish notice of the benefits available under this part to workers covered by each certification made under subsection (d) in newspapers of general circulation in the areas in which such workers reside and shall make such information available on the website of the Department of Labor.

SEC. 312. PROGRAM BENEFITS.

(a) CLIMATE CHANGE ADJUSTMENT ASSISTANCE.—

(1) ELIGIBILITY.—Payment of climate change adjustment assistance shall be made to an adversely affected worker covered by a certification under sec-

tion 311(b) who files an application for such assistance for any week of unemployment which begins on or after the date of such certification, if the following conditions are met:

(A) Such worker's total or partial separation before the worker's application under this part occurred—

(i) on or after the date, as specified in the certification under which the worker is covered, on which total or partial separation began or threatened to begin in the adversely affected employment;

(ii) before the expiration of the 2-year period beginning on the date on which the determination under section 311(d) was made; and

(iii) before the termination date, if any, determined pursuant to section 311(d)(3).

(B) Such worker had, in the 52-week period ending with the week in which such total or partial separation occurred, at least 26 weeks of full-time employment or 1,040 hours of part time employment in adversely affected employment, or, if data with respect to weeks of

employment are not available, equivalent amounts of employment computed under regulations prescribed by the Secretary. For the purposes of this paragraph, any week in which such worker—

(i) is on employer-authorized leave for purposes of vacation, sickness, injury, maternity, or inactive duty or active duty military service for training;

(ii) does not work because of a disability that is compensable under a workmen's compensation law or plan of a State or the United States;

(iii) had his employment interrupted in order to serve as a full-time representative of a labor organization in such firm; or

(iv) is on call-up for purposes of active duty in a reserve status in the Armed Forces of the United States, provided such active duty is ''Federal service'' as defined in section 8521(a)(1) of title 5, United States Code,

shall be treated as a week of employment.

(C) Such worker is enrolled in a training program approved by the Secretary under subsection (b)(2).

(2) INELIGIBILITY FOR CERTAIN OTHER BENEFITS.—An adversely affected worker receiving a payment under this section shall be ineligible to receive any other form of unemployment insurance for the period in which such worker is receiving climate change adjustment assistance under this section.

(3) REVOCATION.—If—

(A) the Secretary determines that—

(i) the adversely affected worker—

(I) has failed to begin participation in the training program the enrollment in which meets the requirement of paragraph (1)(C); or

(II) has ceased to participate in such training program before completing such training program; and

(ii) there is no justifiable cause for such failure or cessation; or

(B) the certification made with respect to such worker under section 311(d) is revoked under paragraph (3) of such section,

no adjustment assistance may be paid to the adversely affected worker under this part for the week in which such failure, cessation, or revocation occurred, or any succeeding week, until the adversely affected worker begins or resumes participation in a training program approved by the Secretary under subsection (b)(2).

(4) WAIVERS OF TRAINING REQUIREMENTS.—The Secretary may issue a written statement to an adversely affected worker waiving the requirement to be enrolled in training described in subsection (b)(2) if the Secretary determines that it is not feasible or appropriate for the worker, because of 1 or more of the following reasons:

(A) RECALL.—The worker has been notified that the worker will be recalled by the employer from which the separation occurred.

(B) MARKETABLE SKILLS.—

(i) IN GENERAL.—The worker possesses marketable skills for suitable employment (as determined pursuant to an assessment of the worker, which may include the profiling system under section 303(j) of the Social Security Act (42 U.S.C. 503(j)), carried out in accordance

with guidelines issued by the Secretary) and there is a reasonable expectation of employment at equivalent wages in the foreseeable future.

(ii) MARKETABLE SKILLS DEFINED.—For purposes of clause (i), the term ''marketable skills'' may include the possession of a postgraduate degree from an institution of higher education (as defined in section 102 of the Higher Education Act of 1965 (20 U.S.C. 1002)) or an equivalent institution, or the possession of an equivalent postgraduate certification in a specialized field.

(C) RETIREMENT.—The worker is within 2 years of meeting all requirements for entitlement to either—

(i) old-age insurance benefits under title II of the Social Security Act (42 U.S.C. 401 et seq.) (except for application therefor); or

(ii) a private pension sponsored by an employer or labor organization.

(D) HEALTH.—The worker is unable to participate in training due to the health of the

worker, except that a waiver under this subparagraph shall not be construed to exempt a worker from requirements relating to the availability for work, active search for work, or refusal to accept work under Federal or State unemployment compensation laws.

(E) ENROLLMENT UNAVAILABLE.—The first available enrollment date for the training of the worker is within 60 days after the date of the determination made under this paragraph, or, if later, there are extenuating circumstances for the delay in enrollment, as determined pursuant to guidelines issued by the Secretary.

(F) TRAINING NOT AVAILABLE.—Training described in subsection (b)(2) is not reasonably available to the worker from either governmental agencies or private sources (which may include area career and technical education schools, as defined in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302), and employers), no training that is suitable for the worker is available at a reasonable cost, or no training funds are available.

(5) WEEKLY AMOUNTS.—The climate change adjustment assistance payable to an adversely affected worker for a week of unemployment shall be an amount equal to 70 percent of the average weekly wage of such worker, but in no case shall such amount exceed the average weekly wage for all workers in the State where the adversely affected worker resides.

(6) MAXIMUM DURATION OF BENEFITS.—An eligible worker may receive a climate change adjustment assistance under this subsection for a period of not longer than 156 weeks.

(b) EMPLOYMENT SERVICES AND TRAINING.—

(1) INFORMATION AND EMPLOYMENT SERVICES.—The Secretary shall make available, directly or through agreements with the States under section 313(a) to adversely affected workers covered by a certification under section 311(a) the following information and employment services:

(A) Comprehensive and specialized assessment of skill levels and service needs, including through—

(i) diagnostic testing and use of other assessment tools; and

(ii) in-depth interviewing and evaluation to identify employment barriers and appropriate employment goals.

(B) Development of an individual employment plan to identify employment goals and objectives, and appropriate training to achieve those goals and objectives.

(C) Information on training available in local and regional areas, information on individual counseling to determine which training is suitable training, and information on how to apply for such training.

(D) Information on training programs and other services provided by a State pursuant to title I of the Workforce Investment Act of 1998 (29 U.S.C. 2801 et seq.) and available in local and regional areas, information on individual counseling to determine which training is suitable training, and information on how to apply for such training.

(E) Information on how to apply for financial aid, including referring workers to educational opportunity centers described in section 402F of the Higher Education Act of 1965 (20 U.S.C. 1070a–16), where applicable, and noti-

fying workers that the workers may request financial aid administrators at institutions of higher education (as defined in section 102 of such Act (20 U.S.C. 1002)) to use the administrators' discretion under section 479A of such Act (20 U.S.C. 1087tt) to use current year income data, rather than preceding year income data, for determining the amount of need of the workers for Federal financial assistance under title IV of such Act (20 U.S.C. 1070 et seq.).

(F) Short-term prevocational services, including development of learning skills, communications skills, interviewing skills, punctuality, personal maintenance skills, and professional conduct to prepare individuals for employment or training.

(G) Individual career counseling, including job search and placement counseling, during the period in which the individual is receiving climate change adjustment assistance or training under this part, and after receiving such training for purposes of job placement.

(H) Provision of employment statistics information, including the provision of accurate

information relating to local, regional, and national labor market areas, including—

(i) job vacancy listings in such labor market areas;

(ii) information on jobs skills necessary to obtain jobs identified in job vacancy listings described in subparagraph (A);

(iii) information relating to local occupations that are in demand and earnings potential of such occupations; and

(iv) skills requirements for local occupations described in subparagraph (C).

(I) Information relating to the availability of supportive services, including services relating to child care, transportation, dependent care, housing assistance, and need-related payments that are necessary to enable an individual to participate in training.

(2) TRAINING.—

(A) APPROVAL OF AND PAYMENT FOR TRAINING.—If the Secretary determines, with respect to an adversely affected worker that—

(i) there is no suitable employment (which may include technical and profes-

sional employment) available for an adversely affected worker;

(ii) the worker would benefit from appropriate training;

(iii) there is a reasonable expectation of employment following completion of such training;

(iv) training approved by the Secretary is reasonably available to the worker from either governmental agencies or private sources (including area career and technical education schools, as defined in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302), and employers);

(v) the worker is qualified to undertake and complete such training; and

(vi) such training is suitable for the worker and available at a reasonable cost,

the Secretary shall approve such training for the worker. Upon such approval, the worker shall be entitled to have payment of the costs of such training (subject to the limitations imposed by this section) paid on the worker's be-

half by the Secretary directly or through a voucher system.

(B) DISTRIBUTION.—The Secretary shall establish procedures for the distribution of the funds to States to carry out the training programs approved under this paragraph, and shall make an initial distribution of the funds made available as soon as practicable after the beginning of each fiscal year.

(C) ADDITIONAL RULES REGARDING APPROVAL OF AND PAYMENT FOR TRAINING.—

(i) For purposes of applying subparagraph (A)(iii), a reasonable expectation of employment does not require that employment opportunities for a worker be available, or offered, immediately upon the completion of training approved under such subparagraph.

(ii) If the costs of training an adversely affected worker are paid by the Secretary under subparagraph (A), no other payment for such costs may be made under any other provision of Federal law. No payment may be made under subparagraph (A) of the costs of training an ad-

versely affected worker or an adversely affected incumbent worker if such costs—

(I) have already been paid under any other provision of Federal law; or

(II) are reimbursable under any other provision of Federal law and a portion of such costs have already been paid under such other provision of Federal law.

The provisions of this clause shall not apply to, or take into account, any funds provided under any other provision of Federal law which are used for any purpose other than the direct payment of the costs incurred in training a particular adversely affected worker, even if such use has the effect of indirectly paying or reducing any portion of the costs involved in training the adversely affected worker.

(D) TRAINING PROGRAMS.—The training programs that may be approved under subparagraph (A) include—

(i) employer-based training, including—

(I) on-the-job training if approved by the Secretary under subsection (c); and

(II) joint labor-management apprenticeship programs;

(ii) any training program provided by a State pursuant to title I of the Workforce Investment Act of 1998 (29 U.S.C. 2801 et seq.);

(iii) any programs in career and technical education described in section 3(5) of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302(5));

(iv) any program of remedial education;

(v) any program of prerequisite education or coursework required to enroll in training that may be approved under this paragraph;

(vi) any training program for which all, or any portion, of the costs of training the worker are paid—

(I) under any Federal or State program other than this part; or

(II) from any source other than this part;

(vii) any training program or coursework at an accredited institution of higher education (described in section 102 of the Higher Education Act of 1965 (20 U.S.C. 1002)), including a training program or coursework for the purpose of—

(I) obtaining a degree or certification; or

(II) completing a degree or certification that the worker had previously begun at an accredited institution of higher education; and

(viii) any other training program approved by the Secretary.

(3) SUPPLEMENTAL ASSISTANCE.—The Secretary may, as appropriate, authorize supplemental assistance that is necessary to defray reasonable transportation and subsistence expenses for separate maintenance in a case in which training for a worker is provided in a facility that is not within commuting distance of the regular place of residence of the worker.

(c) ON-THE-JOB TRAINING REQUIREMENTS.—

(1) IN GENERAL.—The Secretary may approve on-the-job training for any adversely affected worker if—

(A) the Secretary determines that on-the-job training—

(i) can reasonably be expected to lead to suitable employment with the employer offering the on-the-job training;

(ii) is compatible with the skills of the worker;

(iii) includes a curriculum through which the worker will gain the knowledge or skills to become proficient in the job for which the worker is being trained; and

(iv) can be measured by benchmarks that indicate that the worker is gaining such knowledge or skills; and

(B) the State determines that the on-the-job training program meets the requirements of clauses (iii) and (iv) of subparagraph (A).

(2) MONTHLY PAYMENTS.—The Secretary shall pay the costs of on-the-job training approved under paragraph (1) in monthly installments.

(3) CONTRACTS FOR ON-THE-JOB TRAINING.—

(A) IN GENERAL.—The Secretary shall ensure, in entering into a contract with an employer to provide on-the-job training to a worker under this subsection, that the skill requirements of the job for which the worker is being trained, the academic and occupational skill level of the worker, and the work experience of the worker are taken into consideration.

(B) TERM OF CONTRACT.—Training under any such contract shall be limited to the period of time required for the worker receiving on-the-job training to become proficient in the job for which the worker is being trained, but may not exceed 156 weeks in any case.

(4) EXCLUSION OF CERTAIN EMPLOYERS.—The Secretary shall not enter into a contract for on-the-job training with an employer that exhibits a pattern of failing to provide workers receiving on-the-job training from the employer with—

(A) continued, long-term employment as regular employees; and

(B) wages, benefits, and working conditions that are equivalent to the wages, benefits, and working conditions provided to regular employees who have worked a similar period of

time and are doing the same type of work as workers receiving on-the-job training from the employer.

(d) ADMINISTRATIVE AND EMPLOYMENT SERVICES FUNDING.—

(1) ADMINISTRATIVE FUNDING.—In addition to any funds made available to a State to carry out this section for a fiscal year, the State shall receive for the fiscal year a payment in an amount that is equal to 15 percent of the amount of such funds and shall—

(A) use not more than ⅔ of such payment for the administration of the climate change adjustment assistance for workers program under this part, including for—

(i) processing waivers of training requirements under subsection (a)(4); and

(ii) collecting, validating, and reporting data required under this part; and

(B) use not less than ⅓ of such payment for information and employment services under subsection (b)(1).

(2) EMPLOYMENT SERVICES FUNDING.—

(A) IN GENERAL.—In addition to any funds made available to a State to carry out

subsection (b)(2) and the payment under paragraph (1) for a fiscal year, the Secretary shall provide to the State for the fiscal year a reasonable payment for the purpose of providing employment and services under subsection (b)(1).

(B) VOLUNTARY RETURN OF FUNDS.—A State that receives a payment under subparagraph (A) may decline or otherwise return such payment to the Secretary.

(e) JOB SEARCH ASSISTANCE.—The Secretary of Labor may provide adversely affected workers one-time job search assistance in accordance with regulations prescribed by the Secretary. Any job search assistance provided shall be available only under the following circumstances and conditions:

(1) The worker is no longer eligible for the climate change adjustment assistance under subsection (a) and has completed the training program required by subsection (b)(1)(E).

(2) The Secretary determines that the worker cannot reasonably be expected to secure suitable employment in the commuting area in which the worker resides.

(3) Assistance granted shall provide reimbursement to the worker of all necessary job search ex-

1 penses as prescribed by the Secretary in regulations.
2 Such reimbursement under this subsection may not
3 exceed $1,500 for any worker.
4 (f) RELOCATION ASSISTANCE AUTHORIZED.—
5 (1) IN GENERAL.—Any adversely affected work-
6 er covered by a certification issued under section
7 311 may file an application for relocation assistance
8 with the Secretary, and the Secretary may grant the
9 relocation assistance, subject to the terms and condi-
10 tions of this subsection.
11 (2) CONDITIONS FOR GRANTING ASSISTANCE.—
12 Relocation assistance may be granted if all of the
13 following terms and conditions are met:
14 (A) ASSIST AN ADVERSELY AFFECTED
15 WORKER.—The relocation assistance will assist
16 an adversely affected worker in relocating with-
17 in the United States.
18 (B) LOCAL EMPLOYMENT NOT AVAIL-
19 ABLE.—The Secretary determines that the
20 worker cannot reasonably be expected to secure
21 suitable employment in the commuting area in
22 which the worker resides.
23 (C) TOTAL SEPARATION.—The worker is
24 totally separated from employment at the time
25 relocation commences.

(D) SUITABLE EMPLOYMENT OBTAINED.—The worker—

(i) has obtained suitable employment affording a reasonable expectation of long-term duration in the area in which the worker wishes to relocate; or

(ii) has obtained a bona fide offer of such employment.

(E) APPLICATION.—The worker filed an application with the Secretary at such time and in such manner as the Secretary shall specify by regulation.

(3) AMOUNT OF ASSISTANCE.—Relocation assistance granted to a worker under paragraph (1) includes—

(A) all reasonable and necessary expenses (including, subsistence and transportation expenses at levels not exceeding amounts prescribed by the Secretary in regulations) incurred in transporting the worker, the worker's family, and household effects; and

(B) a lump sum equivalent to 3 times the worker's average weekly wage, up to a maximum payment of $1,500.

(4) LIMITATIONS.—Relocation assistance may not be granted to a worker unless—

(A) the relocation occurs within 182 days after the filing of the application for relocation assistance; or

(B) the relocation occurs within 182 days after the conclusion of training, if the worker entered a training program approved by the Secretary under subsection (b)(2).

(g) HEALTH INSURANCE CONTINUATION.—Not later than 1 year after the date of enactment of this Act, the Secretary of Labor shall prescribe regulations to provide, for the period in which an adversely affected worker is participating in a training program described in subsection (b)(2), 80 percent of the monthly premium of any health insurance coverage that an adversely affected worker was receiving from such worker's employer prior to the separation from employment described in section 311(b), to be paid to any health care insurance plan designated by the adversely affected worker receiving assistance under this section.

SEC. 313. GENERAL PROVISIONS.

(a) AGREEMENTS WITH STATES.—

(1) IN GENERAL.—The Secretary is authorized on behalf of the United States to enter into an

agreement with any State, or with any State agency (referred to in this section as ''cooperating States'' and ''cooperating State agencies'' respectively). Under such an agreement, the cooperating State or cooperating State agency—

(A) as agent of the United States, shall receive applications for, and shall provide, payments on the basis provided in this part;

(B) in accordance with paragraph (6), shall make available to adversely affected workers covered by a certification under section 311(d) the employment services described in section 312(b)(1);

(C) shall make any certifications required under section 311(d); and

(D) shall otherwise cooperate with the Secretary and with other State and Federal agencies in providing payments and services under this part.

Each agreement under this section shall provide the terms and conditions upon which the agreement may be amended, suspended, or terminated.

(2) FORM AND MANNER OF DATA.—Each agreement under this section shall—

(A) provide the Secretary with the authority to collect any data the Secretary determines necessary to meet the requirements of this part; and

(B) specify the form and manner in which any such data requested by the Secretary shall be reported.

(3) RELATIONSHIP TO UNEMPLOYMENT INSURANCE.—Each agreement under this section shall provide that an adversely affected worker receiving climate change adjustment assistance under this part shall not be eligible for unemployment insurance otherwise payable to such worker under the laws of the State.

(4) REVIEW.—A determination by a cooperating State agency with respect to entitlement to program benefits under an agreement is subject to review in the same manner and to the same extent as determinations under the applicable State law and only in that manner and to that extent.

(5) COORDINATION.—Any agreement entered into under this section shall provide for the coordination of the administration of the provisions for employment services, training, and supplemental assistance under section 312 and under title I of the

Workforce Investment Act of 1998 (29 U.S.C. 2801 et seq.) upon such terms and conditions as are established by the Secretary in consultation with the States and set forth in such agreement. Any agency of the State jointly administering such provisions under such agreement shall be considered to be a cooperating State agency for purposes of this part.

(6) RESPONSIBILITIES OF COOPERATING AGENCIES.—Each cooperating State agency shall, in carrying out paragraph (1)(B)—

(A) advise each worker who applies for unemployment insurance of the benefits under this part and the procedures and deadlines for applying for such benefits;

(B) facilitate the early filing of petitions under section 311(a) for any workers that the agency considers are likely to be eligible for benefits under this part;

(C) advise each adversely affected worker to apply for training under section 312(b) before, or at the same time, the worker applies for climate change adjustment assistance under section 312(a);

(D) perform outreach to, intake of, and orientation for adversely affected workers and

adversely affected incumbent workers covered by a certification under section 312(a) with respect to assistance and benefits available under this part;

(E) make employment services described in section 312(b)(1) available to adversely affected workers and adversely affected incumbent workers covered by a certification under section 311(d) and, if funds provided to carry out this part are insufficient to make such services available, make arrangements to make such services available through other Federal programs; and

(F) provide the benefits and reemployment services under this part in a manner that is necessary for the proper and efficient administration of this part, including the use of state agency personnel employed in accordance with a merit system of personnel administration standards, including—

(i) making determinations of eligibility for, and payment of, climate change readjustment assistance and health care benefit replacement amounts;

(ii) developing recommendations regarding payments as a bridge to retirement and lump sum payments to pension plans in accordance with this subsection; and

(iii) the provision of reemployment services to eligible workers, including referral to training services.

(7) SUBMISSION OF CERTAIN INFORMATION.—In order to promote the coordination of workforce investment activities in each State with activities carried out under this part, any agreement entered into under this section shall provide that the State shall submit to the Secretary, in such form as the Secretary may require, the description and information described in paragraphs (8) and (14) of section 112(b) of the Workforce Investment Act of 1998 (29 U.S.C. 2822(b)) and a description of the State's rapid response activities under section 134(a)(2)(A) of that Act (29 U.S.C. 2864(a)(2)(A)).

(8) CONTROL MEASURES.—

(A) IN GENERAL.—The Secretary shall require each cooperating State and cooperating State agency to implement effective control measures and to effectively oversee the oper-

ation and administration of the climate change adjustment assistance program under this part, including by means of monitoring the operation of control measures to improve the accuracy and timeliness of the data being collected and reported.

(B) DEFINITION.—For purposes of subparagraph (A), the term ''control measures'' means measures that—

(i) are internal to a system used by a State to collect data; and

(ii) are designed to ensure the accuracy and verifiability of such data.

(9) DATA REPORTING.—

(A) IN GENERAL.—Any agreement entered into under this section shall require the cooperating State or cooperating State agency to report to the Secretary on a quarterly basis comprehensive performance accountability data, to consist of—

(i) the core indicators of performance described in subparagraph (B)(i);

(ii) the additional indicators of performance described in subparagraph (B)(ii), if any; and

(iii) a description of efforts made to improve outcomes for workers under the climate change adjustment assistance program.

(B) CORE INDICATORS DESCRIBED.—

(i) IN GENERAL.—The core indicators of performance described in this subparagraph are—

(I) the percentage of workers receiving benefits under this part who are employed during the second calendar quarter following the calendar quarter in which the workers cease receiving such benefits;

(II) the percentage of such workers who are employed in each of the third and fourth calendar quarters following the calendar quarter in which the workers cease receiving such benefits; and

(III) the earnings of such workers in each of the third and fourth calendar quarters following the calendar quarter in which the workers cease receiving such benefits.

(ii) ADDITIONAL INDICATORS.—The Secretary and a cooperating State or cooperating State agency may agree upon additional indicators of performance for the climate change adjustment assistance program under this part, as appropriate.

(C) STANDARDS WITH RESPECT TO RELIABILITY OF DATA.—In preparing the quarterly report required by subparagraph (A), each cooperating State or cooperating State agency shall establish procedures that are consistent with guidelines to be issued by the Secretary to ensure that the data reported are valid and reliable.

(10) VERIFICATION OF ELIGIBILITY FOR PROGRAM BENEFITS.—

(A) IN GENERAL.—An agreement under this section shall provide that the State shall periodically redetermine that a worker receiving benefits under this part who is not a citizen or national of the United States remains in a satisfactory immigration status. Once satisfactory immigration status has been initially verified through the immigration status verification system described in section 1137(d) of the Social

Security Act (42 U.S.C. 1320b–7(d)) for purposes of establishing a worker's eligibility for unemployment compensation, the State shall reverify the worker's immigration status if the documentation provided during initial verification will expire during the period in which that worker is potentially eligible to receive benefits under this part. The State shall conduct such redetermination in a timely manner, utilizing the immigration status verification system described in section 1137(d) of the Social Security Act (42 U.S.C. 1320b–7(d)).

(B) PROCEDURES.—The Secretary shall establish procedures to ensure the uniform application by the States of the requirements of this paragraph.

(b) ADMINISTRATION ABSENT STATE AGREEMENT.—

(1) In any State where there is no agreement in force between a State or its agency under subsection (a), the Secretary shall promulgate regulations for the performance of all necessary functions under section 312, including provision for a fair hearing for any worker whose application for payments is denied.

(2) A final determination under paragraph (1) with respect to entitlement to program benefits under section 312 is subject to review by the courts in the same manner and to the same extent as is provided by section 205(g) of the Social Security Act (42 U.S.C. 405(g)).

(c) PROHIBITION ON CONTRACTING WITH PRIVATE ENTITIES.—Neither the Secretary nor a State may contract with any private for-profit or nonprofit entity for the administration of the climate change adjustment assistance program under this part.

(d) PAYMENT TO THE STATES.—

(1) IN GENERAL.—The Secretary shall from time to time certify to the Secretary of the Treasury for payment to each cooperating State the sums necessary to enable such State as agent of the United States to make payments provided for by this part.

(2) RESTRICTION.—All money paid a State under this subsection shall be used solely for the purposes for which it is paid; and money so paid which is not used for such purposes shall be returned, at the time specified in the agreement under this section, to the Secretary of the Treasury.

(3) BONDS.—Any agreement under this section may require any officer or employee of the State cer-

tifying payments or disbursing funds under the agreement or otherwise participating in the performance of the agreement, to give a surety bond to the United States in such amount as the Secretary may deem necessary, and may provide for the payment of the cost of such bond from funds for carrying out the purposes of this part.

(e) LABOR STANDARDS.—

(1) PROHIBITION ON DISPLACEMENT.—An individual in an apprenticeship program or on-the-job training program under this part shall not displace (including a partial displacement, such as a reduction in the hours of non-overtime work, wages, or employment benefits) any employed employee.

(2) PROHIBITION ON IMPAIRMENT OF CONTRACTS.—An apprenticeship program or on-the-job raining program under this Act shall not impair an existing contract for services or collective bargaining agreement, and no such activity that would be inconsistent with the terms of a collective bargaining agreement shall be undertaken without the written concurrence of the labor organization and employer concerned.

(3) ADDITIONAL STANDARDS.—The Secretary, or a State acting under an agreement described in

subsection (a) may pay the costs of on-the-job training, notwithstanding any other provision of this section, only if—

(A) in the case of training which would be inconsistent with the terms of a collective bargaining agreement, the written concurrence of the labor organization concerned has been obtained;

(B) the job for which such adversely affected worker is being trained is not being created in a promotional line that will infringe in any way upon the promotional opportunities of currently employed individuals;

(C) such training is not for the same occupation from which the worker was separated and with respect to which such worker's group was certified pursuant to section 311(d);

(D) the employer is provided reimbursement of not more than 50 percent of the wage rate of the participant, for the cost of providing the training and additional supervision related to the training; and

(E) the employer has not received payment under with respect to any other on-the-job training provided by such employer which failed

to meet the requirements of subparagraphs (A) through (D).

(f) DEFINITIONS.—As used in this part the following definitions apply:

(1) The term ''adversely affected employment'' means employment at an employment site, if workers at such site are eligible to apply for adjustment assistance under this part.

(2) The term ''adversely affected worker'' means an individual who has been totally or partially separated from employment and is eligible to apply for adjustment assistance under this part.

(3) The term ''average weekly wage'' means 1/13 of the total wages paid to an individual in the quarter in which the individual's total wages were highest among the first 4 of the last 5 completed calendar quarters immediately before the quarter in which occurs the week with respect to which the computation is made. Such week shall be the week in which total separation occurred, or, in cases where partial separation is claimed, an appropriate week, as defined in regulations prescribed by the Secretary.

(4) The term ''average weekly hours'' means the average hours worked by the individual (excluding overtime) in the employment from which he has

been or claims to have been separated in the 52 weeks (excluding weeks during which the individual was sick or on vacation) preceding the week specified in the last sentence of paragraph (4).

(5) The term ''benefit period'' means, with respect to an individual—

(A) the benefit year and any ensuing period, as determined under applicable State law, during which the individual is eligible for regular compensation, additional compensation, or extended compensation; or

(B) the equivalent to such a benefit year or ensuing period provided for under the applicable Federal unemployment insurance law.

(6) The term ''consumer goods manufacturing'' means the electrical equipment, appliance, and component manufacturing industry and transportation equipment manufacturing.

(7) The term ''employment site'' means a single facility or site of employment.

(8) The term ''energy-intensive manufacturing industries'' means all industrial sectors, entities, or groups of entities that meet the energy or greenhouse gas intensity criteria in section 763(b)(2)(A)

of the Clean Air Act based on the most recent data available.

(9) The term ''energy producing and transforming industries'' means the coal mining industry, oil and gas extraction, electricity power generation, transmission and distribution, and natural gas distribution.

(10) The term ''on-the-job training'' means training provided by an employer to an individual who is employed by the employer.

(11) The terms ''partial separation'' and ''partially separated'' refer, with respect to an individual who has not been totally separated, that such individual has had—

(A) his or her hours of work reduced to 80 percent or less of his average weekly hours in adversely affected employment; and

(B) his or her wages reduced to 80 percent or less of his average weekly wage in such adversely affected employment.

(12) The term ''public agency'' means a department or agency of a State or political subdivision of a State or of the Federal Government.

(13) The term ''Secretary'' means the Secretary of Labor.

(14) The term ''service workers'' means workers supplying support or auxiliary services to an employment site.

(15) The term ''State'' includes the District of Columbia and the Commonwealth of Puerto Rico: and the term ''United States'' when used in the geographical sense includes such Commonwealth.

(16) The term ''State agency'' means the agency of the State which administers the State law.

(17) The term ''State law'' means the unemployment insurance law of the State approved by the Secretary of Labor under section 3304 of the Internal Revenue Code of 1986.

(18) The terms ''total separation'' and ''totally separated'' refer to the layoff or severance of an individual from employment with an employer in which adversely affected employment exists.

(19) The term ''unemployment insurance'' means the unemployment compensation payable to an individual under any State law or Federal unemployment compensation law, including chapter 85 of title 5, United States Code, and the Railroad Unemployment Insurance Act (45 U.S.C. 351 et seq.). The terms ''regular compensation'', ''additional compensation'', and ''extended compensation'' have the

same respective meanings that are given them in section 205(2), (3), and (4) of the Federal-State Extended Unemployment Compensation Act of 1970 (26 U.S.C. 3304 note; Public Law 91–373).

(20) The term ''week'' means a week as defined in the applicable State law.

(21) The term ''week of unemployment'' means a week of total, part-total, or partial unemployment as determined under the applicable State law or Federal unemployment insurance law.

(g) SPECIAL RULE WITH RESPECT TO MILITARY SERVICE.—

(1) IN GENERAL.—Notwithstanding any other provision of this part, the Secretary may waive any requirement of this part that the Secretary determines is necessary to ensure that an adversely affected worker who is a member of a reserve component of the Armed Forces and serves a period of duty described in paragraph (2) is eligible to receive climate change adjustment assistance, training, and other benefits under this part in the same manner and to the same extent as if the worker had not served the period of duty.

(2) PERIOD OF DUTY DESCRIBED.—An adversely affected worker serves a period of duty de-

scribed in this paragraph if, before completing training under this part, the worker—

(A) serves on active duty for a period of more than 30 days under a call or order to active duty of more than 30 days; or

(B) in the case of a member of the Army National Guard of the United States or Air National Guard of the United States, performs full-time National Guard duty under section 502(f) of title 32, United States Code, for 30 consecutive days or more when authorized by the President or the Secretary of Defense for the purpose of responding to a national emergency declared by the President and supported by Federal funds.

(h) FRAUD AND RECOVERY OF OVERPAYMENTS.—

(1) RECOVERY OF PAYMENTS TO WHICH AN INDIVIDUAL WAS NOT ENTITLED.—If the Secretary or a court of competent jurisdiction determines that any person has received any payment under this part to which the individual was not entitled, such individual shall be liable to repay such amount to the Secretary, as the case may be, except that the Secretary shall waive such repayment if such agency or the Secretary determines that—

(A) the payment was made without fault on the part of such individual; and

(B) requiring such repayment would cause a financial hardship for the individual (or the individual's household, if applicable) when taking into consideration the income and resources reasonably available to the individual (or household) and other ordinary living expenses of the individual (or household).

(2) MEANS OF RECOVERY.—Unless an overpayment is otherwise recovered, or waived under paragraph (1), the Secretary shall recover the overpayment by deductions from any sums payable to such person under this part, under any Federal unemployment compensation law or other Federal law administered by the Secretary which provides for the payment of assistance with respect to unemployment. Any amount recovered under this section shall be returned to the Treasury of the United States.

(3) PENALTIES FOR FRAUD.—Any person who—

(A) makes a false statement of a material fact knowing it to be false, or knowingly fails to disclose a material fact, for the purpose of obtaining or increasing for that person or for

any other person any payment authorized to be furnished under this part; or

(B) makes a false statement of a material fact knowing it to be false, or knowingly fails to disclose a material fact, when providing information to the Secretary during an investigation of a petition under section 311(c);

shall be imprisoned for not more than one year, or fined under title 18, United States Code, or both, and be ineligible for any further payments under this part.

(i) REGULATIONS.—The Secretary shall prescribe such regulations as may be necessary to carry out the provisions of this part.

(j) STUDY ON OLDER WORKERS.—The Secretary shall conduct a study examine the circumstances of older adversely affected workers and the ability of such workers to access their retirement benefits. The Secretary shall transmit a report to Congress not later than 2 years after the date of enactment of this Act on the findings of the study and the Secretary's recommendations on how to ensure that adversely affected workers within 2 years of retirement are able to access their retirement benefits.

Subtitle B—International Climate Change Programs

SEC. 321. STRATEGIC INTERAGENCY BOARD ON INTERNATIONAL CLIMATE INVESTMENT.

(a) ESTABLISHMENT.—

(1) IN GENERAL.—Not later than 90 days after the date of the enactment of this Act, the President shall establish the ''Strategic Interagency Board on International Climate Investment'' (referred to in this subtitle as the ''Board'').

(2) COMPOSITION.—The Board shall be composed of—

(A) the Secretary of State;

(B) the Administrator of United States Agency for International Development;

(C) the Secretary of Energy;

(D) the Secretary of the Treasury;

(E) the Secretary of Commerce;

(F) the Secretary of Agriculture;

(G) the Administrator; and

(H) such other relevant officials as the President may designate.

(b) DUTIES.—The duties of the Board shall include assessing, monitoring, and evaluating the progress and contributions of relevant departments and agencies of the

Federal Government in supporting financing for international climate change activities.

SEC. 322. EMISSION REDUCTIONS FROM REDUCED DEFORESTATION.

Title VII of the Clean Air Act (as amended by section 101 of division B) is amended by adding at the end the following:

"PART E—SUPPLEMENTAL EMISSION REDUCTIONS

"SEC. 751. DEFINITIONS.

''In this part:

''(1) ADMINISTRATOR.—The term 'Administrator' means the Administrator of the United States Agency for International Development.

''(2) DEFORESTATION.—The term 'deforestation' means a change in land use from a forest to any other land use.

''(3) DEGRADATION.—The term 'degradation', with respect to a forest, is any reduction in the carbon stock of a forest due to the impact of human land-use activities.

''(4) EMISSION REDUCTIONS.—The term 'emission reductions' means greenhouse gas emission reductions achieved from reduced or avoided deforestation under this title.

"(5) LEAKAGE PREVENTION ACTIVITIES.—The term 'leakage prevention activities' means activities in developing countries that are directed at preserving existing forest carbon stocks, including forested wetlands and peatlands, that might, absent such activities, be lost through leakage.

"SEC. 752. PURPOSES.

"The purposes of this part are to provide United States assistance to developing countries—

"(1) to develop, implement and improve nationally appropriate greenhouse gas mitigation policies and actions that reduce deforestation and forest degradation or conserve or restore forest ecosystems, in a measurable, reportable, and verifiable manner; and

"(2) in a manner that is consistent with and enhances the implementation of complementary United States policies that support the good governance of forests, biodiversity conservation, and environmentally sustainable development, while taking local communities, most vulnerable populations and communities, particularly forest-dependent communities and indigenous peoples into consideration.

"SEC. 753. EMISSION REDUCTIONS FROM REDUCED DEFORESTATION.

"(a) IN GENERAL.—Not later than 2 years after the date of the enactment of this part, the Administrator, in consultation with the Administrator of the Environmental Protection Agency, the Secretary of Agriculture, and the head of any other appropriate agency, shall establish a program to provide assistance to reduce greenhouse gas emissions from deforestation in developing countries, in accordance with this title.

"(b) OBJECTIVES.—The objectives of the program established under this section shall be—

"(1) to reduce greenhouse gas emissions from deforestation in developing countries by at least 720,000,000 tons of carbon dioxide equivalent in 2020, and a cumulative quantity of at least 6,000,000,000 tons of carbon dioxide equivalent by December 31, 2025, with additional reductions in subsequent years;

"(2) to assist developing countries in preparing to participate in international markets for international offset credits for reduced emissions from deforestation; and

"(3) to preserve existing forest carbon stocks in countries where such forest carbon may be vulnerable to international leakage.".

SEC. 323. INTERNATIONAL CLEAN ENERGY DEPLOYMENT PROGRAM.

(a) PURPOSES.—The purposes of this section are—

(1) to assist developing countries in activities that reduce, sequester, or avoid greenhouse gas emissions;

(2) to encourage those countries to shift toward low-carbon development, and promote a successful global agreement under the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992 (or a successor agreement) (referred to in this subtitle as the ''Convention''); and

(3) to promote robust compliance with and enforcement of existing international legal requirements for the protection of intellectual property rights.

(b) ESTABLISHMENT OF INTERNATIONAL CLEAN ENERGY DEPLOYMENT PROGRAM.—

(1) ESTABLISHMENT.—The Secretary of State, in consultation with an interagency group designated by the President, shall establish an International Clean Energy Deployment Program in accordance with this section.

(2) DISTRIBUTION OF ASSISTANCE.—The Secretary of State, or the head of such other Federal

agency as the President may designate, shall direct the distribution of funding to carry out the Clean Energy Technology Program—

(A) in the form of bilateral assistance;

(B) to multilateral funds or international institutions pursuant to the Convention or an agreement negotiated under the Convention; or

(C) through a combination of the mechanisms identified under subparagraphs (A) and (B).

(c) DETERMINATION OF QUALIFYING ACTIVITIES.—Assistance under this subtitle may be provided only to qualifying entities for clean technology activities (including building relevant technical and institutional capacity) that contribute to substantial, measurable, reportable, and verifiable reductions, sequestration, or avoidance of greenhouse gas emissions.

SEC. 324. INTERNATIONAL CLIMATE CHANGE ADAPTATION AND GLOBAL SECURITY PROGRAM.

(a) PURPOSES.—The purposes of this section are—

(1) to provide assistance to the most vulnerable developing countries, particularly to the most vulnerable communities and populations in those countries; and

(2) to support the development and implementation of climate change adaptation programs in a way that protects and promotes interests of the United States, to the extent those interests may be advanced by minimizing, averting, or increasing resilience to climate change impacts.

(b) INTERNATIONAL CLIMATE CHANGE ADAPTATION AND GLOBAL SECURITY PROGRAM.—

(1) ESTABLISHMENT.—The Secretary of State, in consultation with the Administrator of the United States Agency for International Development, the Secretary of the Treasury, and the Administrator, shall establish an International Climate Change Adaptation and Global Security Program in accordance with this section.

(2) DISTRIBUTION OF ASSISTANCE.—The Secretary of State, or the head of such other Federal agency as the President may designate, after consultation with the Secretary of the Treasury, the Administrator of the United States Agency for International Development, and the Administrator, shall direct the distribution of funding to carry out the International Climate Change Adaptation and Global Security Program—

(A) in the form of bilateral assistance;

(B) to multilateral funds or international institutions pursuant to the Convention or an agreement negotiated under the Convention; or

(C) through a combination of the mechanisms identified under subparagraphs (A) and (B).

SEC. 325. EVALUATION AND REPORTS.

(a) MONITORING, EVALUATION, AND ENFORCEMENT.—The Board shall establish and implement a system to monitor and evaluate the effectiveness and efficiency of assistance provided under this subtitle by including evaluation criteria, such as performance indicators.

(b) REPORTS AND REVIEW.—

(1) ANNUAL REPORT.—Not later than 1 year after the date of enactment of this Act, and annually thereafter, the Board shall submit to the appropriate committees of Congress a report that describes—

(A) the steps Federal agencies have taken, and the progress made, toward accomplishing the objectives of this section; and

(B) the ramifications of any potentially destabilizing impacts climate change may have on the interests of the United States.

(2) REVIEWS.—Not later than 3 years after the date of enactment of this Act, and triennially there-

after, the Board, in cooperation with the National Academy of Sciences and other appropriate research and development institutions, shall—

(A) review the global needs and opportunities for climate change investment in developing countries; and

(B) submit to Congress a report that describes the findings of the review.

SEC. 326. REPORT ON CLIMATE ACTIONS OF MAJOR ECONOMIES.

(a) IN GENERAL.—The Secretary of State, in cooperation with the Board, shall prepare an interagency report on climate change and energy policy of the 5 countries that, of the countries that are not members of the Organisation for Economic Co-Operation and Development, emit the greatest annual quantity of greenhouse gases.

(b) PURPOSES.—The purposes of the report shall be—

(1) to provide to Congress and the public of the United States—

(A) a better understanding of the actions the countries described in subsection (a) are taking to reduce greenhouse gas emissions; and

(B) an assessment of the climate change and energy policy commitments and actions of those countries; and

(2) to identify the means by which the United States can assist those countries in achieving such a reduction.

(c) SUBMISSION TO CONGRESS.—Not later than 15 months after the date of enactment of this Act, the Secretary of State shall submit to the appropriate committees of Congress the report prepared under this section.

Subtitle C—Adapting to Climate Change

PART 1—DOMESTIC ADAPTATION

Subpart A—National Climate Change Adaptation Program

SEC. 341. NATIONAL CLIMATE CHANGE ADAPTATION PROGRAM.

The President shall establish within the United States Global Change Research Program a National Climate Change Adaptation Program for the purpose of increasing the overall effectiveness of Federal climate change adaptation efforts.

SEC. 342. CLIMATE SERVICES.

The Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Ad-

ministration (NOAA), shall establish within NOAA a National Climate Service to develop climate information, data, forecasts, and warnings at national and regional scales, and to distribute information related to climate impacts to State, local, and tribal governments and the public to facilitate the development and implementation of strategies to reduce society's vulnerability to climate variability and change.

Subpart B—Public Health and Climate Change

SEC. 351. SENSE OF CONGRESS ON PUBLIC HEALTH AND CLIMATE CHANGE.

It is the sense of the Congress that the Federal Government, in cooperation with international, State, tribal, and local governments, Indian tribes, concerned public and private organizations, and citizens, should use all practicable means and measures—

(1) to assist the efforts of public health and health care professionals, first responders, States, Indian tribes, municipalities, and local communities to incorporate measures to prepare health systems to respond to the impacts of climate change;

(2) to ensure—

(A) that the Nation's health professionals have sufficient information to prepare for and

respond to the adverse health impacts of climate change;

(B) the utility and value of scientific research in advancing understanding of—

(i) the health impacts of climate change; and

(ii) strategies to prepare for and respond to the health impacts of climate change;

(C) the identification of communities vulnerable to the health effects of climate change and the development of strategic response plans to be carried out by health professionals for those communities;

(D) the improvement of health status and health equity through efforts to prepare for and respond to climate change; and

(E) the inclusion of health policy in the development of climate change responses;

(3) to encourage further research, interdisciplinary partnership, and collaboration among stakeholders in order to—

(A) understand and monitor the health impacts of climate change; and

(B) improve public health knowledge and response strategies to climate change;

(4) to enhance preparedness activities, and public health infrastructure, relating to climate change and health;

(5) to encourage each and every American to learn about the impacts of climate change on health; and

(6) to assist the efforts of developing nations to incorporate measures to prepare health systems to respond to the impacts of climate change.

SEC. 352. RELATIONSHIP TO OTHER LAWS.

Nothing in this subpart in any manner limits the authority provided to or responsibility conferred on any Federal department or agency by any provision of any law (including regulations) or authorizes any violation of any provision of any law (including regulations), including any health, energy, environmental, transportation, or any other law or regulation.

SEC. 353. NATIONAL STRATEGIC ACTION PLAN.

(a) REQUIREMENT.—

(1) IN GENERAL.—The Secretary of Health and Human Services, within 2 years after the date of the enactment of this Act, on the basis of the best available science, and in consultation pursuant to para-

graph (2), shall publish a strategic action plan to assist health professionals in preparing for and responding to the impacts of climate change on public health in the United States and other nations, particularly developing nations.

(2) CONSULTATION.—In developing or making any revision to the national strategic action plan, the Secretary shall—

(A) consult with the Director of the Centers for Disease Control and Prevention, the Administrator of the Environmental Protection Agency, the Director of the National Institutes of Health, the Director of the Indian Health Service, the Secretary of Energy, other appropriate Federal agencies, Indian tribes, State and local governments, public health organizations, scientists, and other interested stakeholders; and

(B) provide opportunity for public input.

(b) CONTENTS.—

(1) IN GENERAL.—The Secretary shall assist health professionals in preparing for and responding effectively and efficiently to the health effects of climate change through measures including—

(A) developing, improving, integrating, and maintaining domestic and international disease surveillance systems and monitoring capacity to respond to health-related effects of climate change, including on topics addressing—

(i) water, food, and vector borne infectious diseases and climate change;

(ii) pulmonary effects, including responses to aeroallergens;

(iii) cardiovascular effects, including impacts of temperature extremes;

(iv) air pollution health effects, including heightened sensitivity to air pollution;

(v) hazardous algal blooms;

(vi) mental and behavioral health impacts of climate change;

(vii) the health of refugees, displaced persons, and vulnerable communities;

(viii) the implications for communities vulnerable to health effects of climate change, as well as strategies for responding to climate change within these communities; and

(ix) local and community-based health interventions for climate-related health impacts;

(B) creating tools for predicting and monitoring the public health effects of climate change on the international, national, regional, State, tribal, and local levels, and providing technical support to assist in their implementation;

(C) developing public health communications strategies and interventions for extreme weather events and disaster response situations;

(D) identifying and prioritizing communities and populations vulnerable to the health effects of climate change, and determining actions and communication strategies that should be taken to inform and protect these communities and populations from the health effects of climate change;

(E) developing health communication, public education, and outreach programs aimed at public health and health care professionals, as well as the general public, to promote preparedness and response strategies relating to climate change and public health, including the identi-

fication of greenhouse gas reduction behaviors that are health-promoting; and

(F) developing academic and regional centers of excellence devoted to—

(i) researching relationships between climate change and health;

(ii) expanding and training the public health workforce to strengthen the capacity of such workforce to respond to and prepare for the health effects of climate change;

(iii) creating and supporting academic fellowships focusing on the health effects of climate change; and

(iv) training senior health ministry officials from developing nations to strengthen the capacity of such nations to—

(I) prepare for and respond to the health effects of climate change; and

(II) build an international network of public health professionals with the necessary climate change knowledge base;

(G) using techniques, including health impact assessments, to assess various climate change public health preparedness and response strategies on international, national, State, regional, tribal, and local levels, and make recommendations as to those strategies that best protect the public health;

(H)(i) assisting in the development, implementation, and support of State, regional, tribal, and local preparedness, communication, and response plans (including with respect to the health departments of such entities) to anticipate and reduce the health threats of climate change; and

(ii) pursuing collaborative efforts to develop, integrate, and implement such plans;

(I) creating a program to advance research as it relates to the effects of climate change on public health across Federal agencies, including research to—

(i) identify and assess climate change health effects preparedness and response strategies;

(ii) prioritize critical public health infrastructure projects related to potential

1 climate change impacts that affect public
2 health; and
3 (iii) coordinate preparedness for cli-
4 mate change health impacts, including the
5 development of modeling and forecasting
6 tools;
7 (J) providing technical assistance for the
8 development, implementation, and support of
9 preparedness and response plans to anticipate
10 and reduce the health threats of climate change
11 in developing nations; and
12 (K) carrying out other activities deter-
13 mined appropriate by the Secretary to plan for
14 and respond to the impacts of climate change
15 on public health.
16 (c) REVISION.—The Secretary shall revise the na-
17 tional strategic action plan not later than July 1, 2014,
18 and every 4 years thereafter, to reflect new information
19 collected pursuant to implementation of the national stra-
20 tegic action plan and otherwise, including information
21 on—
22 (1) the status of critical environmental health
23 parameters and related human health impacts;
24 (2) the impacts of climate change on public
25 health; and

(3) advances in the development of strategies for preparing for and responding to the impacts of climate change on public health.

(d) IMPLEMENTATION.—

(1) IMPLEMENTATION THROUGH HHS.—The Secretary shall exercise the Secretary's authority under this subpart and other provisions of Federal law to achieve the goals and measures of the national strategic action plan.

(2) OTHER PUBLIC HEALTH PROGRAMS AND INITIATIVES.—The Secretary and Federal officials of other relevant Federal agencies shall administer public health programs and initiatives authorized by provisions of law other than this subpart, subject to the requirements of such statutes, in a manner designed to achieve the goals of the national strategic action plan.

(3) SPECIFIC ACTIVITIES.—In furtherance of the national strategic action plan, the Secretary shall—

(A) conduct scientific research to assist health professionals in preparing for and responding to the impacts of climate change on public health; and

(B) provide funding for—

(i) research on the health effects of climate change; and

(ii) preparedness planning on the international, national, State, tribal, regional, and local levels to respond to or reduce the burden of health effects of climate change; and

(C) carry out other activities determined appropriate by the Secretary to prepare for and respond to the impacts of climate change on public health.

SEC. 354. ADVISORY BOARD.

(a) ESTABLISHMENT.—The Secretary shall establish a permanent science advisory board comprised of not less than 10 and not more than 20 members.

(b) APPOINTMENT OF MEMBERS.—The Secretary shall appoint the members of the science advisory board from among individuals—

(1) who have expertise in public health and human services, climate change, and other relevant disciplines; and

(2) at least ½ of whom are recommended by the President of the National Academy of Sciences.

(c) FUNCTIONS.—The science advisory board shall—

(1) provide scientific and technical advice and recommendations to the Secretary on the domestic and international impacts of climate change on public health, populations and regions particularly vulnerable to the effects of climate change, and strategies and mechanisms to prepare for and respond to the impacts of climate change on public health; and

(2) advise the Secretary regarding the best science available for purposes of issuing the national strategic action plan.

SEC. 355. REPORTS.

(a) NEEDS ASSESSMENT.—

(1) IN GENERAL.—The Secretary shall seek to enter into, by not later than 6 months after the date of the enactment of this Act, an agreement with the National Research Council and the Institute of Medicine to complete a report that—

(A) assesses the needs for health professionals to prepare for and respond to climate change impacts on public health; and

(B) recommends programs to meet those needs.

(2) SUBMISSION.—The agreement under paragraph (1) shall require the completed report to be submitted to the Congress and the Secretary and

made publicly available not later than 1 year after the date of the agreement.

(b) CLIMATE CHANGE HEALTH PROTECTION AND PROMOTION REPORTS.—

(1) IN GENERAL.—The Secretary, in consultation with the advisory board established under section 354, shall ensure the issuance of reports to aid health professionals in preparing for and responding to the adverse health effects of climate change that—

(A) review scientific developments on health impacts of climate change; and

(B) recommend changes to the national strategic action plan.

(2) SUBMISSION.—The Secretary shall submit the reports required by paragraph (1) to the Congress and make such reports publicly available not later than July 1, 2013, and every 4 years thereafter.

SEC. 356. DEFINITIONS.

In this subpart:

(1) HEALTH IMPACT ASSESSMENT.—The term ''health impact assessment'' means a combination of procedures, methods, and tools by which a policy, program, or project may be judged as to its potential

effects on the health of a population, and the distribution of those effects within the population.

(2) NATIONAL STRATEGIC ACTION PLAN.—The term ''national strategic action plan'' means the plan issued and revised under section 353.

(3) SECRETARY.—Unless otherwise specified, the term ''Secretary'' means the Secretary of Health and Human Services.

Subpart C—Climate Change Safeguards for Natural Resources Conservation

SEC. 361. PURPOSES.

The purposes of this subpart are—

(1) to establish an integrated Federal program that responds to ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire, by protecting, restoring, and conserving the natural resources of the United States; and

(2) to provide financial support and incentives for programs, strategies, and activities that respond to threats of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire, by protecting, restoring, and conserving the natural resources of the United States.

SEC. 362. NATURAL RESOURCES CLIMATE CHANGE ADAPTATION POLICY.

It is the policy of the Federal Government, in cooperation with State and local governments, Indian tribes, and other interested stakeholders, to use all practicable means to protect, restore, and conserve natural resources so that natural resources become more resilient, adapt to, and withstand the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire.

SEC. 363. DEFINITIONS.

In this subpart:

(1) ACCOUNT.—The term ''Account'' means the Natural Resources Climate Change Adaption Account established by section 370(a).

(2) ADMINISTRATORS.—The term ''Administrators'' means—

(A) the Administrator of the National Oceanic and Atmospheric Administration; and

(B) the Director of the United States Geological Survey.

(3) BOARD.—The term ''Board'' means the Science Advisory Board established by section 367(f)(1).

(4) CENTER.—The term ''Center'' means the National Climate Change and Wildlife Science Center described by section 367(e)(1).

(5) COASTAL STATE.—The term ''coastal State'' has the meaning given the term ''coastal state'' in section 304 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1453).

(6) CORRIDORS.—The term ''corridors'' means areas that—

(A) provide connectivity, over different time scales, of habitats or potential habitats; and

(B) facilitate terrestrial, marine, estuarine, and freshwater fish, wildlife, or plant movement necessary for migration, gene flow, or dispersal, or to respond to the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire.

(7) ECOLOGICAL PROCESSES.—The term ''ecological processes'' means biological, chemical, or physical interaction between the biotic and abiotic components of an ecosystem, including—

(A) nutrient cycling;

(B) pollination;

(C) predator-prey relationships;

(D) soil formation;

(E) gene flow;

(F) disease epizootiology;

(G) larval dispersal and settlement;

(H) hydrological cycling;

(I) decomposition; and

(J) disturbance regimes, such as fire and flooding.

(8) HABITAT.—The term ''habitat'' means the physical, chemical, and biological properties that fish, wildlife, or plants use for growth, reproduction, survival, food, water, or cover (whether on land, in water, or in an area or region).

(9) INDIAN TRIBE.—The term ''Indian tribe'' has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).

(10) NATURAL RESOURCES.—The term ''natural resources'' means land, wildlife, fish, air, water, estuaries, plants, habitats, and ecosystems of the United States.

(11) NATURAL RESOURCES ADAPTATION.—The term ''natural resources adaptation'' means the protection, restoration, and conservation of natural re-

sources so that natural resources become more resilient, adapt to, and withstand the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire.

(12) PANEL.—The term ''Panel'' means the Natural Resources Climate Change Adaptation Panel established under section 365(a).

(13) RESILIENCE; RESILIENT.—The terms ''resilience'' and ''resilient'' mean—

(A) the ability to resist or recover from disturbance; and

(B) the ability to preserve diversity, productivity, and sustainability.

(14) STATE.—The term ''State'' means—

(A) a State of the United States;

(B) the District of Columbia;

(C) American Samoa;

(D) Guam;

(E) the Commonwealth of the Northern Mariana Islands;

(F) the Commonwealth of Puerto Rico; and

(G) the United States Virgin Islands.

(15) STRATEGY.—The term ''Strategy'' means the Natural Resources Climate Change Adaptation Strategy developed under section 366(a).

SEC. 364. COUNCIL ON ENVIRONMENTAL QUALITY.

The Chair of the Council on Environmental Quality shall—

(1) advise the President on implementing and developing—

(A) the Strategy; and

(B) the Federal natural resource agency adaptation plans required by section 368;

(2) serve as the Chair of the Panel established under section 365; and

(3) coordinate Federal agency strategies, plans, programs, and activities relating to protecting, restoring, and maintaining natural resources so that natural resources become more resilient, adapt to, and withstand the ongoing and expected impacts of climate change.

SEC. 365. NATURAL RESOURCES CLIMATE CHANGE ADAPTATION PANEL.

(a) ESTABLISHMENT.—Not later than 90 days after the date of enactment of this Act, the President shall establish a Natural Resources Climate Change Adaptation Panel.

(b) DUTIES.—The Panel shall serve as a forum for interagency consultation on, and the coordination of, the development and implementation of the Strategy.

(c) MEMBERSHIP.—The Panel shall be composed of—

(1) the Administrator of the National Oceanic and Atmospheric Administration (or a designee);

(2) the Chief of the Forest Service (or a designee);

(3) the Director of the National Park Service (or a designee);

(4) the Director of the United States Fish and Wildlife Service (or a designee);

(5) the Director of the Bureau of Land Management (or a designee);

(6) the Director of the United States Geological Survey (or a designee);

(7) the Commissioner of Reclamation (or a designee);

(8) the Director of the Bureau of Indian Affairs (or a designee);

(9) the Administrator of the Environmental Protection Agency (or a designee);

(10) the Chief of Engineers (or a designee);

(11) the Chair of the Council on Environmental Quality (or a designee);

(12) the Administrator of the Federal Emergency Management Agency (or a designee); and

(13) the heads of such other Federal agencies or departments with jurisdiction over natural resources of the United States, as determined by the President.

(d) CHAIRPERSON.—The Chair of the Council on Environmental Quality shall serve as the Chairperson of the Panel.

SEC. 366. NATURAL RESOURCES CLIMATE CHANGE ADAPTATION STRATEGY.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Panel shall develop a Natural Resources Climate Change Adaptation Strategy—

(1) to protect, restore, and conserve natural resources so that natural resources become more resilient, adapt to, and withstand the ongoing and expected impacts of climate change; and

(2) to identify opportunities to mitigate the ongoing and expected impacts of climate change.

(b) DEVELOPMENT.—In developing and revising the Strategy, the Panel shall—

(1) base the strategy on the best available science;

(2) develop the strategy in close cooperation with States and Indian tribes;

(3) coordinate with other Federal agencies, as appropriate;

(4) consult with local governments, conservation organizations, scientists, and other interested stakeholders; and

(5) provide public notice and opportunity for comment.

(c) REVISION.—After the Panel adopts the initial Strategy, the Panel shall review and revise the Strategy every 5 years to incorporate—

(1) new information regarding the ongoing and expected impacts of climate change on natural resources; and

(2) new advances in the development of strategies that make natural resources more resilient or able to adapt to the ongoing and expected impacts of climate change.

(d) CONTENTS.—The Strategy shall—

(1) assess the vulnerability of natural resources to climate change, including short-term, medium-

term, long-term, cumulative, and synergistic impacts;

(2) describe current research, observation, and monitoring activities at the Federal, State, tribal, and local level related to the ongoing and expected impacts of climate change on natural resources;

(3) identify and prioritize research and data needs;

(4) identify natural resources likely to have the greatest need for protection, restoration, and conservation due to the ongoing and expanding impacts of climate change;

(5) include specific protocols for integrating natural resources adaptation strategies and activities into the conservation and management of natural resources by Federal departments and agencies to ensure consistency across agency jurisdictions;

(6) include specific actions that Federal departments and agencies shall take to protect, conserve, and restore natural resources to become more resilient, adapt to, and withstand the ongoing and expected impacts of climate change, including a timeline to implement those actions;

(7) include specific mechanisms for ensuring communication and coordination—

(A) among Federal departments and agencies; and

(B) between Federal departments and agencies and State natural resource agencies, United States territories, Indian tribes, private landowners, conservation organizations, and other countries that share jurisdiction over natural resources with the United States;

(8) include specific actions to develop and implement consistent natural resources inventory and monitoring protocols through interagency coordination and collaboration; and

(9) include procedures for guiding the development of detailed agency- and department-specific adaptation plans required under section 368.

(e) IMPLEMENTATION.—Consistent with other laws and Federal trust responsibilities concerning Indian land, each Federal department or agency represented on the Panel shall integrate the elements of the Strategy that relate to conservation, restoration, and management of natural resources into agency plans, environmental reviews, programs, and activities.

SEC. 367. NATURAL RESOURCES ADAPTATION SCIENCE AND INFORMATION.

(a) COORDINATION.—Not later than 90 days after the date of enactment of this Act, the Administrators shall establish coordinated procedures for developing and providing science and information necessary to address the ongoing and expected impacts of climate change on natural resources.

(b) OVERSIGHT.—The National Climate Change and Wildlife Science Center established under subsection (e) and the National Climate Service of the National Oceanic and Atmospheric Administration shall oversee development of the procedures.

(c) FUNCTIONS.—The Administrators shall—

(1) ensure that the procedures required under subsection (a) avoid duplication; and

(2) ensure that the National Oceanic and Atmospheric Administration and the United States Geological Survey—

(A) provide technical assistance to Federal departments and agencies, State and local governments, Indian tribes, and interested private landowners that are pursuing the goals of addressing the ongoing and expected impacts of climate change on natural resources;

(B) conduct and sponsor research to develop strategies that increase the ability of natural resources to become more resilient, adapt to, and withstand the ongoing and expected impacts of climate change;

(C) provide Federal departments and agencies, State and local governments, Indian tribes, and interested private landowners with research products, decision and monitoring tools, and information to develop strategies that increase the ability of natural resources to become more resilient, adapt to, and withstand the ongoing and expected impacts of climate change; and

(D) assist Federal departments and agencies in the development of adaptation plans required by section 368.

(d) SURVEY.—Not later than 1 year after the date of enactment of this Act, and every 5 years thereafter, the Secretary of Commerce and the Secretary of the Interior shall conduct a climate change impact survey that—

(1) identifies natural resources considered likely to be adversely affected by climate change;

(2) includes baseline monitoring and ongoing trend analysis;

(3) with input from stakeholders, identifies and prioritizes necessary monitoring and research that is most relevant to the needs of natural resource managers to address the ongoing and expected impacts of climate change and to promote resilience; and

(4) identifies the decision tools necessary to develop strategies that increase the ability of natural resources to become more resilient, adapt to, and withstand the ongoing and expected impacts of climate change.

(e) NATIONAL CLIMATE CHANGE AND WILDLIFE SCIENCE CENTER.—

(1) ESTABLISHMENT.—The Secretary of the Interior shall establish the National Climate Change and Wildlife Science Center within the United States Geological Survey.

(2) FUNCTIONS.—In collaboration with Federal and State natural resources agencies and departments, Indian tribes, universities, and other partner organizations, the Center shall—

(A) assess and synthesize current physical and biological knowledge;

(B) prioritize scientific gaps in such knowledge in order to forecast the ecological impacts of climate change, including, where applicable,

ocean acidification, drought, flooding, and wildfire on fish and wildlife at the ecosystem, habitat, community, population, and species levels;

(C) develop and improve tools to identify, evaluate, and link scientific approaches and models that forecast the impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire on fish, wildlife, plants, and associated habitats, including—

(i) monitoring;

(ii) predictive models;

(iii) vulnerability analyses;

(iv) risk assessments; and

(v) decision support systems that help managers make informed decisions;

(D) develop and evaluate tools to adaptively manage and monitor the effects of climate change (including tools for the collection of data) on fish and wildlife on the national, regional, and local level; and

(E) develop capacities for sharing standardized data and the synthesis of the data described in subparagraph (D).

(f) SCIENCE ADVISORY BOARD.—

(1) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary of Commerce and the Secretary of the Interior shall establish and appoint the members of the Science Advisory Board.

(2) MEMBERSHIP.—The Board shall be comprised of not fewer than 10 and not more than 20 members—

(A) who have expertise in fish, wildlife, plant, aquatic, and coastal and marine biology, ecology, climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire, and other relevant scientific disciplines;

(B) who represent a balanced membership among Federal, State, tribal, and local representatives, universities, and conservation organizations; and

(C) at least ½ of whom are recommended by the President of the National Academy of Sciences.

(3) DUTIES.—The Board shall—

(A) advise the Secretary of Commerce and the Secretary of the Interior on the state of the science regarding—

(i) the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire on natural resources; and

(ii) scientific strategies and mechanisms for protecting, restoring, and conserving natural resources so natural resources become more resilient, adapt to, and withstand the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire; and

(B) identify and recommend priorities for ongoing research needs on the issues described in subparagraph (A).

(4) COLLABORATION.—The Board shall collaborate with climate change and ecosystem research entities in other Federal agencies and departments.

(5) AVAILABILITY TO PUBLIC.—The advice and recommendations of the Board shall be made available to the public.

SEC. 368. FEDERAL NATURAL RESOURCE AGENCY ADAPTATION PLANS.

(a) DEVELOPMENT.—Not later than 1 year after the date of development of the Strategy, each department or agency with representation on the Panel shall—

(1) complete an adaptation plan for that department or agency that—

(A) implements the Strategy and is consistent with the natural resources climate change adaptation policy required by section 362;

(B) details the ongoing and expanding actions of the department or agency, and any changes in decisionmaking processes necessary to increase the ability of resources under the jurisdiction of the department or agency and, to the maximum extent practicable, resources under the jurisdiction of other departments and agencies that may be significantly affected by decisions of the department or agency, to become more resilient, adapt to, and withstand the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire; and

(C) includes a timeline for implementation;

(2) provide opportunities for public review and comment on the adaptation plan, and in the case of a plan by the Bureau of Indian Affairs, review by Indian tribes; and

(3) submit the plan to the President for approval.

(b) REVIEW BY PRESIDENT AND SUBMISSION TO CONGRESS.—

(1) REVIEW BY PRESIDENT.—The President shall—

(A) approve an adaptation plan submitted under subsection (a)(3) if the plan meets the requirements of subsection (c) and is consistent with the Strategy; and

(B) decide whether to approve the plan within 60 days of submission.

(2) DISAPPROVAL.—If the President disapproves an adaptation plan, the President shall direct the department or agency to submit a revised plan within 60 days of that disapproval.

(3) SUBMISSION TO CONGRESS.—Not later than 30 days after the date of approval of an adaptation plan by the President, the department or agency shall submit the plan to—

(A) the Committee on Natural Resources of the House of Representatives;

(B) the Committee on Energy and Natural Resources of the Senate;

(C) the Committee on Environment and Public Works of the Senate; and

(D) any other committees of the House of Representatives or the Senate with principal jurisdiction over the department or agency.

(c) REQUIREMENTS.—Each adaptation plan shall—

(1) establish programs for assessing the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire on natural resources under the jurisdiction of the department or agency preparing the plan, including—

(A) assessment of cumulative and synergistic effects; and

(B) programs that identify and monitor natural resources likely to be adversely affected and that have need for conservation;

(2) identify and prioritize—

(A) the strategies of the department or agency preparing the plan;

(B) the specific conservation actions that address the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire on natural resources under jurisdiction of the department or agency preparing the plan;

(C) strategies to protect, restore, and conserve such resources to become more resilient, adapt to, and better withstand those impacts, including—

(i) protection, restoration, and conservation of terrestrial, marine, estuarine, and freshwater habitats and ecosystems;

(ii) establishment of terrestrial, marine, estuarine, and freshwater habitat linkages and corridors;

(iii) restoration and conservation of ecological processes;

(iv) protection of a broad diversity of native species of fish, wildlife, and plant populations across the ranges of those species; and

(v) protection of fish, wildlife, and plant health, recognizing that climate can

alter the distribution and ecology of parasites, pathogens, and vectors;

(3) describe how the department or agency will—

(A) integrate the strategies and conservation activities into plans, programs, activities, and actions of the department or agency relating to the conservation and management of natural resources; and

(B) establish new plans, programs, activities, and actions, if necessary;

(4) establish methods—

(A) to assess the effectiveness of strategies and conservation actions the department or agency takes to protect, restore, and conserve natural resources so natural resources become more resilient, adapt to, and withstand the ongoing and expected impacts of climate change; and

(B) to update those strategies and actions to respond to new information and changing conditions;

(5) describe current and proposed mechanisms to enhance cooperation and coordination of natural resources adaptation efforts with other Federal

agencies, State and local governments, Indian tribes, and nongovernmental stakeholders;

(6) include written guidance to resource managers that—

(A) explains how managers are expected to address the ongoing and expected effects of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire;

(B) identifies how managers shall obtain any necessary site-specific information; and

(C) reflects best practices shared among relevant agencies, but recognizes the unique missions, objectives, and responsibilities of each agency;

(7) identify and assess data and information gaps necessary to develop natural resources adaptation plans and strategies; and

(8) consider strategies that engage youth and young adults (including youth and young adults working in full-time or part-time youth service or conservation corps programs) to provide the youth and young adults with opportunities for meaningful conservation and community service and to encourage opportunities for employment in the private sector through partnerships with employers.

(d) IMPLEMENTATION.—

(1) IN GENERAL.—Upon approval by the President, each department or agency with representation on the Panel shall, consistent with existing authority, implement the adaptation plan of the department or agency through existing and new plans, policies, programs, activities, and actions.

(2) CONSIDERATION OF IMPACTS.—

(A) IN GENERAL.—To the maximum extent practicable and consistent with existing authority, natural resource management decisions made by the department or agency shall—

(i) consider the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, nd wildfire on natural resources; and

(ii) choose alternatives that will avoid and minimize those impacts and promote resilience.

(B) GUIDANCE.—The Council on Environmental Quality shall provide guidance for Federal departments and agencies considering those impacts and choosing alternatives that will

avoid and minimize those impacts and promote resilience.

(e) REVISION AND REVIEW.—Not less than every 5 years, each department or agency shall review and revise the adaptation plan of the department or agency to incorporate the best available science, and other information, regarding the ongoing and expected impacts of climate change on natural resources.

SEC. 369. STATE NATURAL RESOURCES ADAPTATION PLANS.

(a) REQUIREMENT.—In order to be eligible for funds under section 370, not later than 1 year after the development of the Strategy, each State shall prepare a State natural resources adaptation plan detailing current and future efforts of the State to address the ongoing and expected impacts of climate change on natural resources and coastal areas within the jurisdiction of the State.

(b) REVIEW OR APPROVAL.—

(1) IN GENERAL.—The Secretary of the Interior and, as applicable, the Secretary of Commerce shall review each State adaptation plan, and approve the plan if the plan—

(A) meets the requirements of subsection (c); and

(B) is consistent with the Strategy.

(2) APPROVAL OR DISAPPROVAL.—The Secretary of the Interior and, as applicable, the Secretary of Commerce shall approve or disapprove the plan by written notice not later than 180 days after the date of submission of the plan (or a revised plan).

(3) RESUBMISSION.—Not later than 90 days after the date of resubmission of an adaptation plan that has been disapproved under paragraph (2), the Secretary of the Interior and, as applicable, the Secretary of Commerce, shall approve or disapprove the plan by written notice.

(c) CONTENTS.—A State natural resources adaptation plan shall—

(1) include strategies for addressing the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire on terrestrial, marine, estuarine, and freshwater fish, wildlife, plants, habitats, ecosystems, wildlife health, and ecological processes that—

(A) describe the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire on the diversity and health of fish,

wildlife and plant populations, habitats, ecosystems, and associated ecological processes;

(B) establish programs for monitoring the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire on fish, wildlife, and plant populations, habitats, ecosystems, and associated ecological processes;

(C) describe and prioritize proposed conservation actions that increase the ability of fish, wildlife, plant populations, habitats, ecosystems, and associated ecological processes to become more resilient, adapt to, and better withstand those impacts;

(D) consider strategies that engage youth and young adults (including youth and young adults working in full-time or part-time youth service or conservation corps programs) to provide the youth and young adults with opportunities for meaningful conservation and community service and to encourage opportunities for employment in the private sector through partnerships with employers;

(E) integrate protection and restoration of resource resilience into agency decision making and specific conservation actions;

(F) include a time frame for implementing conservation actions for fish, wildlife, and plant populations, habitats, ecosystems, and associated ecological processes;

(G) establish methods—

(i) for assessing the effectiveness of strategies and conservation actions taken to increase the ability of fish, wildlife, and plant populations, habitats, ecosystems, and associated ecological processes to become more resilient, adapt to, and better withstand the ongoing and expected impacts of climate changes, including, where applicable, ocean acidification, drought, flooding, and wildfire; and

(ii) for updating strategies and actions to respond appropriately to new information or changing conditions;

(H) are incorporated into a revision of the State wildlife action plan (also known as the State comprehensive wildlife strategy) that has been—

(i) submitted to the United States Fish and Wildlife Service; and

(ii) approved, or is pending approval, by the United States Fish and Wildlife Service; and

(I) are developed—

(i) with the participation of the State fish and wildlife agency, the State coastal agency, the State agency responsible for administration of Land and Water Conservation Fund grants, the State Forest Legacy program coordinator, and other State agencies considered appropriate by the Governor of the State;

(ii) in coordination with the Secretary of the Interior, and where applicable, the Secretary of Commerce; and

(iii) in coordination with other States that share jurisdiction over natural resources with the State; and

(2) in the case of a coastal State, include strategies for addressing the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire on a coastal zone that—

(A) identify natural resources likely to be impacted by climate change, and describe the impacts;

(B) identify and prioritize continuing research and data collection needed to address the impacts, including—

(i) acquisition of high-resolution coastal elevation and nearshore bathymetry data;

(ii) historic shoreline position maps, erosion rates, and inventories of shoreline features and structures;

(iii) measures and models of relative rates of sea level rise or lake level changes, including effects on flooding, storm surge, inundation, and coastal geological processes;

(iv) measures and models of habitat loss, including projected losses of coastal wetlands and potentials for inland migration of natural shoreline habitats;

(v) measures and models of ocean and coastal species and ecosystem migrations, and changes in species population dynamics;

(vi) changes in storm frequency, intensity, or rainfall patterns;

(vii) measures and models of saltwater intrusion into coastal rivers and aquifers;

(viii) changes in chemical or physical characteristics of marine and estuarine systems, including the presence, extent, and timing of hypoxic and anoxic conditions;

(ix) measures and models of increased harmful algal blooms; and

(x) measures and models of the spread of invasive species;

(C) identify and prioritize adaptation strategies to protect, restore, and conserve natural resources to enable natural resources to become more resilient, adapt to, and withstand the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire, including—

(i) protection, maintenance, and restoration of ecologically important coastal lands, coastal and ocean ecosystems, and species biodiversity and the establishment

of habitat buffer zones, migration corridors, and climate refugia; and

(ii) improved planning, siting policies, hazard mitigation strategies, and State property insurance programs;

(D) establish programs—

(i) for the long-term monitoring of the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire on the ocean and coastal zone; and

(ii) assess and adjust, when necessary, the adaptive management strategies;

(E) establish performance measures that—

(i) assess the effectiveness of adaptation strategies intended to improve resilience and the ability of natural resources to adapt to and withstand the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire;

(ii) assess the effectiveness of adaptation strategies intended to minimize those impacts on the coastal zone; and

(iii) update the strategies to respond to new information or changing conditions; and

(F) are developed—

(i) with the participation of the State coastal agency and other appropriate State agencies; and

(ii) in coordination with the Secretary of Commerce and other appropriate Federal agencies.

(d) PUBLIC INPUT.—In developing the adaptation plan, a State shall provide for solicitation and consideration of public input and independent scientific input.

(e) COORDINATION WITH OTHER PLANS.—The State adaptation plan shall review research and information and, where appropriate, integrate the goals and measures set forth in other natural resources conservation strategies, including—

(1) the National Fish Habitat Action Plan;

(2) plans under the North American Wetlands Conservation Act (16 U.S.C. 4401 et seq.);

(3) the Federal, State, and local partnership known as ''Partners in Flight'';

(4) federally approved coastal zone management plans under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.);

(5) federally approved regional fishery management plants and habitat conservation activities under the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.);

(6) the National Coral Reef Action Plan;

(7) recovery plans for threatened species and endangered species under section 4(f) of the Endangered Species Act of 1973 (16 U.S.C. 1533(f));

(8) habitat conservation plans under section 10 of that Act (16 U.S.C. 1539);

(9) other Federal, State, and tribal plans for imperiled species;

(10) State or tribal hazard mitigation plans;

(11) State or tribal water management plans;

(12) State property insurance programs; and

(13) other State-based strategies that comprehensively implement adaptation activities to remediate the ongoing and expected effects of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire, on terrestrial, marine, and freshwater fish, wildlife, plants, and other natural resources.

(f) UPDATING.—Each State plan shall be updated at least every 5 years.

(g) FUNDING.—

(1) IN GENERAL.—Funds allocated to States under section 370 shall be used only for activities consistent with a State natural resources adaptation plan approved by the Secretary of the Interior and, as appropriate, the Secretary of Commerce.

(2) FUNDING PRIOR TO THE APPROVAL OF A STATE PLAN.—Until the earlier of the date that is 3 years after the date of enactment of this Act or the date on which a State adaptation plan is approved, a State shall be eligible to receive funding under section 370 for adaptation activities that are—

(A) consistent with the comprehensive wildlife strategy of the State and, where appropriate, other natural resources conservation strategies; and

(B) in accordance with a work plan developed in coordination with—

(i) the Secretary of the Interior; and

(ii) the Secretary of Commerce.

(3) COASTAL STATE.—In developing a work plan under paragraph (2)(B), a coastal State shall

coordinate with the Secretary of Commerce only for those portions of the strategy relating to activities affecting the coastal zone.

(4) PENDING APPROVAL.—During the period for which approval by the applicable Secretary is pending, the State may continue to receive funds under section 370 pursuant to the work plan described in paragraph (2)(B).

SEC. 370. NATURAL RESOURCES CLIMATE CHANGE ADAPTATION ACCOUNT.

(a) DISTRIBUTION OF AMOUNTS.—

(1) STATES.—Of the amounts made available for each fiscal year to carry out this subpart, 38.5 percent shall be provided to States to carry out natural resources adaptation activities in accordance with adaptation plans approved under section 369, and shall be distributed as follows:

(A) 32.5 percent shall be available to State wildlife agencies in accordance with the apportionment formula established under the second subsection (c) (relating to the apportionment of the Wildlife Conservation and Restoration Account) of section 4 of the Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669c); and

(B) 6 percent shall be available to State coastal agencies pursuant to the formula established by the Secretary of Commerce under section 306(c) of the Coastal Management Act of 1972 (16 U.S.C. 1455(c)).

(2) NATURAL RESOURCE ADAPTATION.—Of the amounts made available for each fiscal year to carry out this subpart—

(A) 17 percent shall be allocated to the Secretary of the Interior for use in funding—

(i) natural resources adaptation activities carried out—

(I) under endangered species, migratory species, and other fish and wildlife programs administered by the National Park Service, the United States Fish and Wildlife Service, the Bureau of Indian Affairs, and the Bureau of Land Management;

(II) on wildlife refuges, National Park Service land, and other public land under the jurisdiction of the United States Fish and Wildlife Service, the Bureau of Land Management,

the Bureau of Indian Affairs, or the National Park Service; and

(III) within Federal water managed by the Bureau of Reclamation and the National Park Service; and

(ii) the implementation of the National Fish and Wildlife Habitat and Corridors Information Program required by section 371;

(B) 5 percent shall be allocated to the Secretary of the Interior for natural resources adaptation activities carried out under cooperative grant programs, including—

(i) the cooperative endangered species conservation fund authorized under section 6 of the Endangered Species Act of 1973 (16 U.S.C. 1535);

(ii) programs under the North American Wetlands Conservation Act (16 U.S.C. 4401 et seq.);

(iii) the Neotropical Migratory Bird Conservation Fund established by section 9(a) of the Neotropical Migratory Bird Conservation Act (16 U.S.C. 6108(a));

(iv) the Coastal Program of the United States Fish and Wildlife Service;

(v) the National Fish Habitat Action Plan;

(vi) the Partners for Fish and Wildlife Program;

(vii) the Landowner Incentive Program;

(viii) the Wildlife Without Borders Program of the United States Fish and Wildlife Service; and

(ix) the Migratory Species Program and Park Flight Migratory Bird Program of the National Park Service; and

(C) 3 percent shall be allocated to the Secretary of the Interior to provide financial assistance to Indian tribes to carry out natural resources adaptation activities through the Tribal Wildlife Grants Program of the United States Fish and Wildlife Service.

(3) LAND AND WATER CONSERVATION.—

(A) DEPOSITS.—

(i) IN GENERAL.—Of the amounts made available for each fiscal year to carry out this subpart, 12 percent shall be de-

posited in the Land and Water Conservation Fund established under section 2 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460*l*–5).

(ii) USE OF DEPOSITS.—Deposits in the Land and Water Conservation Fund under this paragraph shall—

(I) be supplemental to authorizations provided under section 3 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460*l*–6), which shall remain available for non-adaptation needs; and

(II) be available to carry out this subpart without further appropriation or fiscal year limitation.

(B) DISTRIBUTION OF AMOUNTS.—Of the amounts deposited under this paragraph in the Land and Water Conservation Fund—

(i) for the purposes of carrying out the natural resources adaptation activities through the acquisition of land and interests in land under section 6 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460*l*–8), ⅙ shall be allocated

to the Secretary of the Interior and made available on a competitive basis—

(I) to States, in accordance with the natural resources adaptation plans of States, and to Indian tribes;

(II) notwithstanding section 5 of that Act (16 U.S.C. 460*l*–7); and

(III) in addition to any funds provided pursuant to annual appropriations Acts, the Energy Policy Act of 2005 (42 U.S.C. 15801 et seq.), or any other authorization for non-adaptation needs;

(ii) ⅓ shall be allocated to the Secretary of the Interior to carry out natural resources adaptation activities through the acquisition of lands and interests in land under section 7 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460*l*–9);

(iii) ⅙ shall be allocated to the Secretary of Agriculture and made available to the States and Indian tribes to carry out natural resources adaptation activities through the acquisition of land and inter-

ests in land under section 7 of the Cooperative Forestry Assistance Act of 1978 (16 U.S.C. 2103c); and

(iv) ⅓ shall be allocated to the Secretary of Agriculture to carry out natural resources adaptation activities through the acquisition of land and interests in land under section 7 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460*l*–9).

(C) EXPENDITURE OF FUNDS.—In allocating funds under subparagraph (B), the Secretary of the Interior and the Secretary of Agriculture shall take into consideration factors including—

(i) the availability of non-Federal contributions from State, local, or private sources;

(ii) opportunities to protect fish and wildlife corridors or otherwise to link or consolidate fragmented habitats;

(iii) opportunities to reduce the risk of catastrophic wildfires, drought, extreme flooding, or other climate-related events

that are harmful to fish and wildlife and people; and

(iv) the potential for conservation of species or habitat types at serious risk due to climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire, or other stressors.

(4) NATIONAL FOREST AND GRASSLAND ADAPTATION.—Of the amounts made available for each fiscal year to carry out this subpart, 5 percent shall be allocated to the Forest Service, through the Secretary of Agriculture—

(A) to fund natural resources adaptation activities carried out in national forests and national grasslands under the jurisdiction of the Forest Service; and

(B) to carry out natural resource adaptation activities on State and private forest land carried out under the Cooperative Forestry Assistance Act of 1978 (16 U.S.C. 2101 et seq.).

(5) COASTAL AND MARINE SYSTEM ADAPTATION.—Of the amounts made available for each fiscal year to carry out this subpart, 7 percent shall be allocated to the Secretary of Commerce to fund natural resources adaptation activities that protect,

maintain, and restore coastal, estuarine, and marine resources, habitats, and ecosystems, including such activities carried out under—

(A) the coastal and estuarine land conservation program administered by the National Oceanic and Atmospheric Administration;

(B) the community-based restoration program for fishery and coastal habitats established under section 117 of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (16 U.S.C. 1891a);

(C) the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.) that are specifically designed to strengthen the ability of coastal, estuarine, and marine resources, habitats, and ecosystems to adapt to and withstand the ongoing and expected impacts of climate change, including, where applicable, ocean acidification, drought, flooding, and wildfire;

(D) the Open Rivers Initiative;

(E) the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.);

(F) the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 et seq.);

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

(H) the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1401 et seq.);

(I) the Coral Reef Conservation Act of 2000 (16 U.S.C. 6401 et seq.); and

(J) the Estuary Restoration Act of 2000 (33 U.S.C. 2901 et seq.).

(6) ESTUARINE AND FRESHWATER ECOSYSTEM ADAPTATION.—Of the amounts made available for each fiscal year to carry out this subpart, 7.5 percent shall be allocated to the Administrator of the Environmental Protection Agency and 5 percent shall be available to the Secretary of the Army for use by the Corps of Engineers for use in natural resources adaptation activities restoring and protecting—

(A) large-scale freshwater aquatic ecosystems, such as the Everglades, the Great Lakes, Flathead Lake, the Missouri River, the Mississippi River, the Colorado River, the Sacramento-San Joaquin Rivers, the Ohio River,

the Columbia-Snake River System, the Apalachicola, Chattahoochee, and Flint River System, the Connecticut River, and the Yellowstone River;

(B) large-scale estuarine ecosystems, such as Chesapeake Bay, Long Island Sound, Puget Sound, the Mississippi River Delta, the San Francisco Bay Delta, Narragansett Bay, and Albemarle-Pamlico Sound;

(C) freshwater and estuarine ecosystems, watersheds, and basins identified and prioritized by the Administrator of the Environmental Protection Agency or the Corps of Engineers, working in cooperation with other Federal agencies, States, tribal governments, local governments, scientists, and other conservation partners; and

(D)(i) habitats and ecosystems through estuary habitat restoration projects authorized by the Estuary Restoration Act of 2000 (33 U.S.C. 2901 et seq.);

(ii) project modifications for improvement of the environment;

(iii) aquatic restoration and protection projects authorized by section 206 of the Water

Resources Development Act of 1996 (33 U.S.C. 2330); and

(iv) other appropriate programs and activities.

(b) USE OF FUNDS BY FEDERAL DEPARTMENTS AND AGENCIES.—Funds allocated to Federal departments and agencies under this section shall only be used for natural resources adaptation activities consistent with an adaptation plan approved under section 368.

(c) STATE COST-SHARING.—Notwithstanding any other provision of law, a State that receives a grant under this section shall use funds from non-Federal sources to pay 10 percent of the costs of each activity carried out under the grant.

SEC. 371. NATIONAL FISH AND WILDLIFE HABITAT AND CORRIDORS INFORMATION PROGRAM.

(a) DEFINITIONS.—In this section:

(1) GEOSPATIAL INTEROPERABILITY FRAMEWORK.—The term ''Geospatial Interoperability Framework'' means the strategy used by the National Biological Information Infrastructure (based on accepted standards, specifications, and protocols adopted through the International Standards Organization, the Open Geospatial Consortium, and the Federal Geographic Data Committee) to manage, ar-

chive, integrate, analyze, and make geospatial and biological data and metadata accessible.

(2) PROGRAM.—The term ''Program'' means the National Fish and Wildlife Habitat and Corridors Information Program established under subsection (b).

(3) SECRETARY.—The term ''Secretary'' means the Secretary of the Interior.

(4) SYSTEM.—The term ''System'' means the Habitat and Corridors Information System established under subsection (d)(1).

(b) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary, in cooperation with the States and Indian tribes, shall establish a National Fish and Wildlife Habitat and Corridors Information Program.

(c) PURPOSE.—The purposes of the Program are—

(1) to support States and Indian tribes in developing geographical information system databases of fish and wildlife habitats and corridors that—

(A) inform planning and development decisions within each State;

(B) enable each State to model climate impacts and adaptation; and

(C) provide geographically specific enhancements of State wildlife action plans;

(2) to ensure the collaborative development of a comprehensive national geographic information system database of maps, models, data, surveys, informational products, and other geospatial information regarding fish and wildlife habitat and corridors that—

(A) is based on consistent protocols for sampling and mapping across landscapes;

(B) takes into account regional differences; and

(C) uses—

(i) existing and planned State- and tribal-based geographical information system databases; and

(ii) existing databases, analytical tools, metadata activities, and other information products available through the National Biological Information Infrastructure maintained by the Secretary and nongovernmental organizations; and

(3) to facilitate the use of those databases by Federal, State, local, and tribal decisionmakers to incorporate qualitative information on fish and wild-

life habitats and corridors at the earliest practicable stage for use in—

(A) prioritizing and targeting natural resources adaptation strategies and activities;

(B) avoiding, minimizing, and mitigating the impacts on fish and wildlife habitat and corridors when locating energy development, water, transmission, transportation, and other land use projects;

(C) assessing the impacts of existing development on habitats and corridors; and

(D) developing management strategies that enhance the ability of fish, wildlife, and plant species to migrate or respond to shifting habitats within existing habitats and corridors.

(d) HABITAT AND CORRIDORS INFORMATION SYSTEM.—

(1) IN GENERAL.—The Secretary, in cooperation with States and Indian tribes, shall establish a Habitat and Corridors Information System.

(2) CONTENTS.—The System shall—

(A) include maps, data, and descriptions of fish and wildlife habitat and corridors that—

(i) have been developed by Federal agencies, State wildlife agencies, and nat-

ural heritage programs, Indian tribes, local governments, nongovernmental organizations, and industry; and

(ii) meet accepted geospatial interoperability framework data and metadata protocols and standards;

(B) include maps and descriptions of projected shifts in habitats and corridors of fish and wildlife species in response to climate change;

(C) ensure data quality;

(D) at scales useful to decisionmakers, make data, models, and analyses included in the System available—

(i) to prioritize and target natural resources adaptation strategies and activities;

(ii) to assess the impacts of existing development on habitats and corridors;

(iii) to assess the impacts of proposed energy development, water, transmission, transportation, and other land use projects and to avoid, minimize, or mitigate those impacts on habitats and corridors; and

(iv) to develop management strategies that enhance the ability of fish, wildlife, and plant species to migrate or respond to shifting habitats within existing habitats and corridors;

(E) update maps and other information as landscapes, habitats, corridors, and wildlife populations change, or as new information becomes available;

(F) encourage development of collaborative plans by Federal and State agencies and Indian tribes that monitor and evaluate the ability of the System to meet the needs of decision-makers;

(G) identify gaps in habitat and corridor information, mapping, and research needed to fully assess current data and metadata;

(H) prioritize research and future data collection activities for use in updating the System and provide support for those activities;

(I) include mechanisms to support collaborative research, mapping, and planning of habitats and corridors by Federal and State agencies, Indian tribes, and other interested stakeholders;

(J) incorporate biological and geospatial data on species and corridors found in energy development and transmission plans, including renewable energy initiatives, transportation, and other land use plans;

(K) identify, prioritize, and describe key parcels of non-Federal land that—

(i) are located within units of the National Park System, National Wildlife Refuge System, National Forest System, or National Grassland System; and

(ii) are critical to maintenance of wildlife habitat and migration corridors; and

(L) be based on the best scientific information available.

(e) FINANCIAL AND OTHER SUPPORT.—The Secretary may provide support to the States and Indian tribes, including financial and technical assistance, for activities that support the development and implementation of the System.

(f) COORDINATION.—In cooperation with States and Indian tribes, the Secretary shall recommend how the information in the System may be incorporated into relevant

State and Federal plans that affect fish and wildlife, including—

(1) land management plans;

(2) the State Comprehensive Wildlife Conservation Strategies; and

(3) appropriate tribal conservation plans.

(g) PURPOSE OF INCORPORATION.—The Secretary shall make the recommendations required by subsection (f) to ensure that relevant State and Federal plans that affect fish and wildlife—

(1) prevent unnecessary habitat fragmentation and disruption of corridors;

(2) promote the landscape connectivity necessary to allow wildlife to move as necessary to meet biological needs, adjust to shifts in habitat, and adapt to climate change; and

(3) minimize the impacts of energy, development, water, transportation, and transmission projects and other activities expected to impact habitat and corridors.

SEC. 372. ADDITIONAL PROVISIONS REGARDING INDIAN TRIBES.

(a) FEDERAL TRUST RESPONSIBILITY.—Nothing in this subpart amends, alters, or gives priority over the Federal trust responsibility to any Indian tribe.

(b) EXEMPTION FROM FOIA.—If a Federal department or agency receives any information relating to sacred sites or cultural activities identified by an Indian tribe as confidential, such information shall be exempt from disclosure under section 552 of title 5, United States Code (commonly referred to as the Freedom of Information Act).

(c) APPLICATION OF OTHER LAW.—The Secretary of the Interior may apply the provisions of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450 et seq.) in the implementation of this subpart.

Subpart D—Additional Climate Change Adaptation Programs

SEC. 381. WATER SYSTEM MITIGATION AND ADAPTION PARTNERSHIPS.

(a) DEFINITIONS.—In this section:

(1) OWNER OR OPERATOR.—

(A) IN GENERAL.—The term ''owner or operator'' means a person (including a regional, local, municipal, or private entity) that owns or operates a water system.

(B) INCLUSION.—The term ''owner or operator'' includes—

(i) a non-Federal entity that has operational responsibilities for a federally or State owned water system; and

(ii) an entity formed pursuant to any State's joint exercise of powers statutes that includes one or more of the entities in paragraph (A).

(2) WATER SYSTEM.—The term ''water system'' means—

(A) a community water system (as defined in section 1401 of the Safe Drinking Water Act (42 U.S.C. 300f));

(B) a treatment works (as defined in section 212 of the Federal Water Pollution Control Act (33 U.S.C. 1292)), including a municipal separate storm sewer system;

(C) a decentralized wastewater treatment system for domestic sewage;

(D) a groundwater storage and replenishment system; or

(E) a system for transport and delivery of water for irrigation or conservation.

(b) ESTABLISHMENT.—The Administrator shall establish a water system mitigation and adaptation partner-

ship program to provide funds to States for water system adaptation projects.

(c) GRANTS.—Beginning in fiscal year 2010, each State receiving funds pursuant to this section shall make grants to owners or operators of water systems to address any ongoing or forecasted (based on the best available research and data) climate-related impact on the water quality, water supply or reliability of a region of the United States, for the purposes of mitigating or adapting to the impacts of climate change.

(d) ELIGIBLE USES.—The funds made available to each State pursuant to this section shall be used exclusively to assist in the planning, design, construction, implementation, or operation or maintenance of any program or project to respond or increase the resilience of a water system to climate change by—

(1) conserving water or enhancing water use efficiency, including through the use of water metering and electronic sensing and control systems to measure the effectiveness of a water efficiency program;

(2) modifying or relocating existing water system infrastructure made or projected to be significantly impaired by climate change impacts;

(3) preserving or improving water quality, including through measures to manage, reduce, treat,

or reuse municipal stormwater, wastewater, or drinking water;

(4) investigating, designing, or constructing groundwater remediation, recycled water, or desalination facilities or systems to serve existing communities;

(5) enhancing water management by increasing watershed preservation and protection, such as through the use of natural or engineered green infrastructure in the management, conveyance, or treatment of water, wastewater, or stormwater;

(6) enhancing energy efficiency or the use and generation of renewable energy in the management, conveyance, or treatment of water, wastewater, or stormwater;

(7) supporting the adoption and use of advanced water treatment, water supply management (such as reservoir reoperation and water banking), or water demand management technologies, projects, or processes (such as water reuse and recycling, adaptive conservation pricing, and groundwater banking) that maintain or increase water supply or improve water quality;

(8) modifying or replacing existing systems or constructing new systems for existing communities

or land currently in agricultural production to improve water supply, reliability, storage, or conveyance in a manner that—

(A) promotes conservation or improves the efficiency of utilization of available water supplies; and

(B) does not further exacerbate stresses on ecosystems or cause redirected impacts by degrading water quality or increasing net greenhouse gas emissions;

(9) supporting practices and projects, such as improved irrigation systems, water banking and other forms of water transactions, groundwater recharge, stormwater capture, groundwater conjunctive use, and reuse or recycling of drainage water, to improve water quality or promote more efficient water use on land currently in agricultural production; or

(10) conducting and completing studies or assessments to project how climate change may impact the future operations and sustainability of water systems.

(e) APPLICATION.—To be eligible to receive a grant from the State under this section, the owner or operator

of a water system shall submit to the State an application that—

(1) includes a proposal of the program, strategy, or infrastructure improvement to be planned, designed, constructed, implemented, or maintained by the water system;

(2) cites the best available research or data that demonstrate—

(A) the risk to the water resources or infrastructure of the water system as a result of ongoing or forecasted changes to the hydrological system brought about by factors arising from climate change, including rising sea levels and changes in precipitation levels; and

(B) how the proposed program, strategy, or infrastructure improvement would perform under the anticipated climate conditions; and

(3) explains how the proposed program, strategy, or infrastructure improvement is expected to enhance the resiliency of the water system, including source water protection for community water systems, to these risks or reduce the direct or indirect greenhouse gas emissions of the water system.

(f) COMPETITIVE PROCESS.—

(1) IN GENERAL.—Each calendar year, each State shall conduct a competitive process to select and fund applications under this section.

(2) PRIORITY REQUIREMENTS AND WEIGHTING.—In carrying out the process, the States shall—

(A) prioritize funding of applications that are submitted by the owners or operators of water systems that are, based on the best available research and data, at the greatest and most immediate risk of facing significant climate-related negative impacts on water quality or quantity; and

(B) in selecting among the priority applications determined under subparagraph (A), ensure that, to the maximum extent practicable, the final list of applications funded for each year includes a substantial number meeting one or more of each of the following goals—

(i) promote more efficient water use, water conservation, water reuse, or recycling;

(ii) use decentralized, low-impact development technologies and nonstructural approaches, including practices that use,

enhance, or mimic the natural hydrological cycle or protect natural flows;

(iii) reduce stormwater runoff by protecting or enhancing natural ecosystem functions;

(iv) modify, upgrade, enhance, or replace existing water system infrastructure in response to ongoing or forecasted climate-related impacts;

(v) promote the sustainability and reliability of water supplies used for agricultural purposes;

(vi) improve water quality or quantity for agricultural and municipal uses, including through salinity reduction; and

(vii) provide multiple benefits, including to water supply enhancement or demand reduction, water quality protection or improvement, increased flood protection, and ecosystem protection or improvement; and

(C) provide for solicitation and consideration of public input in the development of criteria used in evaluating applications.

(g) COST-SHARING.—

(1) FEDERAL SHARE.—The share of the cost of any program, strategy, or infrastructure improvement that is the subject of a grant awarded by a State to the owner or operator of a water system under subsection (c) paid through funds distributed under this section shall not exceed 50 percent of the cost of the program, strategy, and infrastructure improvement.

(2) CALCULATION OF NON-FEDERAL SHARE.—In calculating the non-Federal share of the cost of a program, strategy, or infrastructure improvement proposed by a water system through an application submitted by the water system under subsection (e), the State shall—

(A) include the value of any in-kind services that are integral to the completion of the program, strategy, or infrastructure improvement, including reasonable administrative and overhead costs; and

(B) not include any other amount that the water system receives from a Federal agency.

(h) LABOR STANDARDS.—

(1) IN GENERAL.—Other than with respect to employees of State and local agencies, or other public entities, all laborers and mechanics employed on

infrastructure improvements funded directly by or assisted in whole or in part by this section shall be paid wages at rates not less than those prevailing for the same type of work on similar construction in the immediate locality, as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of part A of subtitle II of title 40, United States Code.

(2) AUTHORITY AND FUNCTIONS.—With respect to the labor standards in this subsection, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code.

SEC. 382. FLOOD CONTROL, PROTECTION, PREVENTION, AND RESPONSE.

(a) ESTABLISHMENT.—The Administrator shall establish a Flood Control, Protection, Prevention and Response Program to provide funds to States for flood control, protection, prevention and response projects.

(b) ELIGIBLE USES.—

(1) IN GENERAL.—States receiving funding pursuant to this section may use such funding on flood control, protection, prevention and response programs and projects addressing the projected im-

pacts of climate change in accordance with this section.

(2) OBJECTIVES.—Such projects and activities shall seek to mitigate or adapt to the destructive impacts of climate related increases in the duration, frequency, or magnitude of rainfall or runoff, including snowmelt runoff, as well as hurricanes, including projects and programs that—

(A) reduce flood damage, risk, and vulnerability;

(B) identify, maintain and restore ecosystems and natural barriers integral to flood control, protection, prevention and response;

(C) update the available data, technologies, and scientific knowledge used in estimating, identifying and mitigating flood hazards;

(D) highlight, update and remediate vulnerabilities in emergency response;

(E) incorporate risk analysis and a risk-reduction approach to flood-related investments;

(F) incorporate and identify changes in risk due to processes such as land loss, subsidence, sea-level rise, reduced natural buffers, urban development and infrastructure aging; and

(G) identify and incorporate innovative approaches to land use management, water resource planning, and ecosystem restoration.

(3) PRIORITY.—Priority in projects to reduce flood events shall be given to those projects that directly assist local governments and communities in flood control, protection, prevention and response activities.

SEC. 383. WILDFIRE.

(a) FINDINGS.—Congress finds that—

(1) since 1980, wildfires in the United States have burned almost twice as many acres per year on average than the average burned acreage during the period beginning on January 1, 1920, and ending on December 31, 1979;

(2) the wildfire season in the western United States has increased by an average of 78 days during the 30-year period preceding the date of enactment of this Act;

(3) researchers predict that the area subject to wildfire damage will increase during the 21st century by up to 118 percent as a result of climate change;

(4) of the annual budget of the Forest Service, the Forest Service used for wildfire suppression activities—

(A) 13 percent in 1991; and

(B) 45 percent in 2007; and

(5) 1 percent of the largest escaped fires—

(A) burn 95 percent of all burned acres; and

(B) consume 85 percent of all wildfire fighting costs.

(b) PURPOSE.—The purpose of this section is to authorize a program to reduce the risk of wildfires in fire-ready communities.

(c) DEFINITIONS.—In this section:

(1) FIRE-READY COMMUNITY.—The term ''fire-ready community'' means a community that—

(A) is located within a priority area identified pursuant to subsection (d);

(B) has a cooperative fire agreement that articulates the roles and responsibilities for Federal, State and local government entities in local wildfire suppression and protection;

(C) has local codes that require fire-resistant home design and building materials;

(D) has a community wildfire protection plan (as defined in section 101 of the Healthy Forests Restoration Act of 2003 (16 U.S.C. 6502)); and

(E) is engaged in a successful collaborative process that includes multiple interested persons representing diverse interests and is transparent and nonexclusive, such as a resource advisory committee established under section 205 of the Secure Rural Schools and Community Self-Determination Act of 2000 (Public Law 106–393; 16 U.S.C. 500 note).

(2) SECRETARIES.—The term ''Secretaries'' means the Secretary of Agriculture and the Secretary of the Interior.

(d) FIRE RISK MAPPING.—As soon as is practicable after the date of the enactment of this Act, the Secretaries shall develop regional maps of communities most at risk of wildfire and in need of hazardous fuel treatment and maintenance. The maps shall identify priority areas for hazardous fuels reduction projects, including—

(1) at-risk communities in fire-prone areas of the wildland-urban interface (as defined in section 101 of the Healthy Forests Restoration Act of 2003 (16 U.S.C. 6502));

(2) watersheds and municipal drinking water sources;

(3) emergency evacuation corridors;

(4) electricity transmission corridors;

(5) low-capacity or low-income communities; and

(6) communities in fire-prone areas due to the impact of pest infestation on forest resources.

(e) LOCAL WILDLAND FIREFIGHTING CAPABILITY GRANTS.—

(1) GRANTS AVAILABLE.—The Secretaries may provide cost-share grants to fire-ready communities to assist such communities in carrying out activities authorized by paragraph (2).

(2) ELIGIBLE ACTIVITIES.—Grant funds may be used for the following:

(A) Education programs to raise awareness of homeowners and citizens about wildland fire protection practices, including FireWise or similar programs.

(B) Training programs for local firefighters on wildland firefighting techniques and approaches.

(C) Equipment acquisition to facilitate wildland fire preparedness.

(D) Implementation of a community wildfire protection plan.

(E) Forest restoration that accomplishes fuels reduction.

(f) WILDLAND FIRE COST-SHARE AGREEMENTS.—In developing any wildland fire cost-share agreement with a State Forester or equivalent official, the Secretaries shall, to the maximum extent practicable, encourage the State and local communities involved to become fire-ready communities.

SEC. 384. COASTAL AND GREAT LAKES STATE ADAPTATION PROGRAM.

(a) FINDINGS.—According to the National Ocean Economics Program, coastal and Great Lakes States account for 81.4 percent of the population of the United States and generate 83 percent of the economic output of the United States.

(b) DEFINITIONS.—In this section:

(1) COASTAL STATE.—The term ''coastal State'' has the meaning given the term ''coastal state'' in section 304 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1453).

(2) COASTAL WATERSHED.—The term ''coastal watershed'' means a geographical area drained into or contributing water to an estuarine area, an ocean,

or a Great Lake, all or a portion of which is within the coastal zone (as defined in section 304 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1453)).

(3) SHORELINE MILES.—The term ''shoreline miles'', with respect to a coastal State, means the mileage of tidal shoreline or Great Lake shoreline of the coastal State, based on the most recently available data from or accepted by the National Ocean Service of the National Oceanic and Atmospheric Administration.

(c) DISTRIBUTION.—

(1) IN GENERAL.—The Administrator shall distribute, in accordance with this section, funding for coastal State economic protection under subsection.

(2) ALLOCATION.—The funding available for allocation under subsection (b) for a calendar year shall be distributed among coastal States, as follows:

(A) 25 percent based on the proportion that—

(i) the number of shoreline miles of a coastal State; bears to

(ii) the total number of shoreline miles of all coastal States.

(B) 25 percent based on the proportion that—

(i) the population of a coastal State; bears to

(ii) the total population of all coastal States.

(C) 50 percent divided equally among all coastal States.

(d) USE OF FUNDING.—

(1) IN GENERAL.—During any calendar year, a coastal State receiving funding under this section may use the funding only for projects and activities to plan for and address the impacts of climate change in the coastal watershed, including—

(A) to address the impacts of climate change with respect to—

(i) accelerated sea level rise and lake level changes;

(ii) shoreline erosion;

(iii) increased storm frequency or intensity;

(iv) changes in rainfall or other precipitation; and

(v) related flooding;

(B) to identify and develop plans to protect, or, as necessary or applicable, to relocate public facilities and infrastructure, coastal resources of national significance, public energy facilities, or other public water uses located in the coastal watershed that are affected by climate change, including strategies that use natural resources, such as natural buffer zones, natural shorelines, and habitat protection or restoration;

(C) to research and collect data using, or on matters such as—

(i) historical shoreline position maps;

(ii) historical shoreline erosion rates;

(iii) inventories of shoreline features and conditions;

(iv) acquisition of high-resolution topography and bathymetry;

(v) sea level rise inundation models;

(vi) storm surge sea level rise linked inundation models;

(vii) shoreline change modeling based on sea level rise projections;

(viii) sea level rise vulnerability analyses and socioeconomic studies; and

(ix) environmental and habitat changes associated with sea level rise; and

(D) to respond to—

(i) changes in chemical characteristics (including ocean acidification) and physical characteristics (including thermal stratification) of marine systems;

(ii) saltwater intrusion into groundwater aquifers;

(iii) increased harmful algae blooms;

(iv) spread of invasive species;

(v) coastal habitat loss;

(vi) species migrations; and

(vii) marine, estuarine, and freshwater ecosystem changes associated with climate change.

(2) EXECUTION.—Priority to plan and carry out projects and activities under this subsection shall be given to State coastal agencies, as determined in accordance with State law.

(3) COORDINATION.—In carrying out this subsection, a coastal State shall coordinate with other statewide climate change efforts in order to avoid duplication of such efforts.

(e) REPORT.—Not later than 1 year after the date on which a State receives funds under this section, and biennially thereafter until such time as the funding is fully expended, the State shall submit to the Administrator, or the heads of such other Federal agencies as the President may designate, a report that—

(1) provides a full accounting for the State's use of funding distributed under this section, including a description of the projects and activities funded; and

(2) may be independent or included within any report required for any State programs for greenhouse gas reduction and climate adaptation.

DIVISION B—POLLUTION REDUCTION AND INVESTMENT

TITLE I—REDUCING GLOBAL WARMING POLLUTION

Subtitle A—Reducing Global Warming Pollution

SEC. 101. REDUCING GLOBAL WARMING POLLUTION.

The Clean Air Act is amended by adding after title VI (42 U.S.C. 7671 et seq.) the following:

"TITLE VII—GLOBAL WARMING POLLUTION REDUCTION AND INVESTMENT PROGRAM

"PART A—GLOBAL WARMING POLLUTION REDUCTION GOALS AND TARGETS

"SEC. 701. FINDINGS.

''Congress finds that—

''(1) global warming poses a significant threat to the national security, economy, public health and welfare, and environment of the United States, as well as of other countries;

''(2) reviews of scientific studies, including by the Intergovernmental Panel on Climate Change and the National Academy of Sciences, demonstrate that global warming is the result of the combined anthropogenic greenhouse gas emissions from numerous sources of all types and sizes;

''(3) each increment of emission, when combined with other emissions, causes or contributes materially to the acceleration and extent of global warming and its adverse effects for the lifetime of such gas in the atmosphere;

''(4) accordingly, controlling emissions in small as well as large quantities is essential to prevent,

slow the pace of, reduce the threats from, and mitigate global warming and its adverse effects;

"(5) because they induce global warming, greenhouse gas emissions cause or contribute to injuries to persons in the United States, including—

"(A) adverse health effects, such as disease and loss of life;

"(B) displacement of human populations;

"(C) damage to property and other interests relating to ocean levels, acidification, and ice changes;

"(D) severe weather and seasonal changes;

"(E) disruption, costs, and losses to business, trade, employment, farms, subsistence, aesthetic enjoyment of the environment, recreation, culture, and tourism;

"(F) damage to plants, forests, lands, and waters;

"(G) harm to wildlife and habitat;

"(H) scarcity of water and the decreased abundance of other natural resources;

"(I) worsening of tropospheric air pollution;

"(J) substantial threats of similar damage; and

"(K) other harm;

"(6) the fact that many of those effects and risks of future effects of global warming are widely shared does not minimize the adverse effects individual persons have suffered, will suffer, and are at risk of suffering because of global warming;

"(7) the fact that some of the adverse and potentially catastrophic effects of global warming are at risk of occurring and not a certainty does not negate the harm persons suffer from actions that increase the likelihood, extent, and severity of such future impacts;

"(8) countries of the world look to the United States for leadership in addressing the threat of and harm from global warming;

"(9) full implementation of this title is critical to engage other countries in an international effort to mitigate the threat of and harm from global warming; and

"(10) global warming and its adverse effects are occurring and are likely to continue and increase in magnitude, and to do so at a greater and more harmful rate, unless the this title is fully implemented and enforced in an expeditious manner.

"SEC. 702. ECONOMY-WIDE REDUCTION GOALS.

"The goals of this title, and the Clean Energy Jobs and American Power Act (and the amendments made by that Act), are to reduce steadily the quantity of United States greenhouse gas emissions such that—

"(1) in 2012, the quantity of United States greenhouse gas emissions does not exceed 97 percent of the quantity of United States greenhouse gas emissions in 2005;

"(2) in 2020, the quantity of United States greenhouse gas emissions does not exceed 80 percent of the quantity of United States greenhouse gas emissions in 2005;

"(3) in 2030, the quantity of United States greenhouse gas emissions does not exceed 58 percent of the quantity of United States greenhouse gas emissions in 2005; and

"(4) in 2050, the quantity of United States greenhouse gas emissions does not exceed 17 percent of the quantity of United States greenhouse gas emissions in 2005.

"SEC. 703. REDUCTION TARGETS FOR SPECIFIED SOURCES.

"(a) IN GENERAL.—The regulations issued under section 721 shall limit and reduce annually the greenhouse gas emissions of capped sources each calendar year beginning in 2012 such that—

"(1) in 2012, the quantity of greenhouse gas emissions from capped sources does not exceed 97 percent of the quantity of greenhouse gas emissions from such sources in 2005;

"(2) in 2020, the quantity of greenhouse gas emissions from capped sources does not exceed 80 percent of the quantity of greenhouse gas emissions from such sources in 2005;

"(3) in 2030, the quantity of greenhouse gas emissions from capped sources does not exceed 58 percent of the quantity of greenhouse gas emissions from such sources in 2005; and

"(4) in 2050, the quantity of greenhouse gas emissions from capped sources does not exceed 17 percent of the quantity of greenhouse gas emissions from such sources in 2005.

"(b) DEFINITION OF GREENHOUSE GAS EMISSIONS FROM SUCH SOURCES IN 2005.—For purposes of this section, the term 'greenhouse gas emissions from such sources in 2005' means emissions to which section 722 would have applied if the requirements of this title for the specified year had been in effect for 2005.

"SEC. 704. SUPPLEMENTAL POLLUTION REDUCTIONS.

"For the purposes of decreasing the likelihood of catastrophic climate change, preserving tropical forests,

building capacity to generate offset credits, and facilitating international action on global warming, the Administrator shall set aside a percentage specified in section 771(d) of the quantity of emission allowances established under section 721(a) for each year, to be used to achieve a reduction of greenhouse gas emissions from deforestation in developing countries in accordance with part E. In 2020, activities supported under part E shall provide greenhouse gas reductions in an amount equal to an additional 10 percentage points of reductions from United States greenhouse gas emissions in 2005. The Administrator shall distribute these allowances with respect to activities in countries that enter into and implement agreements or arrangements relating to reduced deforestation as described in section 753(a)(2).

"SEC. 705. REVIEW AND PROGRAM RECOMMENDATIONS.

"(a) IN GENERAL.—The Administrator shall, in consultation with appropriate Federal agencies, submit to Congress a report not later than July 1, 2013, and every 4 years thereafter, that includes—

"(1) an analysis of key findings based on up-to-date scientific information and data relevant to global climate change;

"(2) an analysis of capabilities to monitor and verify greenhouse gas reductions on a worldwide

basis, including for the United States, as required under the Clean Energy Jobs and American Power Act (and the amendments made by that Act); and

"(3) an analysis of the status of worldwide greenhouse gas reduction efforts, including implementation of the Clean Energy Jobs and American Power Act and other policies, both domestic and international, for reducing greenhouse gas emissions, preventing dangerous atmospheric concentrations of greenhouse gases, preventing significant irreversible consequences of climate change, and reducing vulnerability to the impacts of climate change.

"(b) EXCEPTION.—Subsection (a)(3) shall not apply to the first report submitted under subsection (a).

"(c) LATEST SCIENTIFIC INFORMATION.—The analysis required under subsection (a)(1) shall—

"(1) address existing scientific information and reports, considering, to the greatest extent possible, the most recent assessment report of the Intergovernmental Panel on Climate Change, reports by the United States Global Change Research Program, the Natural Resources Climate Change Adaptation Panel established under section 365 of the Clean Energy Jobs and American Power Act, and Federal

agencies, and the European Union's global temperature data assessment;

"(2) review trends and projections for—

"(A) global and country-specific annual emissions of greenhouse gases, and cumulative greenhouse gas emissions produced between 1850 and the present, including—

"(i) global cumulative emissions of anthropogenic greenhouse gases;

"(ii) global annual emissions of anthropogenic greenhouse gases; and

"(iii) by country, annual total, annual per capita, and cumulative anthropogenic emissions of greenhouse gases for the top 50 emitting nations;

"(B) significant changes, both globally and by region, in annual net non-anthropogenic greenhouse gas emissions from natural sources, including permafrost, forests, or oceans;

"(C) global atmospheric concentrations of greenhouse gases, expressed in annual concentration units as well as carbon dioxide equivalents based on 100-year global warming potentials;

"(D) major climate forcing factors, such as aerosols;

"(E) global average temperature, expressed as seasonal and annual averages in land, ocean, and land-plus-ocean averages; and

"(F) sea level rise;

"(3) assess the current and potential impacts of global climate change on—

"(A) human populations, including impacts on public health, economic livelihoods, subsistence, tribal culture, human infrastructure, and displacement or permanent relocation due to flooding, severe weather, extended drought, erosion, or other ecosystem changes;

"(B) freshwater systems, including water resources for human consumption and agriculture and natural and managed ecosystems, flood and drought risks, and relative humidity;

"(C) the carbon cycle, including impacts related to the thawing of permafrost, the frequency and intensity of wildfire, and terrestrial and ocean carbon sinks;

"(D) ecosystems and animal and plant populations, including impacts on species abundance, phenology, and distribution;

"(E) oceans and ocean ecosystems, including effects on sea level, ocean acidity, ocean temperatures, coral reefs, ocean circulation, fisheries, and other indicators of ocean ecosystem health;

"(F) the cryosphere, including effects on ice sheet mass balance, mountain glacier mass balance, and sea-ice extent and volume;

"(G) changes in the intensity, frequency, or distribution of severe weather events, including precipitation, tropical cyclones, tornadoes, and severe heat waves;

"(H) agriculture and forest systems; and

"(I) any other indicators the Administrator deems appropriate;

"(4) summarize any significant socioeconomic impacts of climate change in the United States, including the territories of the United States, drawing on work by Federal agencies and the academic literature, including impacts on—

"(A) public health;

"(B) economic livelihoods, subsistence, and tribal culture;

"(C) displacement or permanent relocation due to flooding, severe weather, extended drought, or other ecosystem changes;

"(D) human infrastructure, including coastal infrastructure vulnerability to extreme events and sea level rise, river floodplain infrastructure, and sewer and water management systems;

"(E) agriculture and forests, including effects on potential growing season, distribution, and yield;

"(F) water resources for human consumption, agriculture and natural and managed ecosystems, flood and drought risks, and relative humidity;

"(G) energy supply and use; and

"(H) transportation;

"(5) in assessing risks and impacts, use a risk management framework, including both qualitative and quantitative measures, to assess the observed and projected impacts of current and future climate change, accounting for—

"(A) both monetized and non-monetized losses;

"(B) potential nonlinear, abrupt, or essentially irreversible changes in the climate system;

"(C) potential nonlinear increases in the cost of impacts;

"(D) potential low-probability, high impact events; and

"(E) whether impacts are transitory or essentially permanent; and

"(6) based on the findings of the Administrator under this section, as well as assessments produced by the Intergovernmental Panel on Climate Change, the United States Global Change Research program, and other relevant scientific entities—

"(A) describe increased risks to natural systems and society that would result from an increase in global average temperature 3.6 degrees Fahrenheit (2 degrees Celsius) above the pre-industrial average or an increase in atmospheric greenhouse gas concentrations above 450 parts per million carbon dioxide equivalent; and

"(B) identify and assess—

"(i) significant residual risks not avoided by the thresholds described in subparagraph (A);

"(ii) alternative thresholds or targets that may more effectively limit the risks identified pursuant to clause (i); and

"(iii) thresholds above those described in subparagraph (A) which significantly increase the risk of certain impacts or render them essentially permanent.

"(d) STATUS OF MONITORING AND VERIFICATION CAPABILITIES TO EVALUATE GREENHOUSE GAS REDUCTION EFFORTS.—The analysis required under subsection (a)(2) shall evaluate the capabilities of the monitoring, reporting, and verification systems used to quantify progress in achieving reductions in greenhouse gas emissions both globally and in the United States (as described in section 702), including—

"(1) quantification of emissions and emission reductions by entities participating in the pollution reduction and investment program under this title;

"(2) quantification of emissions and emission reductions by entities participating in the offset program under this title;

"(3) quantification of emission and emission reductions by entities regulated by performance standards;

"(4) quantification of aggregate net emissions and emission reductions by the United States; and

"(5) quantification of global changes in net emissions and in sources and sinks of greenhouse gases.

"(e) STATUS OF GREENHOUSE GAS REDUCTION EFFORTS.—The analysis required under subsection (a)(3) shall address—

"(1) whether the programs under the Clean Energy Jobs and American Power Act (and the amendments made by that Act) and other Federal statutes are resulting in sufficient United States greenhouse gas emission reductions to meet the emissions reduction goals described in section 702, taking into account the use of offsets; and

"(2) whether United States actions, taking into account international actions, commitments, and trends, and considering the range of plausible emissions scenarios, are sufficient to avoid—

"(A) atmospheric greenhouse gas concentrations above 450 parts per million carbon dioxide equivalent;

"(B) global average surface temperature 3.6 degrees Fahrenheit (2 degrees Celsius) above the pre-industrial average, or such other

temperature thresholds as the Administrator deems appropriate; and

"(C) other temperature or greenhouse gas thresholds identified pursuant to subsection (c)(6)(B).

"(f) RECOMMENDATIONS.—

"(1) LATEST SCIENTIFIC INFORMATION.—Based on the analysis described in subsection (a)(1), each report under subsection (a) shall identify actions that could be taken to—

"(A) improve the characterization of changes in the earth-climate system and impacts of global climate change;

"(B) better inform decision making and actions related to global climate change;

"(C) mitigate risks to natural and social systems; and

"(D) design policies to better account for climate risks.

"(2) MONITORING, REPORTING AND VERIFICATION.—Based on the analysis described in subsection (a)(2), each report under subsection (a) shall identify key gaps in measurement, reporting, and verification capabilities and make recommenda-

tions to improve the accuracy and reliability of those capabilities.

"(3) STATUS OF GREENHOUSE GAS REDUCTION EFFORTS.—Based on the analysis described in subsection (a)(3), taking into account international actions, commitments, and trends, and considering the range of plausible emissions scenarios, each report under subsection (a) shall identify—

"(A) the quantity of additional reductions required to meet the emissions reduction goals in section 702;

"(B) the quantity of additional reductions in global greenhouse gas emissions needed to avoid the concentration and temperature thresholds identified in subsection (e); and

"(C) possible strategies and approaches for achieving additional reductions.

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

"SEC. 706. NATIONAL ACADEMY REVIEW.

"(a) IN GENERAL.—Not later than 1 year after the date of enactment of this title, the Administrator shall offer to enter into a contract with the National Academy of Sciences (in this section referred to as the 'Academy')

1 under which the Academy shall, not later than July 1,
2 2014, and every 4 years thereafter, submit to Congress
3 and the Administrator a report that includes—

4 "(1) a review of the most recent report and rec-
5 ommendations issued under section 705; and

6 "(2) an analysis of technologies to achieve re-
7 ductions in greenhouse gas emissions.

8 "(b) FAILURE TO ISSUE A REPORT.—In the event
9 that the Administrator has not issued all or part of the
10 most recent report required under section 705, the Acad-
11 emy shall conduct its own review and analysis of the re-
12 quired information.

13 "(c) TECHNOLOGICAL INFORMATION.—The analysis
14 required under subsection (a)(2) shall—

15 "(1) review existing technological information
16 and reports, including the most recent reports by the
17 Department of Energy, the United States Global
18 Change Research Program, the Intergovernmental
19 Panel on Climate Change, and the International En-
20 ergy Agency and any other relevant information on
21 technologies or practices that reduce or limit green-
22 house gas emissions;

23 "(2) include the participation of technical ex-
24 perts from relevant private industry sectors;

"(3) review the current and future projected deployment of technologies and practices in the United States that reduce or limit greenhouse gas emissions, including—

"(A) technologies for capture and sequestration of greenhouse gases;

"(B) technologies to improve energy efficiency;

"(C) low- or zero-greenhouse gas emitting energy technologies;

"(D) low- or zero-greenhouse gas emitting fuels;

"(E) biological sequestration practices and technologies; and

"(F) any other technologies the Academy deems relevant; and

"(4) review and compare the emissions reduction potential, commercial viability, market penetration, investment trends, and deployment of the technologies described in paragraph (3), including—

"(A) the need for additional research and development, including publicly funded research and development;

"(B) the extent of commercial deployment, including, where appropriate, a comparison to

the cost and level of deployment of conventional fossil fuel-fired energy technologies and devices; and

"(C) an evaluation of any substantial technological, legal, or market-based barriers to commercial deployment.

"(d) RECOMMENDATIONS.—

"(1) LATEST SCIENTIFIC INFORMATION.—Based on the review described in subsection (a)(1), the Academy shall identify actions that could be taken to—

"(A) improve the characterization of changes in the earth-climate system and impacts of global climate change;

"(B) better inform decision making and actions related to global climate change;

"(C) mitigate risks to natural and social systems;

"(D) design policies to better account for climate risks; and

"(E) improve the accuracy and reliability of capabilities to monitor, report, and verify greenhouse gas emissions reduction efforts.

"(2) TECHNOLOGICAL INFORMATION.—Based on the analysis described in subsection (a)(2), the Academy shall identify—

"(A) additional emission reductions that may be possible as a result of technologies described in the analysis;

"(B) barriers to the deployment of such technologies; and

"(C) actions that could be taken to speed deployment of such technologies.

"(3) STATUS OF GREENHOUSE GAS REDUCTION EFFORTS.—Based on the review described in subsection (a)(1), the Academy shall identify—

"(A) the quantity of additional reductions required to meet the emissions reduction goals described in section 702; and

"(B) the quantity of additional reductions in global greenhouse gas emissions needed to avoid the concentration and temperature thresholds described in section 705(c)(6)(A) or identified pursuant to section 705(c)(6)(B).

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

"SEC. 707. PRESIDENTIAL RESPONSE AND RECOMMENDATIONS.

"Not later than July 1, 2015, and every 4 years thereafter—

"(1) the President shall direct relevant Federal agencies to use existing statutory authority to take appropriate actions identified in the reports submitted under sections 705 and 706 and to address any shortfalls identified in such reports; and

"(2) in the event that the National Academy of Sciences has concluded, in the most recent report submitted under section 706, that the United States will not achieve the necessary domestic greenhouse gas emission reductions, or that global actions will not maintain safe global average surface temperature and atmospheric greenhouse gas concentration thresholds, the President shall submit to Congress a plan identifying domestic and international actions that will achieve necessary additional greenhouse gas reductions, including any recommendations for legislative action.

"PART B—DESIGNATION AND REGISTRATION OF GREENHOUSE GASES

"SEC. 711. DESIGNATION OF GREENHOUSE GASES.

"(a) GREENHOUSE GASES.—For purposes of this title, the following are greenhouse gases:

"(1) Carbon dioxide.

"(2) Methane.

"(3) Nitrous oxide.

"(4) Sulfur hexafluoride.

"(5) Hydrofluorocarbons from a chemical manufacturing process at an industrial stationary source.

"(6) Any perfluorocarbon, except as otherwise provided in section 714.

"(7) Nitrogen trifluoride.

"(8) Any other anthropogenic gas designated as a greenhouse gas by the Administrator under this section.

"(b) DETERMINATION ON ADMINISTRATOR'S INITIATIVE.—The Administrator shall, by rule—

"(1) determine whether 1 metric ton of another anthropogenic gas makes the same or greater contribution to global warming over 100 years as 1 metric ton of carbon dioxide;

"(2) determine the carbon dioxide equivalent value for each gas with respect to which the Administrator makes an affirmative determination under paragraph (1);

"(3) for each gas with respect to which the Administrator makes an affirmative determination

under paragraph (1) and that is used as a substitute for a class I or class II substance under title VI, determine the extent to which to regulate that gas under section 619 and specify appropriate compliance obligations under section 619;

"(4) designate as a greenhouse gas for purposes of this title each gas for which the Administrator makes an affirmative determination under paragraph (1), to the extent that it is not regulated under section 619; and

"(5) specify the appropriate compliance obligations under this title for each gas designated as a greenhouse gas under paragraph (4).

"(c) PETITIONS TO DESIGNATE A GREENHOUSE GAS.—

"(1) IN GENERAL.—Any person may petition the Administrator to designate as a greenhouse gas any anthropogenic gas 1 metric ton of which makes the same or greater contribution to global warming over 100 years as 1 metric ton of carbon dioxide.

"(2) CONTENTS OF PETITION.—The petitioner shall provide sufficient data, as specified by rule by the Administrator, to demonstrate that the gas is likely to be a greenhouse gas and is likely to be produced, imported, used, or emitted in the United

States. To the extent practicable, the petitioner shall also identify producers, importers, distributors, users, and emitters of the gas in the United States.

"(3) REVIEW AND ACTION BY THE ADMINISTRATOR.—Not later than 90 days after receipt of a petition under paragraph (2), the Administrator shall determine whether the petition is complete and notify the petitioner and the public of the decision.

"(4) ADDITIONAL INFORMATION.—The Administrator may require producers, importers, distributors, users, or emitters of the gas to provide information on the contribution of the gas to global warming over 100 years compared to carbon dioxide.

"(5) TREATMENT OF PETITION.—For any substance used as a substitute for a class I or class II substance under title VI, the Administrator may elect to treat a petition under this subsection as a petition to list the substance as a class II, group II substance under section 619, and may require the petition to be amended to address listing criteria promulgated under that section.

"(6) DETERMINATION.—Not later than 2 years after receipt of a complete petition, the Administrator shall, after notice and an opportunity for comment—

"(A) issue and publish in the Federal Register—

"(i) a determination that 1 metric ton of the gas does not make a contribution to global warming over 100 years that is equal to or greater than that made by 1 metric ton of carbon dioxide; and

"(ii) an explanation of the decision; or

"(B) determine that 1 metric ton of the gas makes a contribution to global warming over 100 years that is equal to or greater than that made by 1 metric ton of carbon dioxide, and take the actions described in subsection (b) with respect to such gas.

"(7) GROUNDS FOR DENIAL.—The Administrator may not deny a petition under this subsection solely on the basis of inadequate Environmental Protection Agency resources or time for review.

"(d) SCIENCE ADVISORY BOARD CONSULTATION.—

"(1) CONSULTATION.—The Administrator shall—

"(A) give notice to the Science Advisory Board prior to making a determination under subsection (b)(1), (c)(6), or (e)(2)(B);

"(B) consider the written recommendations of the Science Advisory Board under paragraph (2) regarding the determination; and

"(C) consult with the Science Advisory Board regarding such determination, including consultation subsequent to receipt of such written recommendations.

"(2) FORMULATION OF RECOMMENDATIONS.—Upon receipt of notice under paragraph (1)(A) regarding a pending determination under subsection (b)(1), (c)(6), or (e)(2)(B), the Science Advisory Board shall—

"(A) formulate recommendations regarding such determination, subject to a peer review process; and

"(B) submit such recommendations in writing to the Administrator.

"(e) MANUFACTURING AND EMISSION NOTICES.—

"(1) NOTICE REQUIREMENT.—

"(A) IN GENERAL.—Except as otherwise provided in section 714, effective 24 months after the date of enactment of this title, no person may manufacture or introduce into interstate commerce a fluorinated gas, or emit a significant quantity, as determined by the Admin-

istrator, of any fluorinated gas that is generated as a byproduct during the production or use of another fluorinated gas, unless—

"(i) the gas is designated as a greenhouse gas under this section or is an ozone-depleting substance listed as a class I or class II substance under title VI;

"(ii) the Administrator has determined that 1 metric ton of such gas does not make a contribution to global warming that is equal to or greater than that made by 1 metric ton of carbon dioxide; or

"(iii) the person manufacturing or importing the gas for distribution into interstate commerce, or emitting the gas, has submitted to the Administrator, at least 90 days before the start of such manufacture, introduction into commerce, or emission, a notice of such person's manufacture, introduction into commerce, or emission of such gas, and the Administrator has not determined that notice or a substantially similar notice is incomplete.

"(B) ALTERNATIVE COMPLIANCE.—For a gas that is a substitute for a class I or class II

substance under title VI and either has been listed as acceptable for use under section 612 or is currently subject to evaluation under section 612, the Administrator may accept the notice and information provided pursuant to that section as fulfilling the obligation under clause (iii) of subparagraph (A).

"(2) REVIEW AND ACTION BY THE ADMINISTRATOR.—

"(A) COMPLETENESS.—Not later than 90 days after receipt of notice under paragraph (1)(A)(iii) or (B), the Administrator shall determine whether the notice is complete.

"(B) DETERMINATION.—If the Administrator determines that the notice is complete, the Administrator shall, after notice and an opportunity for comment, not later than 12 months after receipt of the notice—

"(i) issue and publish in the Federal Register a determination that 1 metric ton of the gas does not make a contribution to global warming over 100 years that is equal to or greater than that made by 1 metric ton of carbon dioxide and an explanation of the decision; or

"(ii) determine that 1 metric ton of the gas makes a contribution to global warming over 100 years that is equal to or greater than that made by 1 metric ton of carbon dioxide, and take the actions described in subsection (b) with respect to such gas.

"(f) REGULATIONS.—Not later than one year after the date of enactment of this title, the Administrator shall promulgate regulations to carry out this section. Such regulations shall include—

"(1) requirements for the contents of a petition submitted under subsection (c);

"(2) requirements for the contents of a notice required under subsection (e); and

"(3) methods and standards for evaluating the carbon dioxide equivalent value of a gas.

"(g) GASES REGULATED UNDER TITLE VI.—The Administrator shall not designate a gas as a greenhouse gas under this section to the extent that the gas is regulated under title VI.

"(h) SAVINGS CLAUSE.—Nothing in this section shall be interpreted to relieve any person from complying with the requirements of section 612.

1 **"SEC. 712. CARBON DIOXIDE EQUIVALENT VALUE OF**
2 **GREENHOUSE GASES.**

3 "(a) MEASURE OF QUANTITY OF GREENHOUSE
4 GASES.—Any provision of this title or title VIII that refers
5 to a quantity or percentage of a quantity of greenhouse
6 gases shall mean the quantity or percentage of the green-
7 house gases expressed in carbon dioxide equivalents.

8 "(b) INITIAL VALUE.—Except as provided by the Ad-
9 ministrator under this section or section 711—

10 "(1) the carbon dioxide equivalent value of
11 greenhouse gases for purposes of this Act shall be as
12 follows:

" CARBON DIOXIDE EQUIVALENT OF 1 TON OF LISTED GREENHOUSE GASES

Greenhouse gas (1 metric ton)	Carbon dioxide equivalent (metric tons)
Carbon dioxide	1
Methane	25
Nitrous oxide	298
HFC-23	14,800
HFC-125	3,500
HFC-134a	1,430
HFC-143a	4,470
HFC-152a	124
HFC-227ea	3,220
HFC-236fa	9,810
HFC-4310mee	1,640
CF_4	7,390

" CARBON DIOXIDE EQUIVALENT OF 1 TON OF LISTED GREENHOUSE GASES—Continued

Greenhouse gas (1 metric ton)	Carbon dioxide equivalent (metric tons)
C_2F_6	12,200
C_4F_{10}	8,860
C_6F_{14}	9,300
SF_6	22,800
NF_3	17,200

1 ; and

2 "(2) the carbon dioxide equivalent value for
3 purposes of this Act for any greenhouse gas not list-
4 ed in the table under paragraph (1) shall be the
5 100-year Global Warming Potentials provided in the
6 Intergovernmental Panel on Climate Change Fourth
7 Assessment Report.

8 "(c) PERIODIC REVIEW.—

9 "(1) Not later than February 1, 2017, and (ex-
10 cept as provided in paragraph (3)) not less than
11 every 5 years thereafter, the Administrator shall—

12 "(A) review and, if appropriate, revise the
13 carbon dioxide equivalent values established
14 under this section or section 711(b)(2), based
15 on a determination of the number of metric
16 tons of carbon dioxide that makes the same
17 contribution to global warming over 100 years
18 as 1 metric ton of each greenhouse gas; and

"(B) publish in the Federal Register the results of that review and any revisions.

"(2) A revised determination published in the Federal Register under paragraph (1)(B) shall take effect for greenhouse gas emissions starting on January 1 of the first calendar year starting at least 9 months after the date on which the revised determination was published.

"(3) The Administrator may decrease the frequency of review and revision under paragraph (1) if the Administrator determines that such decrease is appropriate in order to synchronize such review and revision with any similar review process carried out pursuant to the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992, or to an agreement negotiated under that convention, except that in no event shall the Administrator carry out such review and revision any less frequently than every 10 years.

"(d) METHODOLOGY.—In setting carbon dioxide equivalent values, for purposes of this section or section 711, the Administrator shall take into account publications by the Intergovernmental Panel on Climate Change or a successor organization under the auspices of the

United Nations Environmental Programme and the World Meteorological Organization.

"SEC. 713. GREENHOUSE GAS REGISTRY.

"(a) DEFINITIONS.—For purposes of this section:

"(1) CLIMATE REGISTRY.—The term 'Climate Registry' means the greenhouse gas emissions registry jointly established and managed by more than 40 States and Indian tribes in 2007 to collect high-quality greenhouse gas emission data from facilities, corporations, and other organizations to support various greenhouse gas emission reporting and reduction policies for the member States and Indian tribes.

"(2) REPORTING ENTITY.—The term 'reporting entity' means—

"(A) a covered entity;

"(B) an entity that—

"(i) would be a covered entity if it had emitted, produced, imported, manufactured, or delivered in 2008 or any subsequent year more than the applicable threshold level in the definition of covered entity in paragraph (13) of section 700; and

"(ii) has emitted, produced, imported, manufactured, or delivered in 2008 or any subsequent year more than the applicable threshold level in the definition of covered entity in paragraph (13) of section 700, provided that the figure of 25,000 tons of carbon dioxide equivalent is read instead as 10,000 tons of carbon dioxide equivalent and the figure of 460,000,000 cubic feet is read instead as 184,000,000 cubic feet;

"(C) any other entity that emits a greenhouse gas, or produces, imports, manufactures, or delivers material whose use results or may result in greenhouse gas emissions if the Administrator determines that reporting under this section by such entity will help achieve the purposes of this title or title VIII;

"(D) any vehicle fleet with emissions of more than 25,000 tons of carbon dioxide equivalent on an annual basis, if the Administrator determines that the inclusion of such fleet will help achieve the purposes of this title or title VIII; or

"(E) any entity that delivers electricity to an energy-intensive facility in an industrial sec-

tor that meets the energy or greenhouse gas intensity criteria in section 764(b)(3)(B)(i).

"(b) REGULATIONS.—

"(1) IN GENERAL.—Not later than 6 months after the date of enactment of this title, the Administrator shall issue regulations establishing a Federal greenhouse gas registry. Such regulations shall—

"(A) require reporting entities to submit to the Administrator data on—

"(i) greenhouse gas emissions in the United States;

"(ii) the production and manufacture in the United States, importation into the United States, and, at the discretion of the Administrator, exportation from the United States, of fuels and industrial gases the uses of which result or may result in greenhouse gas emissions;

"(iii) deliveries in the United States of natural gas, and any other gas meeting the specifications for commingling with natural gas for purposes of delivery, the combustion of which result or may result in greenhouse gas emissions; and

"(iv) the capture and sequestration of greenhouse gases;

"(B) require covered entities and, where appropriate, other reporting entities to submit to the Administrator data sufficient to ensure compliance with or implementation of the requirements of this title;

"(C) require reporting of electricity delivered to industrial sources in energy-intensive industries;

"(D) ensure the completeness, consistency, transparency, accuracy, precision, and reliability of such data;

"(E) take into account the best practices from the most recent Federal, State, tribal, and international protocols for the measurement, accounting, reporting, and verification of greenhouse gas emissions, including protocols from the Climate Registry and other mandatory State or multistate authorized programs;

"(F) take into account the latest scientific research;

"(G) require that, for covered entities with respect to greenhouse gases to which section 722 applies, and, to the extent determined to be

appropriate by the Administrator, for covered entities with respect to other greenhouse gases and for other reporting entities, submitted data are based on—

"(i) continuous monitoring systems for fuel flow or emissions, such as continuous emission monitoring systems;

"(ii) alternative systems that are demonstrated as providing data with the same precision, reliability, accessibility, and timeliness, or, to the extent the Administrator determines is appropriate for reporting small amounts of emissions, the same precision, reliability, and accessibility and similar timeliness, as data provided by continuous monitoring systems for fuel flow or emissions; or

"(iii) alternative methodologies that are demonstrated to provide data with precision, reliability, accessibility, and timeliness, or, to the extent the Administrator determines is appropriate for reporting small amounts of emissions, precision, reliability, and accessibility, as similar as is technically feasible to that of data gen-

erally provided by continuous monitoring systems for fuel flow or emissions, if the Administrator determines that, with respect to a reporting entity, there is no continuous monitoring system or alternative system described in clause (i) or (ii) that is technically feasible;

''(H) require that the Administrator, in determining the extent to which the requirement to use systems or methodologies in accordance with subparagraph (G) is appropriate for reporting entities other than covered entities or for greenhouse gases to which section 722 does not apply, consider the cost of using such systems and methodologies, and of using other systems and methodologies that are available and suitable, for quantifying the emissions involved in light of the purposes of this title, including the goal of collecting consistent entity-wide data;

''(I) include methods for minimizing double reporting and avoiding irreconcilable double reporting of greenhouse gas emissions;

''(J) establish measurement protocols for carbon capture and sequestration systems, tak-

ing into consideration the regulations promulgated under section 813;

"(K) require that reporting entities provide the data required under this paragraph in reports submitted electronically to the Administrator, in such form and containing such information as may be required by the Administrator;

"(L) include requirements for keeping records supporting or related to, and protocols for auditing, submitted data;

"(M) establish consistent policies for calculating carbon content and greenhouse gas emissions for each type of fossil fuel with respect to which reporting is required;

"(N) subsequent to implementation of policies developed under subparagraph (M), provide for immediate dissemination, to States, Indian tribes, and on the Internet, of all data reported under this section as soon as practicable after electronic audit by the Administrator and any resulting correction of data, except that data shall not be disseminated under this subparagraph if—

"(i) its nondissemination is vital to the national security of the United States, as determined by the President; or

"(ii) it is confidential business information that cannot be derived from information that is otherwise publicly available and that would cause significant calculable competitive harm if published, except that—

"(I) data relating to greenhouse gas emissions, including any upstream or verification data from reporting entities, shall not be considered to be confidential business information; and

"(II) data that is confidential business information shall be provided to a State or Indian tribe within whose jurisdiction the reporting entity is located, if the Administrator determines that such State or Indian tribe has in effect protections for confidential business information that are equivalent to protections applicable to the Federal Government;

"(O) prescribe methods by which the Administrator shall, in cases in which satisfactory data are not submitted to the Administrator for any period of time, estimate emission, production, importation, manufacture, or delivery levels—

"(i) for covered entities with respect to greenhouse gas emissions, production, importation, manufacture, or delivery regulated under this title to ensure that emissions, production, importation, manufacture, or deliveries are not underreported, and to create a strong incentive for meeting data monitoring and reporting requirements—

"(I) with a conservative estimate of the highest emission, production, importation, manufacture, or delivery levels that may have occurred during the period for which data are missing; or

"(II) to the extent the Administrator considers appropriate, with an estimate of such levels assuming the unit is emitting, producing, importing,

manufacturing, or delivering at a maximum potential level during the period, in order to ensure that such levels are not underreported and to create a strong incentive for meeting data monitoring and reporting requirements; and

''(ii) for covered entities with respect to greenhouse gas emissions to which section 722 does not apply and for other reporting entities, with a reasonable estimate of the emission, production, importation, manufacture, or delivery levels that may have occurred during the period for which data are missing;

''(P) require the designation of a designated representative for each reporting entity;

''(Q) require an appropriate certification, by the designated representative for the reporting entity, of accurate and complete accounting of greenhouse gas emissions, as determined by the Administrator; and

''(R) include requirements for other data necessary for accurate and complete accounting of greenhouse gas emissions, as determined by

the Administrator, including data for quality assurance of monitoring systems, monitors and other measurement devices, and other data needed to verify reported emissions, production, importation, manufacture, or delivery.

"(2) TIMING.—

"(A) CALENDAR YEARS 2007 THROUGH 2010.—For a base period of calendar years 2007 through 2010, each reporting entity shall submit annual data required under this section to the Administrator not later than March 31, 2011. The Administrator may waive or modify reporting requirements for calendar years 2007 through 2010 for categories of reporting entities to the extent that the Administrator determines that the reporting entities did not keep data or records necessary to meet reporting requirements. The Administrator may, in addition to or in lieu of such requirements, collect information on energy consumption and production.

"(B) SUBSEQUENT CALENDAR YEARS.—For calendar year 2011 and each subsequent calendar year, each reporting entity shall submit quarterly data required under this section to the Administrator not later than 60 days

after the end of the applicable quarter, except when the data is already being reported to the Administrator on an earlier timeframe for another program.

"(3) WAIVER OF REPORTING REQUIREMENTS.—The Administrator may waive reporting requirements under this section for specific entities to the extent that the Administrator determines that sufficient and equally or more reliable verified and timely data are available to the Administrator and the public on the Internet under other mandatory statutory requirements.

"(4) ALTERNATIVE THRESHOLD.—The Administrator may, by rule, establish applicability thresholds for reporting under this section using alternative metrics and levels, provided that such metrics and levels are easier to administer and cover the same size and type of sources as the threshold defined in this section.

"(c) INTERRELATIONSHIP WITH OTHER SYSTEMS.—In developing the regulations issued under subsection (b), the Administrator shall take into account the work done by the Climate Registry and other mandatory State or multistate programs. Such regulations shall include an explanation of any major differences in approach between

the system established under the regulations and such registries and programs.

"SEC. 714. PERFLUOROCARBON REGULATION.

"(a) DEFINITIONS.—In this section:

"(1) CONSUMPTION.—The term 'consumption' means, with respect to perfluorocarbon, the quantity of that substance produced in the United States, plus the quantity imported, minus the quantity exported.

"(2) PRODUCE; PRODUCED; PRODUCTION.—

"(A) IN GENERAL.—The terms 'produce', 'produced', and 'production' mean the manufacture of perfluorocarbon, or the emission of perfluorocarbon from other industrial sources.

"(B) EXCLUSIONS.—The terms 'produce', 'produced', and 'production' do not include—

"(i) the manufacture of perfluorocarbon that is used and entirely consumed (except for trace quantities) in the manufacture of other chemicals or products;

"(ii) the reuse or recycling of perfluorocarbon; or

"(iii) the emission of perfluorocarbon from use in production processes, such as electronics manufacturing.

"(C) OFFSET CREDIT.—The term 'offset credit' means reduction of perfluorocarbon emissions by destruction or conversionary use of perfluorocarbons during production processes, such as electronics manufacturing.

"(b) DETERMINATION BY ADMINISTRATOR.—As soon as practicable after the date of enactment of this section, the Administrator shall determine, based on such criteria as the Administrator determines to be appropriate, whether emissions from the production and consumption of perfluorocarbon should be regulated in accordance with—

"(1) this section; or

"(2) the other applicable provisions of this title.

"(c) EFFECT OF DETERMINATION.—On a determination by the Administrator under subsection (a)(1) that perfluorocarbon emissions described in subsection (b) should be regulated in accordance with this section—

"(1) emissions from the production of perfluorocarbon shall be subject to the best available control technology (as defined in section 169) for each greenhouse gas designated in section 711 at fa-

cilities emitting 25,000 metric tons of carbon dioxide equivalent perfluorocarbon emissions or more; and

"(2) the consumption of perfluorocarbon shall be phased down in accordance with this section.

"(d) USE AND CONSUMPTION.—

"(1) PHASE-DOWNS.—

"(A) CONSUMPTION.—

"(i) IN GENERAL.—With respect to perfluorocarbon, not later than 18 months after the date of enactment of this section, the Administrator shall promulgate regulations phasing down, in accordance with this section—

"(I) the consumption of perfluorocarbon in the United States; and

"(II) the importation into the United States of products containing any perfluorocarbon.

"(ii) PROHIBITION.—Effective beginning on January 1, 2014, it shall be unlawful for any person to produce any perfluorocarbon, import any perfluorocarbon, or import any product containing perfluorocarbon, unless the person holds 1

consumption allowance or 1 offset credit for each carbon dioxide equivalent ton of the perfluorocarbon destroyed.

"(iii) RETIRED ALLOWANCES.—Any person who exports a perfluorocarbon for which a use allowance was retired may receive a refund of that allowance from the Administrator after the date of export.

"(B) INTEGRITY OF LIMITS.—To maintain the integrity of the perfluorocarbon limits under this paragraph, the Administrator may limit, by regulation, the percentage of the compliance obligation of any person that may be met through the consumption of offset credits or banked allowances.

"(C) COUNTING OF VIOLATIONS.—Each consumption allowance or offset credit not held as required by this subsection shall be a separate violation of this section.

"(2) SCHEDULE.—Pursuant to the regulations promulgated under paragraph (1)(A), the number of perfluorocarbon consumption allowances available for distribution for each calendar year beginning in calendar year 2014 shall be established by the Administrator.

"(3) BASELINE.—

"(A) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Administrator shall promulgate regulations to establish the baseline for purposes of paragraph (2).

"(B) CALCULATION.—The baseline shall be—

"(i) the sum, expressed in metric tons of carbon dioxide equivalents, of—

"(I) the average of the annual consumption of all perfluorocarbon in each of calendar years 2004, 2005, and 2006; and

"(II) the annual average quantity of all perfluorocarbon contained in imported products during the period of calendar years 2004, 2005, and 2006; or

"(ii) such alternative quantity of carbon dioxide equivalents that, as determined by the Administrator, more accurately reflects the average annual quantity of perfluorocarbon consumed in and imported into the United States (including in prod-

ucts), as based on information compiled by the Administrator.

"(4) DISTRIBUTION OF ALLOWANCES.—The Administrator shall determine an allocation, and procedures for the distribution, transfer, and exchange of allowances for the consumption of perfluorocarbon under this section, including a determination of whether allowances may be auctioned, sold, or allocated and distributed at no cost, transferred, or exchanged for domestic or international consumption, in accordance with such criteria as the Administrator considers to be appropriate.

"(e) IMPLEMENTATION.—To the maximum extent practicable, the Administrator shall implement this section in accordance with the procedures described in section 619.

"(f) DEADLINES FOR COMPLIANCE.—The Administrator shall promulgate regulations for perfluorocarbon in accordance with this section by not later than October 31, 2013.

"PART C—PROGRAM RULES

"SEC. 721. EMISSION ALLOWANCES.

"(a) IN GENERAL.—The Administrator shall establish a separate quantity of emission allowances for each

calendar year starting in 2012, in the amounts prescribed under subsection (e).

"(b) IDENTIFICATION NUMBERS.—The Administrator shall assign to each emission allowance established under subsection (a) a unique identification number that includes the vintage year for that emission allowance.

"(c) LEGAL STATUS OF EMISSION ALLOWANCES.—

"(1) IN GENERAL.—An allowance established by the Administrator under this title does not constitute a property right.

"(2) TERMINATION OR LIMITATION.—Nothing in this Act or any other provision of law shall be construed to limit or alter the authority of the United States, including the Administrator acting pursuant to statutory authority, to terminate or limit allowances, offset credits, or term offset credits.

"(3) OTHER PROVISIONS UNAFFECTED.—Except as otherwise specified in this Act, nothing in this Act relating to allowances, offset credits, or term offset credits established or issued under this title shall affect the application of any other provision of law to a covered entity, or the responsibility for a covered entity to comply with any such provision of law.

"(d) SAVINGS PROVISION.—Nothing in this part shall be construed as requiring a change of any kind in any State law regulating electric utility rates and charges, or as affecting any State law regarding such State regulation, or as limiting State regulation (including any prudency review) under such a State law. Nothing in this part shall be construed as modifying the Federal Power Act (16 U.S.C. 791a et seq.) or as affecting the authority of the Federal Energy Regulatory Commission under that Act. Nothing in this part shall be construed to interfere with or impair any program for competitive bidding for power supply in a State in which such program is established.

"(e) ALLOWANCES FOR EACH CALENDAR YEAR.—

"(1) IN GENERAL.—Except as provided in paragraph (2), the number of emission allowances established by the Administrator under subsection (a) for each calendar year shall be as provided in the following table:

"Calendar Year	Emissions Allowances (MtCO2e)
2012	4,627
2013	4,544
2014	5,099
2015	5,003
2016	5,482
2017	5,261
2018	5,132
2019	5,002
2020	4,873
2021	4,739
2022	4,605
2023	4,471

2024	4,337
2025	4,203
2026	4,069
2027	3,935
2028	3,801
2029	3,667
2030	3,533
2031	3,408
2032	3,283
2033	3,158
2034	3,033
2035	2,908
2036	2,784
2037	2,659
2038	2,534
2039	2,409
2040	2,284
2041	2,159
2042	2,034
2043	1,910
2044	1,785
2045	1,660
2046	1,535
2047	1,410
2048	1,285
2049	1,160
2050	1,035

"(2) REVISION.—

"(A) IN GENERAL.—The Administrator may adjust, in accordance with subparagraph (B), the number of emission allowances established pursuant to paragraph (1) if, after notice and an opportunity for public comment, the Administrator determines that—

"(i) United States greenhouse gas emissions in 2005 were other than 7,206 million metric tons carbon dioxide equivalent;

"(ii) if the requirements of this title for 2012 had been in effect in 2005, sec-

tion 722 would have required emission allowances to be held for other than 66.2 percent of United States greenhouse gas emissions in 2005;

"(iii) if the requirements of this title for 2014 had been in effect in 2005, section 722 would have required emission allowances to be held for other than 75.7 percent of United States greenhouse gas emissions in 2005; or

"(iv) if the requirements of this title for 2016 had been in effect in 2005, section 722 would have required emission allowances to be held for other than 84.5 percent United States greenhouse gas emissions in 2005.

"(B) ADJUSTMENT FORMULA.—

"(i) IN GENERAL.—If the Administrator adjusts under this paragraph the number of emission allowances established pursuant to paragraph (1), the number of emission allowances the Administrator establishes for any given calendar year shall equal the product of—

"(I) United States greenhouse gas emissions in 2005, expressed in tons of carbon dioxide equivalent;

"(II) the percent of United States greenhouse gas emissions in 2005, expressed in tons of carbon dioxide equivalent, that would have been subject to section 722 if the requirements of this title for the given calendar year had been in effect in 2005; and

"(III) the percentage set forth for that calendar year in section 703(a), or determined under clause (ii) of this subparagraph.

"(ii) TARGETS.—In applying the portion of the formula in clause (i)(III) of this subparagraph, for calendar years for which a percentage is not listed in section 703(a), the Administrator shall use a uniform annual decline in the amount of emissions between the years that are specified.

"(iii) CARBON DIOXIDE EQUIVALENT VALUE.—If the Administrator adjusts under this paragraph the number of emis-

sion allowances established pursuant to paragraph (1), the Administrator shall use the carbon dioxide equivalent values established pursuant to section 712.

"(iv) LIMITATION ON ADJUSTMENT TIMING.—Once a calendar year has started, the Administrator may not adjust the number of emission allowances to be established for that calendar year.

"(C) LIMITATION ON ADJUSTMENT AUTHORITY.—The Administrator may adjust under this paragraph the number of emission allowances to be established pursuant to paragraph (1) only once.

"(f) COMPENSATORY ALLOWANCE.—

"(1) IN GENERAL.—The regulations promulgated under subsection (h) shall provide for the establishment and distribution of compensatory allowances for—

"(A) the destruction, in 2012 or later, of fluorinated gases that are greenhouse gases if—

"(i) allowances or offset credits were retired for their production or importation; and

"(ii) such gases are not required to be destroyed under any other provision of law;

"(B) the nonemissive use, in 2012 or later, of petroleum-based or coal-based liquid or gaseous fuel, petroleum coke, natural gas liquid, or natural gas as a feedstock, if allowances or offset credits were retired for the greenhouse gases that would have been emitted from their combustion; and

"(C) the conversionary use, in 2012 or later, of fluorinated gases in a manufacturing process, including semiconductor research or manufacturing, if allowances or offset credits were retired for the production or importation of such gas.

"(2) ESTABLISHMENT AND DISTRIBUTION.—

"(A) IN GENERAL.—Not later than 90 days after the end of each calendar year, the Administrator shall establish and distribute to the entity taking the actions described in subparagraph (A), (B), or (C) of paragraph (1) a quantity of compensatory allowances equivalent to the number of tons of carbon dioxide equivalent of avoided emissions achieved through such actions. In establishing the quantity of compen-

satory allowances, the Administrator shall take into account the carbon dioxide equivalent value of any greenhouse gas resulting from such action.

"(B) SOURCE OF ALLOWANCES.—Compensatory allowances established under this subsection shall not be emission allowances established under subsection (a).

"(C) IDENTIFICATION NUMBERS.—The Administrator shall assign to each compensatory allowance established under subparagraph (A) a unique identification number.

"(3) DEFINITIONS.—For purposes of this subsection—

"(A) the term 'destruction' means the conversion of a greenhouse gas by thermal, chemical, or other means to another gas or set of gases with little or no carbon dioxide equivalent value;

"(B) the term 'nonemissive use' means the use of fossil fuel as a feedstock in an industrial or manufacturing process to the extent that greenhouse gases are not emitted from such process, and to the extent that the products of

such process are not intended for use as, or to be contained in, a fuel; and

"(C) the term 'conversionary use' means the conversion during research or manufacturing of a fluorinated gas into another greenhouse gas or set of gases with a lower carbon dioxide equivalent value.

"(4) FEEDSTOCK EMISSIONS STUDY.—

"(A) The Administrator may conduct a study to determine the extent to which petroleum-based or coal-based liquid or gaseous fuel, petroleum coke, natural gas liquid, or natural gas are used as feedstocks in manufacturing processes to produce products and the greenhouse gas emissions resulting from such uses.

"(B) If as a result of such a study, the Administrator determines that the use of such products by noncovered sources results in substantial emissions of greenhouse gases or their precursors and that such emissions have not been adequately addressed under other requirements of this Act, the Administrator may, after notice and comment rulemaking, promulgate a regulation reducing compensatory allowances

commensurately if doing so will not result in leakage.

"(g) FLUORINATED GASES ASSESSMENT.—

"(1) IN GENERAL.—Not later than March 31, 2014, the Administrator shall conduct an assessment of the regulation of non-hydrofluorocarbon fluorinated gases under this title (excluding perfluorocarbon) to determine whether the most appropriate point of regulation of those gases is at—

"(A) the gas manufacturer or importer level; or

"(B) the downstream source of the emissions.

"(2) MODIFICATION OF DEFINITION.—If the Administrator determines, based on consideration of environmental effectiveness, cost-effectiveness, administrative feasibility, extent of coverage of emissions, and competitiveness considerations, that emissions of non-hydrofluorocarbon fluorinated gases (excluding perfluorocarbons) can best be regulated by designating downstream emission sources as covered entities with compliance obligations under section 722, the Administrator shall—

"(A) after providing notice and an opportunity for comment, modify the definition of the

term 'covered entity' with respect to fluorinated gases (other than hydrofluorocarbons and perfluorocarbons) accordingly; and

"(B) establish such requirements as are necessary to ensure compliance by the covered entities with the requirements of this title.

"(h) REGULATIONS.—Not later than 24 months after the date of enactment of this title, the Administrator shall promulgate regulations to carry out the provisions of this title.

"SEC. 722. PROHIBITION OF EXCESS EMISSIONS.

"(a) PROHIBITION.—Except as provided in subsection (c), effective January 1, 2012, each covered entity is prohibited from emitting greenhouse gases, and having attributable greenhouse gas emissions, in combination, in excess of its allowable emissions level. A covered entity's allowable emissions level for each calendar year is the number of emission allowances (or credits or other allowances as provided in subsection (d)) it holds as of 12:01 a.m. on April 1 (or a later date established by the Administrator under subsection (j)) of the following calendar year.

"(b) METHODS OF DEMONSTRATING COMPLIANCE.—Except as otherwise provided in this section, the owner or operator of a covered entity shall not be considered to

be in compliance with the prohibition in subsection (a) unless, as of 12:01 a.m. on April 1 (or a later date established by the Administrator under subsection (j)) of each calendar year starting in 2013, the owner or operator holds a quantity of emission allowances (or credits or other allowances as provided in subsection (d)) at least as great as the quantity calculated as follows:

"(1) ELECTRICITY SOURCES.—For a covered entity described in section 700(13)(A), 1 emission allowance for each ton of carbon dioxide equivalent of greenhouse gas that such covered entity emitted in the previous calendar year, excluding emissions resulting from the combustion of—

"(A) petroleum-based or coal-based liquid fuel;

"(B) natural gas liquid;

"(C) renewable biomass or gas derived from renewable biomass; or

"(D) petroleum coke.

"(2) FUEL PRODUCERS AND IMPORTERS.—For a covered entity described in section 700(13)(B), 1 emission allowance for each ton of carbon dioxide equivalent of greenhouse gas that would be emitted from the combustion of any petroleum-based or coal-based liquid fuel, petroleum coke, or natural gas liq-

uid, produced or imported by such covered entity during the previous calendar year for sale or distribution in interstate commerce, assuming no capture and sequestration of any greenhouse gas emissions.

"(3) INDUSTRIAL GAS PRODUCERS AND IMPORTERS.—For a covered entity described in section 700(13)(C), 1 emission allowance for each ton of carbon dioxide equivalent of fossil fuel-based carbon dioxide, nitrous oxide, or any other fluorinated gas that is a greenhouse gas (except for nitrogen trifluoride), or any combination thereof, produced or imported by such covered entity during the previous calendar year for sale or distribution in interstate commerce or released as fugitive emissions in the production of fluorinated gas.

"(4) NITROGEN TRIFLUORIDE SOURCES.—For a covered entity described in section 700(13)(D), 1 emission allowance for each ton of carbon dioxide equivalent of nitrogen trifluoride that such covered entity emitted in the previous calendar year.

"(5) GEOLOGICAL SEQUESTRATION SITES.—For a covered entity described in section 700(13)(E), 1 emission allowance for each ton of carbon dioxide

equivalent of greenhouse gas that such covered entity emitted in the previous calendar year.

"(6) INDUSTRIAL STATIONARY SOURCES.—For a covered entity described in section 700(13)(F), (G), or (H), 1 emission allowance for each ton of carbon dioxide equivalent of greenhouse gas that such covered entity emitted in the previous calendar year, excluding emissions resulting from—

"(A) the combustion of petroleum-based or coal-based liquid fuel;

"(B) the combustion of natural gas liquid;

"(C) the combustion of renewable biomass or gas derived from renewable biomass;

"(D) the combustion of petroleum coke; or

"(E) the use of any fluorinated gas that is a greenhouse gas purchased for use at that covered entity, except for nitrogen trifluoride.

"(7) INDUSTRIAL FOSSIL FUEL-FIRED COMBUSTION DEVICES.—For a covered entity described in section 700(13)(I), 1 emission allowance for each ton of carbon dioxide equivalent of greenhouse gas that the devices emitted in the previous calendar year, excluding emissions resulting from the combustion of—

"(A) petroleum-based or coal-based liquid fuel;

"(B) natural gas liquid;

"(C) renewable biomass or gas derived from renewable biomass; or

"(D) petroleum coke.

"(8) NATURAL GAS LOCAL DISTRIBUTION COMPANIES.—For a covered entity described in section 700(13)(J), 1 emission allowance for each ton of carbon dioxide equivalent of greenhouse gas that would be emitted from the combustion of the natural gas, and any other gas meeting the specifications for commingling with natural gas for purposes of delivery, that such entity delivered during the previous calendar year to customers that are not covered entities, assuming no capture and sequestration of that greenhouse gas.

"(9) R&D FACILITIES.—

"(A) IN GENERAL.—For a qualified R&D facility that emitted 25,000 tons per year or more carbon dioxide equivalent in the previous calendar year, 1 emission allowance for each ton of carbon dioxide equivalent of greenhouse gas that such facility emitted in the previous calendar year.

"(B) TREATMENT.—A qualified R&D facility shall be treated as a separate covered entity solely for purposes of applying the requirements of this subsection.

"(10) ALGAE-BASED FUELS.—Where carbon dioxide (or another greenhouse gas) is used as an input in the production of algae-based fuels, the Administrator shall ensure that allowances are required to be held either for the carbon dioxide used to grow the algae or for the carbon dioxide emitted from combustion of the fuel produced from such algae, but not for both.

"(11) FUGITIVE EMISSIONS.—The greenhouse gas emissions to which paragraphs (1), (4), (6), and (7) apply shall not include fugitive emissions of greenhouse gas, except to the extent the Administrator determines that data on the carbon dioxide equivalent value of greenhouse gas in the fugitive emissions can be provided with sufficient precision, reliability, accessibility, and timeliness to ensure the integrity of emission allowances, the allowance tracking system, and the limits on emissions.

"(12) EXPORT EXEMPTION.—This section shall not apply to any petroleum-based or coal-based liquid fuel, petroleum coke, natural gas liquid, fossil

fuel-based carbon dioxide, nitrous oxide, or fluorinated gas that is exported for sale or use.

"(13) NATURAL GAS LIQUIDS.—Notwithstanding subsection (a), if the owner or operator of a covered entity described in section 700(13)(B) that produces natural gas liquids does not take ownership of the liquids, and is not responsible for the distribution or use of the liquids in commerce, the owner of the liquids shall be responsible for compliance with this section, section 723, and other relevant sections of this title with respect to such liquids. In the regulations promulgated under section 721, the Administrator shall include such provisions with respect to such liquids as the Administrator determines are appropriate to determine and ensure compliance, and to penalize noncompliance. In such a case, the owner of the covered entity shall provide to the Administrator, in a manner to be determined by the Administrator, information regarding the quantity and ownership of liquids produced at the covered entity.

"(14) APPLICATION OF MULTIPLE PARAGRAPHS.—For a covered entity to which more than 1 of paragraphs (1) through (8) apply, all applicable paragraphs shall apply, except that not more than 1

emission allowance shall be required for the same emission.

"(c) PHASE-IN OF PROHIBITION.—

"(1) INDUSTRIAL STATIONARY SOURCES.—The prohibition under subsection (a) shall first apply to a covered entity described in section 700(13)(D), (F), (G), (H), or (I), with respect to emissions occurring during calendar year 2014.

"(2) NATURAL GAS LOCAL DISTRIBUTION COMPANIES.—The prohibition under subsection (a) shall first apply to a covered entity described in section 700(13)(J) with respect to deliveries occurring during calendar year 2016.

"(d) ADDITIONAL METHODS.—In addition to using the method of compliance described in subsection (b), a covered entity may do the following:

"(1) OFFSET CREDITS.—

"(A) CREDITS.—

"(i) IN GENERAL.—Covered entities collectively may, in accordance with this paragraph, use offset credits to demonstrate compliance for up to a maximum of 2,000,000,000 tons of greenhouse gas emissions annually.

"(ii) DEMONSTRATION OF COMPLIANCE.—In any calendar year, a covered entity may demonstrate compliance by holding 1 domestic offset credit or 1.25 international offset credits in lieu of an emission allowance, except as provided in subparagraph (D), up to a total number of offset credits described in subparagraph (B).

"(B) APPLICABLE PERCENTAGE.—

"(i) IN GENERAL.—The total number of offset credits referred to in subparagraph (A)(ii) for a covered entity for a given calendar year shall be determined by—

"(I) dividing—

"(aa) the tons of carbon dioxide equivalent of greenhouse gas emissions of the covered entity (except for the types of emissions excluded under subparagraphs (A) through (D) of subsection (b)(1), subparagraphs (A) through (E) of subsection (b)(6), and subparagraphs (A) through

(D) of subsection (b)(7)) and attributable greenhouse gas emissions for the year before the preceding calendar year; by

"(bb) the sum of the tons of carbon dioxide equivalent of greenhouse gas emissions of all covered entities (except for the types of emissions excluded under subparagraphs (A) through (D) of subsection (b)(1), subparagraphs (A) through (E) of subsection (b)(6), and subparagraphs (A) through (D) of subsection (b)(7)) and attributable greenhouse gas emissions for the year before the preceding calendar year; and

"(II) multiplying the quotient obtained under subclause (I) by 2,000,000,000.

"(ii) APPLICABILITY.—Clause (i) shall apply to a covered entity (including a covered entity that commenced operation during the preceding calendar year) even if

the covered entity had no greenhouse gas emissions or attributable greenhouse gas emissions described in that clause.

"(iii) OFFSET CREDITS.—Not more than ¾ of the applicable percentage under this paragraph may be used by holding domestic offset credits, and not more than ¼ of the applicable percentage under this paragraph may be used by holding international offset credits, except as provided in subparagraph (C).

"(C) MODIFIED PERCENTAGES.—If the Administrator determines that domestic offset credits available for use in demonstrating compliance in any calendar year at domestic offset prices generally equal to or less than allowance prices, are likely to offset less than 900,000,000 tons of greenhouse gas emissions (measured in tons of carbon dioxide equivalents), the Administrator shall increase the percent of emissions that can be offset through the use of international offset credits (and decrease the percent of emissions that can be allowed through the use of domestic offset credits by the same amount) to reflect the amount that

1,500,000,000 exceeds the number of domestic offset credits the Administrator determines is available for that year, up to a maximum of 750,000,000 tons of greenhouse gas emissions.

"(D) INTERNATIONAL OFFSET CREDITS.—Notwithstanding subparagraph (A), to demonstrate compliance prior to calendar year 2018, a covered entity may use 1 international offset credit in lieu of an emission allowance up to the amount permitted under this paragraph.

"(E) PRESIDENT'S RECOMMENDATION.—The President may make a recommendation to Congress as to whether the number 2,000,000,000 specified in subparagraphs (A) and (B) should be increased or decreased.

"(2) TERM OFFSET CREDITS.—

"(A) IN GENERAL.—Covered entities may, in accordance with this paragraph, use non-expired term offset credits instead of domestic offset credits for purposes of temporarily demonstrating compliance with this section.

"(B) AMOUNT.—The combined quantity of term offset credits and domestic offset credits used by a covered entity to demonstrate compliance for its emissions or attributable green-

house gas emissions in any given year shall not exceed the quantity of domestic offset credits that a covered entity is entitled to use for that year to demonstrate compliance in accordance with paragraph (1).

"(C) EXPIRATION.—A term offset credit shall expire in the year after its term ends. The term of a term offset credit shall be calculated by adding to the year of issuance the number of years equal to the length of the crediting period for the practice or project for which the term offset credit was issued, but in no case shall be later than the date 5 years from the date of issuance.

"(D) DEMONSTRATING COMPLIANCE UPON EXPIRATION OF TERM OFFSET CREDIT.—With respect to the emissions for which a covered entity is using term offset credits to demonstrate compliance temporarily with this section, the owner or operator of a covered entity shall not be considered to be in compliance with the prohibition in subsection (a) unless, as of 12:01 a.m. on April 1 (or a later date established by the Administrator under subsection (j)) of the

calendar year in which a term offset credit expires, the owner or operator holds—

"(i) for purposes of finally demonstrating compliance, an allowance or a domestic offset credit; or

"(ii) for purposes of temporarily demonstrating compliance, a non-expired term offset credit.

"(E) INAPPLICABILITY OF PERCENTAGE LIMITATIONS.—Domestic offset credits used for purposes of finally demonstrating compliance under this subparagraph shall not be subject to the percentage limitations in subparagraph (B).

"(F) FINANCIAL ASSURANCE.—A covered entity may not use a term offset credit to demonstrate compliance temporarily unless it simultaneously provides to the Administrator financial assurance that, at the end of the term offset credit's crediting term, the covered entity will have sufficient resources to obtain the quantity of allowances or credits necessary to demonstrate final compliance. The Administrator shall issue regulations establishing requirements for such financial assurance, which shall take into account the increased risk asso-

ciated with longer crediting terms. These regulations shall take into account the total number of tons of carbon dioxide equivalent of greenhouse gas emissions for which a covered entity is demonstrating compliance temporarily, and may set a limit on this amount. In the event that a covered entity that used term offset credits to demonstrate compliance temporarily fails to meet the requirements of subparagraph (D) at the end of the term offset credits' crediting term, if the financial assurance mechanism fails to provide to the Administrator the number of allowances or offset credits for which the crediting term has expired, then the Administrator shall retire that number of allowances with the vintage year 2 years after the year in which the term offset credit expires in the same amount. Allowances so retired shall not be counted as emission allowances established for that calendar year under section 721(a).

"(3) INTERNATIONAL EMISSION ALLOWANCES.—To demonstrate compliance, a covered entity may hold an international emission allowance in lieu of an emission allowance, except as modified under section 728(d).

"(4) COMPENSATORY ALLOWANCES.—To demonstrate compliance, a covered entity may hold a compensatory allowance obtained under section 721(f) in lieu of an emission allowance.

"(e) RETIREMENT OF ALLOWANCES AND CREDITS.—As soon as practicable after a deadline established for covered entities to demonstrate compliance with this title, the Administrator shall retire the quantity of allowances or credits required to be held under this title.

"(f) ALTERNATIVE METRICS.—For categories of covered entities described in subparagraph (B), (C), (D), (G), (H), or (I) of section 700(13), the Administrator may, by rule, establish an applicability threshold for inclusion under those subparagraphs using an alternative metric and level, provided that such metric and level are easier to administer and cover the same size and type of sources as the threshold defined in such subparagraphs.

"(g) THRESHOLD REVIEW.—For each category of covered entities described in subparagraph (B), (C), (D), (G), (H), or (I) of section 700(13), the Administrator shall, in 2020 and once every 8 years thereafter, review the carbon dioxide equivalent emission thresholds that are used to define covered entities. After consideration of—

"(1) emissions from covered entities in each such category, and from other entities of the same

type that emit less than the threshold amount for the category (including emission sources that commence operation after the date of enactment of this title that are not covered entities); and

"(2) whether greater greenhouse gas emission reductions can be cost-effectively achieved by lowering the applicable threshold,

the Administrator may by rule lower such threshold to not less than 10,000 tons of carbon dioxide equivalent emissions. In determining the cost effectiveness of potential reductions from lowering the threshold for covered entities, the Administrator shall consider alternative regulatory greenhouse gas programs, including setting standards under other titles of this Act.

"(h) DESIGNATED REPRESENTATIVES.—The regulations promulgated under section 721(h) shall require that each covered entity, and each entity holding allowances or credits or receiving allowances or credits from the Administrator under this title, select a designated representative.

"(i) EDUCATION AND OUTREACH.—

"(1) IN GENERAL.—The Administrator shall establish and carry out a program of education and outreach to assist covered entities, especially entities having little experience with environmental regulatory requirements similar or comparable to those

under this title, in preparing to meet the compliance obligations of this title. Such program shall include education with respect to using markets to effectively achieve such compliance.

"(2) FAILURE TO RECEIVE INFORMATION.—A failure to receive information or assistance under this subsection may not be used as a defense against an allegation of any violation of this title.

"(j) ADJUSTMENT OF DEADLINE.—The Administrator may, by rule, establish a deadline for demonstrating compliance, for a calendar year, later than the date provided in subsection (a), as necessary to ensure the availability of emissions data, but in no event shall the deadline be later than June 1.

"(k) NOTICE REQUIREMENT FOR COVERED ENTITIES RECEIVING NATURAL GAS FROM NATURAL GAS LOCAL DISTRIBUTION COMPANIES.—The owner or operator of a covered entity that takes delivery of natural gas from a natural gas local distribution company shall, not later than September 1 of each calendar year, notify such natural gas local distribution company in writing that such entity will qualify as a covered entity under this title for that calendar year.

"(l) COMPLIANCE OBLIGATION.—For purposes of this title, the year of a compliance obligation is the year

in which compliance is determined, not the year in which the greenhouse gas emissions occur or the covered entity has attributable greenhouse gas emissions.

"SEC. 723. PENALTY FOR NONCOMPLIANCE.

"(a) ENFORCEMENT.—A violation of any prohibition of, requirement of, or regulation promulgated pursuant to this title shall be a violation of this Act. It shall be a violation of this Act for a covered entity to emit greenhouse gases, and have attributable greenhouse gas emissions, in combination, in excess of its allowable emissions level as provided in section 722(a). Each ton of carbon dioxide equivalent for which a covered entity fails to demonstrate compliance under section 722(b) shall be a separate violation. In the event that a covered entity fails to demonstrate compliance at the expiration of a term of offset credits crediting term as required by section 722(d)(2)(D), the year of the violation shall be the year in which the term offset credit expires.

"(b) EXCESS EMISSIONS PENALTY.—

"(1) IN GENERAL.—The owner or operator of any covered entity that fails for any year to comply, on the deadline described in section 722(a) or (j), shall be liable for payment to the Administrator of an excess emissions penalty in the amount described in paragraph (2).

"(2) AMOUNT.—The amount of an excess emissions penalty required to be paid under paragraph (1) shall be equal to the product obtained by multiplying—

"(A) the tons of carbon dioxide equivalent of greenhouse gas emissions or attributable greenhouse gas emissions for which the owner or operator of a covered entity failed to comply under section 722(b) on the deadline; by

"(B) twice the fair market value of emission allowances established for emissions occurring in the calendar year for which the emission allowances were due.

"(3) TIMING.—An excess emissions penalty required under this subsection shall be immediately due and payable to the Administrator, without demand, in accordance with regulations promulgated by the Administrator, which shall be issued not later than 2 years after the date of enactment of this title.

"(4) NO EFFECT ON LIABILITY.—An excess emissions penalty due and payable by the owners or operators of a covered entity under this subsection shall not diminish the liability of the owners or operators for any fine, penalty, or assessment against

the owners or operators for the same violation under any other provision of this Act or any other law.

"(c) EXCESS EMISSIONS ALLOWANCES.—The owner or operator of a covered entity that fails for any year to comply on the deadline described in section 722(a) or (j) shall be liable to offset the covered entity's excess combination of greenhouse gases emitted and attributable greenhouse gas emissions by an equal quantity of emission allowances during the following calendar year, or such longer period as the Administrator may prescribe. During the year in which the covered entity failed to comply, or any year thereafter, the Administrator may deduct the emission allowances required under this subsection to offset the covered entity's excess actual or attributable emissions.

"SEC. 724. TRADING.

"(a) PERMITTED TRANSACTIONS.—Except as otherwise provided in this title, the lawful holder of an emission allowance, compensatory allowance, or offset credit may, without restriction, sell, exchange, transfer, hold for compliance in accordance with section 722, or request that the Administrator retire the emission allowance, compensatory allowance, or offset credit.

"(b) NO RESTRICTION ON TRANSACTIONS.—The privilege of purchasing, holding, selling, exchanging,

transferring, and requesting retirement of emission allowances, compensatory allowances, or offset credits shall not be restricted to the owners and operators of covered entities, except as otherwise provided in this title.

"(c) EFFECTIVENESS OF ALLOWANCE TRANSFERS.—No transfer of an allowance or offset credit shall be effective for purposes of this title until a certification of the transfer, signed by the designated representative of the transferor, is received and recorded by the Administrator in accordance with regulations promulgated under section 721(h).

"(d) ALLOWANCE TRACKING SYSTEM.—The regulations promulgated under section 721(h) shall include a system for issuing, recording, holding, and tracking allowances, offset credits, and term offset credits that shall specify all necessary procedures and requirements for an orderly and competitive functioning of the allowance and offset credit markets. Such regulations shall provide for appropriate publication of the information in the system on the Internet.

"SEC. 725. BANKING AND BORROWING.

"(a) BANKING.—An emission allowance may be used to comply with section 722 or 723 for emissions in—

"(1) the vintage year for the allowance; or

"(2) any calendar year subsequent to the vintage year for the allowance.

"(b) EXPIRATION.—

"(1) REGULATIONS.—The Administrator may establish by regulation criteria and procedures for determining whether, and for implementing a determination that, the expiration of an allowance, credit, or term offset credit established or issued by the Administrator under this title, or expiration of the ability to use an international emission allowance to comply with section 722, is necessary to ensure the authenticity and integrity of allowances, credits, or term offset credits or the allowance tracking system.

"(2) GENERAL RULE.—An allowance, credit, or term offset credit established or issued by the Administrator under this title shall not expire unless—

"(A) it is retired by the Administrator as required under this title; or

"(B) it is determined to expire or to have expired by a specific date by the Administrator in accordance with regulations promulgated under paragraph (1).

"(3) INTERNATIONAL EMISSION ALLOWANCES.—The ability to use an international emission

allowance to comply with section 722 shall not expire unless—

"(A) the allowance is retired by the Administrator as required by this title; or

"(B) the ability to use such allowance to meet such compliance obligation requirements is determined to expire or to have expired by a specific date by the Administrator in accordance with regulations promulgated under paragraph (1).

"(c) BORROWING FUTURE VINTAGE YEAR ALLOWANCES.—

"(1) BORROWING WITHOUT INTEREST.—In addition to the uses described in subsection (a), an emission allowance may be used to comply with section 722(a) or 723 for emissions, production, importation, manufacture, or deliveries in the calendar year immediately preceding the vintage year for the allowance.

"(2) BORROWING WITH INTEREST.—

"(A) IN GENERAL.—A covered entity may demonstrate compliance under subsection (b) in a specific calendar year for up to 15 percent of its emissions by holding emission allowances

with a vintage year 1 to 5 years later than that calendar year.

"(B) LIMITATIONS.—An emission allowance borrowed pursuant to this paragraph shall be an emission allowance that is established by the Administrator for a specific future calendar year under section 721(a) and that is held by the borrower.

"(C) PREPAYMENT OF INTEREST.—For each emission allowance that an owner or operator of a covered entity borrows pursuant to this paragraph, such owner or operator shall, at the time it borrows the allowance, hold for retirement by the Administrator a quantity of emission allowances that is equal to the product obtained by multiplying—

"(i) 0.08; by

"(ii) the number of years between the calendar year in which the allowance is being used to satisfy a compliance obligation and the vintage year of the allowance.

"SEC. 726. MARKET STABILITY RESERVE.

"(a) MARKET STABILITY RESERVE AUCTIONS.—

"(1) IN GENERAL.—Once each quarter of each calendar year for which allowances are established

under section 721(a), the Administrator shall auction market stability reserve allowances.

"(2) RESTRICTION TO COVERED ENTITIES.—In each auction conducted under paragraph (1), only covered entities that the Administrator expects will be required to comply with section 722 in the following calendar year shall be eligible to make purchases.

"(b) POOL OF EMISSION ALLOWANCES FOR MARKET STABILITY RESERVE AUCTIONS.—

"(1) FILLING THE MARKET STABILITY RESERVE INITIALLY.—

"(A) IN GENERAL.—The Administrator shall, not later than 2 years after the date of enactment of this title, establish a market stability reserve account, and shall place in that account an amount of emission allowances established under section 721(a).

"(B) EFFECT ON OTHER PROVISIONS.—Any provision in this title (except for subparagraph (B) of this paragraph) that refers to a quantity or percentage of the emission allowances established for a calendar year under section 721(a) shall be considered to refer to the amount of emission allowances as determined

pursuant to section 721(e), less any emission allowances established for that year that are placed in the market stability reserve account under this paragraph.

"(2) SUPPLEMENTING THE MARKET STABILITY RESERVE.—The Administrator shall also—

"(A) at the end of each calendar year, transfer to the market stability reserve account each emission allowance that was offered for sale but not sold at any auction conducted under section 778; and

"(B) transfer emission allowances established under subsection (g) from auction proceeds, and deposit them into the market stability reserve, to the extent necessary to maintain the reserve at its original size.

"(c) MINIMUM MARKET STABILITY RESERVE AUCTION PRICE.—

"(1) IN GENERAL.—At each market stability reserve auction, the Administrator shall offer emission allowances for sale beginning at a minimum price per emission allowance, which shall be known as the 'minimum market stability reserve auction price'.

"(2) INITIAL MINIMUM MARKET STABILITY RESERVE AUCTION PRICES.—The minimum market

stability reserve auction price shall be $28 (in constant 2005 dollars) for the market stability reserve auctions held in 2012. For the market stability reserve auctions held in 2013 through 2017, the minimum market stability reserve auction price shall be the market stability reserve auction price for the previous year increased by 5 percent plus the rate of inflation (as measured by the Consumer Price Index for All Urban Consumers).

"(3) MINIMUM MARKET STABILITY RESERVE AUCTION PRICE IN SUBSEQUENT YEARS.—For each market stability reserve auction held in 2018 and each year thereafter, the minimum market stability reserve auction price shall be the market stability reserve auction price for the previous year increased by 7 percent, plus the rate of inflation (as measured by the Consumer Price Index for All Urban Consumers).

"(d) QUANTITY OF EMISSION ALLOWANCES RELEASED FROM THE MARKET STABILITY RESERVE.—

"(1) INITIAL LIMITS.—Subject to paragraph (4), for each of calendar years 2012 through 2016, the annual limit on the number of emission allowances from the market stability reserve account that may be auctioned is an amount equal to 15 percent

of the emission allowances established for that calendar year under section 721(a). This limit does not apply to offset credits sold on consignment pursuant to subsection (h).

"(2) LIMITS IN SUBSEQUENT YEARS.—Subject to paragraph (4), for calendar year 2017 and each year thereafter, the annual limit on the number of emission allowances from the market stability reserve account that may be auctioned is an amount equal to 25 percent of the emission allowances established for that calendar year under section 721(a). This limit does not apply to offset credits sold on consignment pursuant to subsection (h).

"(3) ALLOCATION OF LIMITATION.—One-fourth of each year's annual market stability reserve auction limit under this subsection shall be made available for auction in each quarter. Any allowances from the market stability reserve account that are made available for sale in a quarterly auction and not sold shall be rolled over and added to the quantity available for sale in the following quarter, except that allowances not sold at auction in the fourth quarter of a year shall not be rolled over to the following calendar year's auctions, but shall be returned to the market stability reserve account.

"(4) AUTHORITY TO ADJUST LIMITATION.—The Administrator may adjust the limits in paragraphs (1) or (2) if the Administrator determines an adjustment is required to prevent disruptively high prices or to preserve the integrity of the market stability reserve.

"(e) PURCHASE LIMIT.—

"(1) IN GENERAL.—Except as provided in paragraph (2) or (3), the annual number of emission allowances that a covered entity may purchase at the market stability reserve auctions in each calendar year shall not exceed 20 percent of the covered entity's emissions during the most recent year for which allowances or credits were retired under section 722.

"(2) 2012 LIMIT.—For calendar year 2012, the maximum aggregate number of emission allowances that a covered entity may purchase from that year's market stability reserve auctions shall be 20 percent of the covered entity's greenhouse gas emissions that the covered entity reported to the registry established under section 713 for 2011 and that would be subject to section 722(a) if occurring in later calendar years.

"(3) NEW ENTRANTS.—The Administrator shall, by regulation, establish a separate purchase

limit applicable to entities that expect to become a covered entity in the year of the auction, permitting them to purchase emission allowances at the market stability reserve auctions in their first calendar year of operation in an amount of at least 20 percent of their expected combined emissions and attributable greenhouse gas emissions for that year.

''(f) DELEGATION OR CONTRACT.—Pursuant to regulations under this section, the Administrator may, by delegation or contract, provide for the conduct of market stability reserve auctions under the Administrator's supervision by other departments or agencies of the Federal Government or by nongovernmental agencies, groups, or organizations.

''(g) USE OF AUCTION PROCEEDS.—

''(1) DEPOSIT IN MARKET STABILITY RESERVE FUND.—The proceeds from market stability reserve auctions shall be placed in the Market Stability Reserve Fund established by subsection (j), and shall be available without further appropriation or fiscal year limitation for the purposes described in this subsection.

''(2) OFFSET CREDITS.—The Administrator shall use the proceeds from each market stability reserve auction to purchase offset credits, including

domestic offset credits and international offset credits issued for reduced deforestation activities pursuant to section 753. The Administrator shall retire those offset credits and establish a number of emission allowances equal to the number of international offset credits so retired. Emission allowances established under this paragraph shall be in addition to those established under section 721(a).

"(3) EMISSION ALLOWANCES.—The Administrator shall deposit emission allowances established under paragraph (2) in the market stability reserve, except that, with respect to any such emission allowances in excess of the amount necessary to fill the market stability reserve to its original size, the Administrator shall—

"(A) except as provided in subparagraph (B), assign a vintage year to the emission allowance, which shall be no earlier than the year in which the allowance is established under paragraph (2) and shall treat such allowances as ones that are not designated for distribution or auction; and

"(B) to the extent any such allowances cannot be assigned a vintage year because of

the limitation in paragraph (4), retire the allowances.

"(4) LIMITATION.—In no case may the Administrator assign under paragraph (3)(A) more emission allowances to a vintage year than the number of emission allowances from that vintage year that were placed in the market stability reserve account under subsection (b)(1).

"(h) AVAILABILITY OF OFFSET CREDITS FOR AUCTION.—

"(1) IN GENERAL.—The regulations promulgated under section 721(h) shall allow any entity holding offset credits to request that the Administrator include such offset credits in an upcoming market stability reserve auction. The regulations shall provide that—

"(A) upon sale of such offset credits, the Administrator shall retire those offset credits, and establish and provide to the purchasers a number of emission allowances equal to the number of offset credits so retired, which allowances shall be in addition to those established under section 721(a); and

"(B) for offset credits sold pursuant to this subsection, the proceeds for the entity that

offered the offset credits for sale shall be the lesser of—

"(i) the average daily closing price for offset credits sold on registered exchanges (or if such price is unavailable, the average price as determined by the Administrator) during the six months prior to the market stability reserve auction at which they were auctioned, with the remaining funds collected upon the sale of the offset credits deposited in the Treasury; and

"(ii) the amount received for the offset credits at the auction.

"(2) PROCEEDS.—For offset credits sold pursuant to this subsection, notwithstanding section 3302 of title 31, United States Code, or any other provision of law, within 90 days of receipt, the United States shall transfer the proceeds from the auction, as defined in paragraph (1)(D), to the entity that offered the offset credits for sale. No funds transferred from a purchaser to a seller of offset credits under this paragraph shall be held by any officer or employee of the United States or treated for any purpose as public monies.

"(3) PRICING.—When the Administrator acts under this subsection as the agent of an entity in possession of offset credits, the Administrator is not obligated to obtain the highest price possible for the offset credits, and instead shall auction such offset credits in the same manner and pursuant to the same rules (except as modified in paragraph (1)) as set forth for auctioning market stability reserve allowances. Entities requesting that such offset credits be offered for sale at a market stability reserve auction may not set a minimum reserve price for their offset credits that is different than the minimum market stability reserve auction price set pursuant to subsection (c).

"(i) INITIAL REGULATIONS.—Not later than 24 months after the date of enactment of this title, the Administrator shall promulgate regulations, in consultation with other appropriate agencies, governing the auction of allowances under this section. Such regulations shall include the following requirements:

"(1) FREQUENCY; FIRST AUCTION.—Auctions shall be held four times per year at regular intervals, with the first auction to be held no later than March 31, 2012.

"(2) AUCTION FORMAT.—Auctions shall follow a single-round, sealed-bid, uniform price format.

"(3) PARTICIPATION; FINANCIAL ASSURANCE.—Auctions shall be open to any covered entity eligible to purchase emission allowances at the auction under subsection (a)(2), except that the Administrator may establish financial assurance requirements to ensure that auction participants can and will perform on their bids.

"(4) DISCLOSURE OF BENEFICIAL OWNERSHIP.—Each bidder in an auction shall be required to disclose the person or entity sponsoring or benefitting from the bidder's participation in the auction if such person or entity is, in whole or in part, other than the bidder.

"(5) PURCHASE LIMITS.—No person may, directly or in concert with another participant, purchase more than 20 percent of the allowances offered for sale at any quarterly auction.

"(6) PUBLICATION OF INFORMATION.—After the auction, the Administrator shall, in a timely fashion, publish the identities of winning bidders, the quantity of allowances obtained by each winning bidder, and the auction clearing price.

"(7) OTHER REQUIREMENTS.—The Administrator may include in the regulations such other requirements or provisions as the Administrator, in consultation with other agencies as appropriate, considers appropriate to promote effective, efficient, transparent, and fair administration of auctions under this section.

"(j) MARKET STABILITY RESERVE FUND.—There are established in the Treasury of the United States a fund to be known as the 'Market Stability Reserve Fund'.

"(k) REVISION OF REGULATIONS.—The Administrator may, at any time, in consultation with other agencies as appropriate, revise the initial regulations promulgated under subsection (i). Such revised regulations need not meet the requirements identified in subsection (i) if the Administrator determines that an alternative auction design would be more effective, taking into account factors including costs of administration, transparency, fairness, and risks of collusion or manipulation. In determining whether and how to revise the initial regulations under this subsection, the Administrator shall not consider maximization of revenues to the Federal Government.

"SEC. 727. PERMITS.

"(a) PERMIT PROGRAM.—For stationary sources subject to title V of this Act, that are covered entities,

the provisions of this title shall be implemented by permits issued to such covered entities (and enforced) in accordance with the provisions of title V, as modified by this title. Any such permit issued by the Administrator, or by a State with an approved permit program, shall require the owner or operator of a covered entity to hold emission allowances or offset credits at least equal to the total annual amount of carbon dioxide equivalents for its combined emissions and attributable greenhouse gas emissions to which section 722 applies. No such permit shall be issued that is inconsistent with the requirements of this title, and title V as applicable. Nothing in this section regarding compliance plans or in title V shall be construed as affecting allowances or offset credits. Submission of a statement by the owner or operator, or the designated representative of the owners and operators, of a covered entity that the owners and operators will hold emission allowances or offset credits for the entity's combined emissions and attributable greenhouse gas emissions to which section 722 applies shall be deemed to meet the proposed and approved planning requirements of title V. Recordation by the Administrator of transfers of emission allowances shall amend automatically all applicable proposed or approved permit applications, compliance plans, and permits.

"(b) MULTIPLE OWNERS.—No permit shall be issued under this section and no allowances or offset credits shall be disbursed under this title to a covered entity or any other person until the designated representative of the owners or operators has filed a certificate of representation with regard to matters under this title, including the holding and distribution of emission allowances and the proceeds of transactions involving emission allowances. Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, such a covered entity or other entity or where a utility or industrial customer purchases power under a long-term power purchase contract from an independent power production facility that is a covered entity, the certificate shall state—

"(1) that emission allowances and the proceeds of transactions involving emission allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement; or

"(2) if such multiple holders have expressly provided for a different distribution of emission allowances by contract, that emission allowances and the proceeds of transactions involving emission allowances will be deemed to be held or distributed in accordance with the contract.

A passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the covered entity or other entity shall not be deemed to be a holder of a legal, equitable, leasehold, or contractual interest for the purpose of holding or distributing emission allowances as provided in this subsection, during either the term of such leasehold or thereafter, unless expressly provided for in the leasehold agreement. Except as otherwise provided in this subsection, where all legal or equitable title to or interest in a covered entity, or other entity, is held by a single person, the certificate shall state that all emission allowances received by the entity are deemed to be held for that person.

"(c) PROHIBITION.—It shall be unlawful for any person to operate any stationary source subject to the requirements of this section except in compliance with the terms and requirements of a permit issued by the Administrator or a State with an approved permit program in accordance with this section. For purposes of this subsection, compliance, as provided in section 504(f), with a permit issued under title V which complies with this title for covered entities shall be deemed compliance with this subsection as well as section 502(a).

"(d) RELIABILITY.—Nothing in this section or title V shall be construed as requiring termination of operations of a stationary source that is a covered entity for failure to have an approved permit, or compliance plan, that is consistent with the requirements in the second and fifth sentences of subsection (a) concerning the holding of emission allowances, compensatory allowances, international emission allowances, or offset allowances, except that any such covered entity may be subject to the applicable enforcement provision of section 113.

"(e) REGULATIONS.—The Administrator shall promulgate regulations to implement this section. To provide for permits required under this section, each State in which one or more stationary sources and that are covered entities are located shall submit, in accordance with this section and title V, revised permit programs for approval.

"SEC. 728. INTERNATIONAL EMISSION ALLOWANCES.

"(a) QUALIFYING PROGRAMS.—The Administrator, in consultation with the Secretary of State, may by rule designate an international climate change program as a qualifying international program if—

"(1) the program is run by a national or supranational foreign government, and imposes a mandatory absolute tonnage limit on greenhouse gas emissions from 1 or more foreign countries, or from 1 or

more economic sectors in such a country or countries; and

"(2) the program is at least as stringent as the program established by this title, including provisions to ensure at least comparable monitoring, compliance, enforcement, quality of offsets, and restrictions on the use of offsets.

"(b) DISQUALIFIED ALLOWANCES.—An international emission allowance may not be held under section 722(d)(3) if it is in the nature of an offset instrument or allowance awarded based on the achievement of greenhouse gas emission reductions or avoidance, or greenhouse gas sequestration, that are not subject to the mandatory absolute tonnage limits referred to in subsection (a)(1).

"(c) RETIREMENT.—

"(1) ENTITY CERTIFICATION.—The owner or operator of an entity that holds an international emission allowance under section 722(d)(3) shall certify to the Administrator that such international emission allowance has not previously been used to comply with any foreign, international, or domestic greenhouse gas regulatory program.

"(2) RETIREMENT.—

"(A) FOREIGN AND INTERNATIONAL REGULATORY ENTITIES.—The Administrator, in

consultation with the Secretary of State, shall seek, by whatever means appropriate, including agreements and technical cooperation on allowance tracking, to ensure that any relevant foreign, international, and domestic regulatory entities—

"(i) are notified of the use, for purposes of compliance with this title, of any international emission allowance; and

"(ii) provide for the disqualification of such international emission allowance for any subsequent use under the relevant foreign, international, or domestic greenhouse gas regulatory program, regardless of whether such use is a sale, exchange, or submission to satisfy a compliance obligation.

"(B) DISQUALIFICATION FROM FURTHER USE.—The Administrator shall ensure that, once an international emission allowance has been disqualified or otherwise used for purposes of compliance with this title, such allowance shall be disqualified from any further use under this title.

"(d) USE LIMITATIONS.—The Administrator may, by rule, modify the percentage applicable to international emission allowances under section 722(d)(3), consistent with the purposes of the Clean Energy Jobs and American Power Act.

"PART D—OFFSETS

"SEC. 731. OFFSETS INTEGRITY ADVISORY BOARD.

"(a) ESTABLISHMENT.—Not later than 30 days after the date of enactment of this title, the President shall establish an independent Offsets Integrity Advisory Board. The Advisory Board shall make recommendations to the President for use in promulgating and revising regulations under this part, and for ensuring the overall environmental integrity of the programs established pursuant to those regulations.

"(b) MEMBERSHIP.—The Advisory Board shall be comprised of at least nine members. Each member shall be qualified by education, training, and experience to evaluate scientific and technical information on matters referred to the Board under this section. The President shall appoint Advisory Board members, including a chair and vice-chair of the Advisory Board. Terms shall be 3 years in length, except for initial terms, which may be up to 5 years in length to allow staggering. Members may be reappointed only once for an additional 3-year term,

1 and such second term may follow directly after a first
2 term.

3 "(c) ACTIVITIES.—The Advisory Board established
4 pursuant to subsection (a) shall—

5 "(1) provide recommendations, not later than
6 90 days after the Advisory Board's establishment
7 and periodically thereafter, to the President regard-
8 ing offset project types that should be considered for
9 eligibility under section 733, taking into consider-
10 ation relevant scientific and other issues, including—

11 "(A) the availability of a representative
12 data set for use in developing the activity base-
13 line;

14 "(B) the potential for accurate quantifica-
15 tion of greenhouse gas reduction, avoidance, or
16 sequestration for an offset project type;

17 "(C) the potential level of scientific and
18 measurement uncertainty associated with an
19 offset project type;

20 "(D) any beneficial or adverse environ-
21 mental, public health, welfare, social, economic,
22 or energy effects associated with an offset
23 project type;

"(E) the extent to which, as of the date of submission of the report, the project or activity types within each category—

"(i) are required by law (including a regulation); or

"(ii) represent business-as-usual (absent funding from offset credits) practices for a relevant land area, industry sector, or forest, soil or facility type;

"(2) make available to the President its advice and comments on offset methodologies that should be considered under regulations promulgated pursuant to subsection (a) and (b) of section 734, including methodologies to address the issues of additionality, activity baselines, measurement, leakage, uncertainty, permanence, and environmental integrity;

"(3) make available to the President, and other relevant Federal agencies, its advice and comments regarding scientific, technical, and methodological issues specific to the issuance of international offset credits under section 744;

"(4) make available to the President, and other relevant Federal agencies, its advice and comments regarding scientific, technical, and methodological

issues associated with the implementation of this part;

"(5) make available to the President its advice and comments on areas in which further knowledge is required to appraise the adequacy of existing, revised, or proposed methodologies for use under this part, and describe the research efforts necessary to provide the required information; and

"(6) make available to the President its advice and comments on other ways to improve or safeguard the environmental integrity of programs established under this part.

"(d) SCIENTIFIC REVIEW OF OFFSET AND DEFORESTATION REDUCTION PROGRAMS.—Not later than January 1, 2017, and at five-year intervals thereafter, the Advisory Board shall submit to the President and make available to the public an analysis of relevant scientific and technical information related to this part. The Advisory Board shall review approved and potential methodologies, scientific studies, offset project monitoring, offset project verification reports, and audits related to this part, and evaluate the net emissions effects of implemented offset projects. The Advisory Board shall recommend changes to offset methodologies, protocols, or project types, or to the overall offset program under this part, to ensure that off-

set credits issued by the President do not compromise the integrity of the annual emission reductions established under section 703, and to avoid or minimize adverse effects to human health or the environment.

"SEC. 732. ESTABLISHMENT OF OFFSETS PROGRAM.

"(a) REGULATIONS.—Not later than 2 years after the date of enactment of this title, the President, in consultation with appropriate Federal agencies and taking into consideration the recommendations of the Advisory Board, shall promulgate regulations establishing a program for the issuance of offset credits in accordance with the requirements of this part. The President shall periodically revise these regulations as necessary to meet the requirements of this part.

"(b) REQUIREMENTS.—The regulations described in subsection (a) shall—

"(1) authorize the issuance of offset credits with respect to qualifying offset projects that result in reductions or avoidance of greenhouse gas emissions, or sequestration of greenhouse gases;

"(2) ensure that such offset credits represent verifiable and additional greenhouse gas emission reductions or avoidance, or increases in sequestration;

"(3) ensure that offset credits issued for sequestration offset projects are only issued for greenhouse gas reductions that are permanent;

"(4) provide for the implementation of the requirements of this part;

"(5) include as reductions in greenhouse gases reductions achieved through the destruction of methane and its conversion to carbon dioxide, and reductions achieved through destruction of chlorofluorocarbons or other ozone depleting substances, if permitted by the President under section 619(b)(9) and subject to the conditions specified in section 619(b)(9), based on the carbon dioxide equivalent value of the substance destroyed; and

"(6) establish a process to accept and respond to comments from third parties regarding programs established under this part in a timely manner.

"(c) COORDINATION TO MINIMIZE NEGATIVE EFFECTS.—In promulgating and implementing regulations under this part, the President shall act (including by rejecting projects, if necessary) to avoid or minimize, to the maximum extent practicable, adverse effects on human health or the environment resulting from the implementation of offset projects under this part.

"(d) OFFSET REGISTRY.—The President shall establish within the allowance tracking system established under section 724(d) an Offset Registry for qualifying offset projects and offset credits issued with respect thereto under this part.

"(e) LEGAL STATUS OF OFFSET CREDIT.—An offset credit does not constitute a property right.

"(f) FEES.—The President shall assess fees payable by offset project developers in an amount necessary to cover the administrative costs and the enforcement costs to the Environmental Protection Agency and the Department of Justice of carrying out the activities under this part. Amounts collected for such fees shall be available to the President and the Attorney General for carrying out the activities under this part to the extent provided in advance in appropriations Acts.

"SEC. 733. ELIGIBLE PROJECT TYPES.

"(a) LIST OF ELIGIBLE PROJECT TYPES.—

"(1) IN GENERAL.—As part of the regulations promulgated under section 732(a), the President shall establish, and may periodically revise, a list of types of projects eligible to generate offset credits, including international offset credits, under this part.

"(2) ADVISORY BOARD RECOMMENDATIONS.—In determining the eligibility of project types, the President shall take into consideration the recommendations of the Advisory Board. If a list established under this section differs from the recommendations of the Advisory Board, the regulations promulgated under section 732(a) shall include a justification for the discrepancy.

"(3) INITIAL DETERMINATION.—The President shall establish the initial eligibility list under paragraph (1) not later than one year after the date of enactment of this title for which there are well developed methodologies that the President determines would meet the criteria of section 734.

"(4) PROJECT TYPES TO BE CONSIDERED FOR INITIAL LIST.—In determining the initial list, the President shall give priority to consideration of offset project types that are recommended by the Advisory Board and for which there are well developed methodologies that the President determines would meet the criteria of section 734, and shall consider—

"(A) methane collection and combustion projects at active underground coal mines;

"(B) methane collection and combustion projects at landfills;

"(C) capture of venting, flaring, and fugitive emissions from oil and natural gas systems;

"(D) nonlandfill methane collection, combustion and avoidance projects involving organic waste streams that would have otherwise emitted methane in the atmosphere, including manure management and biogas capture and combustion;

"(E) projects involving afforestation or reforestation of acreage not forested as of January 1, 2009;

"(F) forest management resulting in an increase in forest carbon stores, including harvested wood products;

"(G) agricultural, grassland, and rangeland sequestration and management practices, including—

"(i) altered tillage practices, including avoided abandonment of such practices;

"(ii) winter cover cropping, continuous cropping, and other means to increase biomass returned to soil in lieu of planting followed by fallowing;

"(iii) reduction of nitrogen fertilizer use or increase in nitrogen use efficiency;

"(iv) reduction in the frequency and duration of flooding of rice paddies;

"(v) reduction in carbon emissions from organic soils;

"(vi) reduction in greenhouse gas emissions from manure and effluent;

"(vii) reduction in greenhouse gas emissions due to changes in animal management practices, including dietary modifications;

"(viii) planting and cultivation of permanent tree crops;

"(ix) greenhouse gas emission reductions from improvements and upgrades to mobile or stationary equipment (including engines);

"(x) practices to reduce and eliminate soil tillage;

"(xi) reductions in greenhouse gas emissions through restoration of wetlands, forestland, and grassland; and

"(xii) sequestration of greenhouse gases through management of tree crops; and

"(H) changes in carbon stocks attributed to land use change and forestry activities, including—

"(i) management of peatland or wetland;

"(ii) conservation of grassland and forested land;

"(iii) improved forest management, including accounting for carbon stored in wood products;

"(iv) reduced deforestation or avoided forest conversion;

"(v) urban tree-planting and maintenance;

"(vi) agroforestry; and

"(vii) adaptation of plant traits or new technologies that increase sequestration by forests.

"(5) METHODOLOGIES.—In issuing methodologies pursuant to section 734, the President shall give priority to methodologies for offset types included on the initial eligibility list.

"(b) MODIFICATION OF LIST.—The President—

"(1) shall add additional project types to the list not later than 2 years after the date of enactment of this title;

"(2) may at any time, by rule, add a project type to the list established under subsection (a) if the President, in consultation with appropriate Federal agencies and taking into consideration the recommendations of the Advisory Board, determines that the project type can generate additional reductions or avoidance of greenhouse gas emissions, or sequestration of greenhouse gases, subject to the requirements of this part;

"(3) may at any time, by rule, determine that a project type on the list does not meet the requirements of this part, and remove a project type from the list established under subsection (a), in consultation with appropriate Federal agencies and taking into consideration any recommendations of the Advisory Board; and

"(4) shall consider adding to or removing from the list established under subsection (a), at a minimum, project types proposed to the President—

"(A) by petition pursuant to subsection (c); or

"(B) by the Advisory Board.

"(c) PETITION PROCESS.—Any person may petition the President to modify the list established under subsection (a) by adding or removing a project type pursuant to subsection (b). Any such petition shall include a showing by the petitioner that there is adequate data to establish that the project type does or does not meet the requirements of this part. Not later than 12 months after receipt of such a petition, the President shall either grant or deny the petition and publish a written explanation of the reasons for the President's decision. The President may not deny a petition under this subsection on the basis of inadequate Environmental Protection Agency resources or time for review.

"SEC. 734. REQUIREMENTS FOR OFFSET PROJECTS.

"(a) METHODOLOGIES.—As part of the regulations promulgated under section 732(a), the President shall establish, for each type of offset project listed as eligible under section 733, the following:

"(1) ADDITIONALITY.—A standardized methodology for determining the additionality of greenhouse gas emission reductions or avoidance, or greenhouse gas sequestration, achieved by an offset project of that type. Such methodology shall ensure, at a minimum, that any greenhouse gas emission reduction

or avoidance, or any greenhouse gas sequestration, is considered additional only to the extent that it results from activities that—

"(A) are not required by or undertaken to comply with any law, including any regulation or consent order;

"(B) were not commenced prior to January 1, 2009, except in the case of—

"(i) offset project activities that commenced after January 1, 2001, and were registered as of the date of enactment of this title under an offset program with respect to which the President has made an affirmative determination under section 740(a)(2); or

"(ii) activities that are readily reversible, with respect to which the President may set an alternative earlier date under this subparagraph that is not earlier than January 1, 2001, where the President determines that setting such an alternative date may produce an environmental benefit by removing an incentive to cease and then reinitiate activities that began prior to January 1, 2009;

"(C) are not receiving support under section 323 of division A, or section 207 of division B, of the Clean Energy Jobs and American Power Act; and

"(D) exceed the activity baseline established under paragraph (2).

"(2) ACTIVITY BASELINES.—A standardized methodology for establishing activity baselines for offset projects of that type. The President shall set activity baselines to reflect a conservative estimate of business-as-usual performance or practices for the relevant type of activity such that the baseline provides an adequate margin of safety to ensure the environmental integrity of offsets calculated in reference to such baseline.

"(3) QUANTIFICATION METHODS.—A standardized methodology for determining the extent to which greenhouse gas emission reductions or avoidance, or greenhouse gas sequestration, achieved by an offset project of that type exceed a relevant activity baseline, including protocols for monitoring and accounting for uncertainty.

"(4) LEAKAGE.—A standardized methodology for accounting for and mitigating potential leakage,

if any, from an offset project of that type, taking uncertainty into account.

"(b) ACCOUNTING FOR REVERSALS.—

"(1) IN GENERAL.—As part of the regulations promulgated under section 732(a), for each type of sequestration project listed under section 733, the President shall establish requirements to account for and address reversals, including—

"(A) a requirement to report any reversal with respect to an offset project for which offset credits have been issued under this part;

"(B) provisions to require emission allowances to be held in amounts to fully compensate for greenhouse gas emissions attributable to reversals, and to assign responsibility for holding such emission allowances;

"(C) provisions to discourage repeated intentional reversals by offset project developers, including but not limited to the assessment of administrative fees, temporary suspension, or disqualification of an offset project developer from the program; and

"(D) any other provisions the President determines necessary to account for and address reversals.

"(2) MECHANISMS.—The President shall prescribe mechanisms to ensure that any sequestration with respect to which an offset credit is issued under this part results in a permanent net increase in sequestration, and that full account is taken of any actual or potential reversal of such sequestration, with an adequate margin of safety. The President shall prescribe at least one of the following mechanisms to meet the requirements of this paragraph:

"(A) An offsets reserve, pursuant to paragraph (3).

"(B) Insurance that provides for purchase and provision to the President for retirement of an amount of offset credits or emission allowances equal in number to the tons of carbon dioxide equivalents of greenhouse gas emissions released due to reversal.

"(C) Another mechanism that the President determines satisfies the requirements of this part.

"(3) OFFSETS RESERVE.—

"(A) IN GENERAL.—An offsets reserve referred to in paragraph (2)(A) is a program under which, before issuance of offset credits under this part, the President shall subtract

and reserve from the quantity to be issued a quantity of offset credits based on the risk of reversal. The President shall—

"(i) hold these reserved offset credits in the offsets reserve; and

"(ii) register the holding of the reserved offset credits in the Offset Registry established under section 732(d).

"(B) PROJECT REVERSAL.—

"(i) IN GENERAL.—If a reversal has occurred with respect an offset project for which offset credits are reserved under this paragraph, the President shall remove offset credits or emission allowances from the offsets reserve and cancel them to fully account for the tons of carbon dioxide equivalent that are no longer sequestered.

"(ii) INTENTIONAL REVERSALS.—If the President determines that a reversal was intentional, the offset project developer for the relevant offset project shall place into the offsets reserve a quantity of offset credits, or combination of offset credits and emission allowances, equal in number to the number of reserve offset credits that

were canceled due to the reversal pursuant to clause (i).

"(iii) UNINTENTIONAL REVERSALS.—If the President determines that a reversal was unintentional, the offset project developer for the relevant offset project shall place into the offsets reserve a quantity of offset credits, or combination of offset credits and emission allowances, equal in number to half the number of offset credits that were reserved for that offset project, or half the number of reserve offset credits that were canceled due to the reversal pursuant to clause (i), whichever is less.

"(iv) PETITION.—Any person may petition the President for a determination that an offsets reversal has occurred. Any such petition shall include a showing by the petitioner that there is adequate data or other evidence to support the petition. Not later than 90 days after the date of receipt of the petition, the President shall take final action determining either that the reversal has occurred or that the reversal has not occurred. Such determination

shall be accompanied by a statement of the basis for the determination.

"(C) USE OF RESERVED OFFSET CREDITS.—Offset credits placed into the offsets reserve under this paragraph may not be used to comply with section 722.

"(4) TERM OFFSET CREDITS.—

"(A) APPLICABILITY.—With respect to a practice listed under section 733 that sequesters greenhouse gases and has a crediting period of not more than 5 years, the President may address reversals pursuant to this paragraph in lieu of permanently accounting for reversals pursuant to paragraphs (1) and (2).

"(B) ACCOUNTING FOR REVERSALS.—For such practices or projects implementing the practices described in subparagraph (A), the President shall require only reversals that occur during the crediting period to be accounted for and addressed pursuant to paragraphs (1) and (2).

"(C) CREDITS ISSUED.—For practices or projects regulated pursuant to subparagraph (B), the Secretary shall issue under section 737 a term offset credit, in lieu of an offset credit,

for each ton of carbon dioxide equivalent that has been sequestered.

"(c) CREDITING PERIODS.—

"(1) IN GENERAL.—As part of the regulations promulgated under section 732(a), for each offset project type, the President shall specify a crediting period, and establish provisions for petitions for new crediting periods, in accordance with this subsection.

"(2) DURATION.—

"(A) IN GENERAL.—The crediting period shall be not less than 5 and not greater than 10 years for any project type other than those involving sequestration or term offsets.

"(B) FORESTRY PROJECTS.—The crediting period for a forestry offset project shall not exceed 20 years.

"(C) TERM OFFSET CREDITS.—The crediting period for a term offset credit issued shall not exceed 5 years.

"(3) ELIGIBILITY.—An offset project shall be eligible to generate offset credits under this part only during the project's crediting period. During such crediting period, the project shall remain eligible to generate offset credits, subject to the methodologies and project type eligibility list that applied

as of the date of project approval under section 735, except as provided in paragraph (4).

"(4) PETITION FOR NEW CREDITING PERIOD.—An offset project developer may petition for a new crediting period to commence after termination of a crediting period, subject to the methodologies and project type eligibility list in effect at the time when such petition is submitted. A petition may not be submitted under this paragraph more than 18 months before the end of the pending crediting period. The President may grant such petition after public notice and opportunity for comment. The President may limit the number of new crediting periods available for projects of particular project types.

"(d) ENVIRONMENTAL INTEGRITY.—In establishing the requirements under this section, the President shall apply conservative assumptions or methods to maximize the certainty that the environmental integrity of the greenhouse gas limitations established under section 703 is not compromised.

"(e) PRE-EXISTING METHODOLOGIES.—In promulgating requirements under this section, the President shall give due consideration to methodologies for offset projects existing as of the date of enactment of this title.

"(f) ADDED PROJECT TYPES.—The President shall establish methodologies described in subsection (a), and, as applicable, requirements and mechanisms for reversals as described in subsection (b), for any project type that is added to the list pursuant to section 733.

"SEC. 735. APPROVAL OF OFFSET PROJECTS.

"(a) APPROVAL PETITION.—An offset project developer shall submit an offset project approval petition signed by a responsible official (who shall certify the accuracy of the information submitted) and providing such information as the President requires to determine whether the offset project is eligible for issuance of offset credits under rules promulgated pursuant to this part.

"(b) TIMING.—An approval petition shall be submitted to the President under subsection (a) not later than the time at which an offset project's first verification report is submitted under section 736.

"(c) APPROVAL PETITION REQUIREMENTS.—As part of the regulations promulgated under section 732, the President shall include provisions for, and shall specify, the required components of an offset project approval petition required under subsection (a), which shall include—

"(1) designation of an offset project developer;

"(2) designation of a party who is authorized to provide access to the appropriate officials or an authorized representative to the offset project; and

"(3) any other information that the President considers to be necessary to achieve the purposes of this part.

"(d) APPROVAL AND NOTIFICATION.—Not later than 90 days after receiving a complete approval petition under subsection (a), the President shall make the approval petition publicly available on the internet, approve or deny the petition in writing, and, if the petition is denied, make the President's decision publicly available on the internet. After an offset project is approved, the offset project developer shall not be required to resubmit an approval petition during the offset project's crediting period, except as provided in section 734(c)(4).

"(e) APPEAL.—The President shall establish procedures for appeal and review of determinations made under subsection (d).

"(f) VOLUNTARY PREAPPROVAL REVIEW.—The President may establish a voluntary preapproval review procedure, to allow an offset project developer to request the President to conduct a preliminary eligibility review for an offset project. Findings of such reviews shall not

be binding upon the President. The voluntary preapproval review procedure—

"(1) shall require the offset project developer to submit such basic project information as the President requires to provide a meaningful review; and

"(2) shall require a response from the President not later than 6 weeks after receiving a request for review under this subsection.

"SEC. 736. VERIFICATION OF OFFSET PROJECTS.

"(a) IN GENERAL.—As part of the regulations promulgated under section 732(a), the President shall establish requirements, including protocols, for verification of the quantity of greenhouse gas emission reductions or avoidance, or sequestration of greenhouse gases, resulting from an offset project. The regulations shall require that an offset project developer shall submit a report, prepared by a third-party verifier accredited under subsection (d), providing such information as the President requires to determine the quantity of greenhouse gas emission reductions or avoidance, or sequestration of greenhouse gas, resulting from the offset project.

"(b) SCHEDULE.—The President shall prescribe a schedule for the submission of verification reports under subsection (a).

"(c) VERIFICATION REPORT REQUIREMENTS.—The President shall specify the required components of a verification report required under subsection (a), which shall include—

"(1) the name and contact information for a designated representative for the offset project developer;

"(2) the quantity of greenhouse gas reduced, avoided, or sequestered;

"(3) the methodologies applicable to the project pursuant to section 734;

"(4) a certification that the project meets the applicable requirements;

"(5) a certification establishing that the conflict of interest requirements in the regulations promulgated under subsection (d)(1) have been complied with; and

"(6) any other information that the President considers to be necessary to achieve the purposes of this part.

"(d) VERIFIER ACCREDITATION.—

"(1) IN GENERAL.—As part of the regulations promulgated under section 732(a), the President shall establish a process and requirements for periodic accreditation of third-party verifiers to ensure

that such verifiers are professionally qualified and have no conflicts of interest with offset project developers.

"(2) STANDARDS.—

"(A) AMERICAN NATIONAL STANDARDS INSTITUTE ACCREDITATION.—The President may accredit, or accept for purposes of accreditation under this subsection, verifiers accredited under the American National Standards Institute (ANSI) accreditation program in accordance with ISO 14065. The President shall accredit, or accept for accreditation, verifiers under this subparagraph only if the President finds that the American National Standards Institute accreditation program provides sufficient assurance that the requirements of this part will be met.

"(B) EPA ACCREDITATION.—As part of the regulations promulgated under section 732(a), the President may establish accreditation standards for verifiers under this subsection, and may establish related training and testing programs and requirements.

"(3) PUBLIC ACCESSIBILITY.—Each verifier meeting the requirements for accreditation in ac-

cordance with this subsection shall be listed in a publicly accessible database, which shall be maintained and updated by the President.

"(4) REVOCATION.—The regulations concerning accreditation of third-party verifiers required under paragraph (1) shall establish a process for the President to revoke the accreditation of any third-party verifier that the President finds fails to maintain professional qualifications or to avoid a conflict of interest, or for other good cause.

"SEC. 737. ISSUANCE OF OFFSET CREDITS.

"(a) DETERMINATION AND NOTIFICATION.—Not later than 90 days after receiving a complete verification report under section 736, the President shall—

"(1) make the report publicly available on the Internet;

"(2) make a determination of the quantity of greenhouse gas emissions reduced or avoided, or greenhouse gases sequestered, resulting from an offset project approved under section 735; and

"(3) notify the offset project developer in writing of such determination and make such determination publicly available on the Internet.

"(b) ISSUANCE OF OFFSET CREDITS.—The President shall issue one offset credit to an offset project devel-

oper for each ton of carbon dioxide equivalent that the President has determined has been reduced, avoided, or sequestered during the period covered by a verification report submitted in accordance with section 736, only if—

"(1) the President has approved the offset project pursuant to section 735; and

"(2) the relevant emissions reduction, avoidance, or sequestration has—

"(A) already occurred, during the offset project's crediting period; and

"(B) occurred after January 1, 2009.

"(c) APPEAL.—The President shall establish procedures for appeal and review of determinations made under subsection (a).

"(d) TIMING.—Offset credits meeting the criteria established in subsection (b) shall be issued not later than 2 weeks following the verification determination made by the President under subsection (a).

"(e) REGISTRATION.—The President shall assign a unique serial number to and register each offset credit to be issued in the Offset Registry established under section 732(d).

"SEC. 738. AUDITS.

"(a) IN GENERAL.—The President shall, on an ongoing basis, conduct random audits of offset projects and

1 offset credits. The President shall conduct audits of the
2 practices of third-party verifiers. In each year, the Presi-
3 dent shall conduct audits, at minimum, for a representa-
4 tive sample of project types and geographic areas.

5 "(b) DELEGATION.—The President may delegate to
6 a State or tribal government the responsibility for con-
7 ducting audits under this section if the President finds
8 that the program proposed by the State or tribal govern-
9 ment provides assurances equivalent to those provided by
10 the auditing program of the President, and that the integ-
11 rity of the offset program under this part will be main-
12 tained. Nothing in this subsection shall prevent the Presi-
13 dent from conducting any audit the President considers
14 necessary and appropriate.

15 "(c) AUDIT REQUIREMENTS.—As part of the regula-
16 tions promulgated under section 732(a), the appropriate
17 officials shall establish requirements and protocols for an
18 auditing program, whether undertaken by the appropriate
19 officials or an authorized representative, concerning
20 project developers, third-party verifiers, and various com-
21 ponents of the offsets program. Such regulations shall in-
22 clude—

23 "(1) the components of the offset project, which
24 shall be evaluated against the offset approval peti-
25 tion and the verification report;

"(2) the minimum experience or training of the auditors;

"(3) the form in which reports shall be completed;

"(4) requirements for delegating auditing functions to States or tribal governments, including requiring periodic reports from State or tribal governments on their auditing activities and findings; and

"(5) any other information that the appropriate officials considers to be necessary to achieve the purpose of the Act.

"SEC. 739. PROGRAM REVIEW AND REVISION.

"At least once every 5 years, the President shall review and, based on new or updated information and taking into consideration the recommendations of the Advisory Board, update and revise—

"(1) the list of eligible project types established under section 733;

"(2) the methodologies established, including specific activity baselines, under section 734(a);

"(3) the reversal requirements and mechanisms established or prescribed under section 734(b);

"(4) measures to improve the accountability of the offsets program; and

"(5) any other requirements established under this part to ensure the environmental integrity and effective operation of this part.

"SEC. 740. EARLY OFFSET SUPPLY.

"(a) PROJECTS REGISTERED UNDER OTHER GOVERNMENT-RECOGNIZED PROGRAMS.—Except as provided in subsection (b) or (c), after public notice and opportunity for comment, the President shall issue one offset credit for each ton of carbon dioxide equivalent emissions reduced, avoided, or sequestered—

"(1) under an offset project that was started after January 1, 2001;

"(2) for which a credit was issued under any regulatory or voluntary greenhouse gas emission offset program that the President determines—

"(A) was established under State or tribal law or regulation prior to January 1, 2009, or has been approved by the President pursuant to subsection (e);

"(B) has developed offset project type standards, methodologies, and protocols through a public consultation process or a peer review process;

"(C) has made available to the public standards, methodologies, and protocols that re-

quire that credited emission reductions, avoidance, or sequestration are permanent, additional, verifiable, and enforceable;

"(D) requires that all emission reductions, avoidance, or sequestration be verified by a State regulatory agency or an accredited third-party independent verification body;

"(E) requires that all credits issued are registered in a publicly accessible registry, with individual serial numbers assigned for each ton of carbon dioxide equivalent emission reductions, avoidance, or sequestration; and

"(F) ensures that no credits are issued for activities for which the entity administering the program, or a program administrator or representative, has funded, solicited, or served as a fund administrator for the development of, the project or activity that caused the emission reduction, avoidance, or sequestration; and

"(3) for which the credit described in paragraph (2) is transferred to the President.

"(b) INELIGIBLE CREDITS.—Subsection (a) shall not apply to offset credits that have expired or have been retired, canceled, or used for compliance under a program established under State or tribal law or regulation.

"(c) LIMITATION.—Notwithstanding subsection (a)(1), offset credits shall be issued under this section—

"(1) only for reductions or avoidance of greenhouse gas emissions, or sequestration of greenhouse gases, that occur after January 1, 2009; and

"(2) only until the date that is 3 years after the date of enactment of this title, or the date that regulations promulgated under section 732(a) take effect, whichever occurs sooner.

"(d) RETIREMENT OF CREDITS.—The President shall seek to ensure that offset credits described in subsection (a)(2) are retired for purposes of use under a program described in subsection (b).

"(e) OTHER PROGRAMS.—

"(1) IN GENERAL.—Offset programs that either—

"(A) were not established under State or tribal law; or

"(B) were not established prior to January 1, 2009;

but that otherwise meet all of the criteria of subsection (a)(2) may apply to the President to be approved under this subsection as an eligible program for early offset credits under this section.

"(2) APPROVAL.—The President shall approve any such program that the President determines has criteria and methodologies of at least equal stringency to the criteria and methodologies of the programs established under State or tribal law that the President determines meet the criteria of subsection (a)(2). The President may approve types of offsets under any such program that are subject to criteria and methodologies of at least equal stringency to the criteria and methodologies for such types of offsets applied under the programs established under State or tribal law that the President determines meet the criteria of subsection (a)(2). The President shall make a determination on any application received under this subsection by not later than 180 days from the date of receipt of the application.

"SEC. 741. ENVIRONMENTAL CONSIDERATIONS.

"If the President lists forestry or other relevant land management-related offset projects as eligible offset project types under section 733, the President, in consultation with appropriate Federal agencies, shall promulgate regulations to establish criteria for such offset projects—

"(1) to ensure that native species are given primary consideration in such projects;

"(2) to enhance biological diversity in such projects;

"(3) to prohibit the use of federally designated or State-designated noxious weeds;

"(4) to prohibit the use of a species listed by a regional or State invasive plant authority within the applicable region or State;

"(5) in the case of forestry offset projects, in accordance with widely accepted, environmentally sustainable forestry practices;

"(6) to ensure that the offset project area was not converted from native ecosystems, such as a forest, grassland, scrubland or wetland, to generate offsets, unless such conversation took place at least 10 years prior to the date of enactment of this title or before January 1, 2009, whichever date is earlier; and

"(7) to the maximum extent practicable, ensure that the use of offset credits would be eligible to satisfy emission reduction commitments made by the United States in multilateral agreements, such as the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992 (or any successor agreement).

"SEC. 742. TRADING.

"Section 724 shall apply to the trading of offset credits.

"SEC. 743. OFFICE OF OFFSETS INTEGRITY.

"(a) ESTABLISHMENT.—There is established within the Office of the Assistant Attorney General of the Environment and Natural Resources Division in the Department of Justice a Carbon Offsets Integrity Unit, to be headed by a Special Counsel (hereinafter referred to as the 'Special Counsel'). The Carbon Offsets Integrity Unit and the Special Counsel shall be responsible to and shall report directly to the Assistant Attorney General of the Environment and Natural Resources Division.

"(b) APPOINTMENT.—The Special Counsel shall be appointed by the President, by and with the advice and consent of the Senate.

"(c) RESPONSIBILITIES.—The Special Counsel shall—

"(1) supervise and coordinate investigations and civil enforcement within the Department of Justice of the carbon offsets program under this part;

"(2) ensure that Federal law relating to civil enforcement of the carbon offsets program is used to the fullest extent authorized; and

"(3) ensure that adequate resources are made available for the investigation and enforcement of civil violations of the carbon offsets program.

"(d) COMPENSATION.—The Special Counsel shall be paid at the basic pay payable for level V of the Executive Schedule under section 5316 of title 5, United States Code.

"(e) ASSIGNMENT OF PERSONNEL.—There shall be assigned to the Carbon Offsets Integrity Unit such personnel as the Attorney General determines to be necessary to provide an appropriate level of enforcement activity in the area of carbon offsets.

"SEC. 744. INTERNATIONAL OFFSET CREDITS.

"(a) IN GENERAL.—The Administrator, in consultation with the Secretary of State and the Administrator of the United States Agency for International Development, may issue, in accordance with this section, international offset credits based on activities that reduce or avoid greenhouse gas emissions, or increase sequestration of greenhouse gases, in a developing country. Such credits may be issued for projects pursuant to the requirements of this part or as provided in subsection (c), (d), or (e).

"(b) ISSUANCE.—

"(1) REGULATIONS.—Not later than 2 years after the date of enactment of this title, the Admin-

istrator, in consultation with the Secretary of State, the Administrator of the United States Agency for International Development, and any other appropriate Federal agency, and taking into consideration the recommendations of the Advisory Board, shall promulgate regulations for implementing this section, taking into consideration specific factors relevant to the determination of eligible international offset project types and the implementation of international methodologies for each offset type approved. Except as otherwise provided in this section, the issuance of international offset credits under this section shall be subject to the requirements of this part.

"(2) REQUIREMENTS FOR INTERNATIONAL OFFSET CREDITS.—The Administrator may issue international offset credits only if—

"(A) the United States is a party to a bilateral or multilateral agreement or arrangement that includes the country in which the project or measure achieving the relevant greenhouse gas emission reduction or avoidance, or greenhouse gas sequestration, has occurred;

"(B) such country is a developing country; and

"(C) such agreement or arrangement—

"(i) ensures that all of the requirements of this part apply to the issuance of international offset credits under this section;

"(ii) provides for the appropriate distribution of international offset credits issued; and

"(iii) provides that the offset project developer be eligible to receive service of process in the United States for the purpose of all civil and regulatory actions in Federal courts, if such service is made in accordance with the Federal rules for service of process in the States in which the case or regulatory action is brought.

"(3) SUPPLEMENTAL INTERNATIONAL OFFSET CATEGORIES.—

"(A) IN GENERAL.—In order to ensure a sufficient supply of international offsets and to reduce the cost of compliance with this title, the Administrator may establish categories of international offsets in addition to those described in subsections (c), (d), and (e), if—

"(i) for 2 consecutive years, the auction price for allowances reaches the market stability reserve auction price under section 726(c); and

"(ii) the Administrator determines that the total amount of international offsets held by covered entities for each of the 2 years referred to in clause (i) does not exceed the limit on international offsets established under section 722(d)(3).

"(B) SUPPLEMENTAL CATEGORIES.—

"(i) IN GENERAL.—Any supplemental categories of international offsets established pursuant to subparagraph (A) shall—

"(I) satisfy all applicable provisions of this part, including subsection (b)(2) of this section and sections 733 and 734; and

"(II) meet the criteria described in clause (ii).

"(ii) CRITERIA.—The criteria referred to in clause (i)(II) are that—

"(I) the country in which the activities in the offset category would

take place has developed and is implementing a low carbon development plan that includes provisions for the activities described in the offset category;

"(II) the activities in the offset category are not activities included under subsection (c), (d) or (e); and

"(III) the activities in the offset category satisfy specific criteria relevant to methodologies and institutional and technical capacities associated with developing country contexts to ensure adequate treatment of leakage, additionality, and permanence.

"(c) SECTOR-BASED CREDITS.—

"(1) IN GENERAL.—In order to minimize the potential for leakage and to encourage countries to take nationally appropriate mitigation actions to reduce or avoid greenhouse gas emissions, or sequester greenhouse gases, the Administrator, in consultation with the Secretary of State and the Administrator of the United States Agency for International Development, shall—

"(A) identify sectors, or combinations of sectors, within specific countries with respect to which the issuance of international offset credits on a sectoral basis is appropriate; and

"(B) issue international offset credits for such sectors only on a sectoral basis.

"(2) IDENTIFICATION OF SECTORS.—

"(A) GENERAL RULE.—For purposes of paragraph (1)(A), a sectoral basis shall be appropriate for activities—

"(i) in countries that have comparatively high greenhouse gas emissions, or comparatively greater levels of economic development; and

"(ii) that, if located in the United States, would be within a sector subject to the compliance obligation under section 722.

"(B) FACTORS.—In determining the sectors and countries for which international offset credits should be awarded only on a sectoral basis, the Administrator, in consultation with the Secretary of State and the Administrator of the United States Agency for International Development, shall consider the following factors:

"(i) The country's gross domestic product.

"(ii) The country's total greenhouse gas emissions.

"(iii) Whether the comparable sector of the United States economy is covered by the compliance obligation under section 722.

"(iv) The heterogeneity or homogeneity of sources within the relevant sector.

"(v) Whether the relevant sector provides products or services that are sold in internationally competitive markets.

"(vi) The risk of leakage if international offset credits were issued on a project-level basis, instead of on a sectoral basis, for activities within the relevant sector.

"(vii) The capability of accurately measuring, monitoring, reporting, and verifying the performance of sources across the relevant sector.

"(viii) Such other factors as the Administrator, in consultation with the Sec-

retary of State and the Administrator of the United States Agency for International Development, determines are appropriate to—

"(I) ensure the integrity of the United States greenhouse gas emissions limitations established under section 703; and

"(II) encourage countries to take nationally appropriate mitigation actions to reduce or avoid greenhouse gas emissions, or sequester greenhouse gases.

"(ix) The issuance of offsets for activities that are—

"(I) in addition to nationally appropriate mitigation actions taken by developing countries pursuant to the low-carbon development plans of the countries; and

"(II) on a sectoral basis.

"(3) SECTORAL BASIS.—

"(A) DEFINITION.—In this subsection, the term 'sectoral basis' means the issuance of international offset credits only for the quantity

of sector-wide reductions or avoidance of greenhouse gas emissions, or sector-wide increases in sequestration of greenhouse gases, achieved across the relevant sector or sectors of the economy relative to a baseline level of emissions established in an agreement or arrangement described in subsection (b)(2)(A) for the sector.

"(B) BASELINE.—The baseline for a sector shall—

"(i) be established at levels of greenhouse gas emissions lower than would occur under a business-as-usual scenario, taking into account relevant domestic or international policies or incentives to reduce greenhouse gas emissions;

"(ii) be used to determine additionality and performance;

"(iii) account for all significant sources of emissions from a sector;

"(iv) be adjusted over time to reflect changing circumstances;

"(v) be developed taking into consideration such factors as—

"(I) any established emissions performance level for the sector;

"(II) the current performance of the sector in the country;

"(III) expected future trends of the sector in the country; and

"(IV) historical data and other factors to ensure additionality; and

"(vi) be designed to produce significant deviations from business-as-usual emissions, consistent with nationally appropriate mitigation commitments or actions, in a way that equitably contributes to meeting thresholds identified in section 705(e)(2).

"(d) CREDITS ISSUED BY AN INTERNATIONAL BODY.—

"(1) IN GENERAL.—The Administrator, in consultation with the Secretary of State, may issue international offset credits in exchange for instruments in the nature of offset credits that are issued by an international body established pursuant to the United Nations Framework Convention on Climate Change, to a protocol to such Convention, or to a treaty that succeeds such Convention. The Administrator may issue international offset credits under this subsection only if, in addition to the require-

ments of subsection (b), the Administrator has determined that the international body that issued the instruments has implemented substantive and procedural requirements for the relevant project type that provide equal or greater assurance of the integrity of such instruments as is provided by the requirements of this part. Beginning on January 1, 2016, the Administrator shall issue no offset credit pursuant to this subsection if the activity generating the greenhouse gas emission reductions or avoidance, or greenhouse gas sequestration, occurs in a country and sector identified by the Administrator under subsection (c), unless the offset credit issued by the international body is consistent with section 744(c).

"(2) RETIREMENT.—The Administrator, in consultation with the Secretary of State, shall seek, by whatever means appropriate, including agreements, arrangements, or technical cooperation with the international issuing body described in paragraph (1), to ensure that such body—

"(A) is notified of the Administrator's issuance, under this subsection, of an international offset credit in exchange for an instrument issued by such international body; and

"(B) provides, to the extent feasible, for the disqualification of the instrument issued by such international body for subsequent use under any relevant foreign or international greenhouse gas regulatory program, regardless of whether such use is a sale, exchange, or submission to satisfy a compliance obligation.

"(e) OFFSETS FROM REDUCED DEFORESTATION.—

"(1) REQUIREMENTS.—The Administrator, in accordance with the regulations promulgated under subsection (b)(1) and an agreement or arrangement described in subsection (b)(2)(A), shall issue international offset credits for greenhouse gas emission reductions achieved through activities to reduce deforestation only if, in addition to the requirements of subsection (b)—

"(A) the activity occurs in—

"(i) a country listed by the Administrator pursuant to paragraph (2);

"(ii) a State or province listed by the Administrator pursuant to paragraph (5); or

"(iii) a country listed by the Administrator pursuant to paragraph (6);

"(B) except as provided in paragraph (5) or (6), the quantity of the international offset credits is determined by comparing the national emissions from deforestation relative to a national deforestation baseline for that country established, in accordance with an agreement or arrangement described in subsection (b)(2)(A), pursuant to paragraph (4);

"(C) the reduction in emissions from deforestation has occurred before the issuance of the international offset credit and, taking into consideration relevant international standards, has been demonstrated using ground-based inventories, remote sensing technology, and other methodologies to ensure that all relevant carbon stocks are accounted;

"(D) the Administrator has made appropriate adjustments, such as discounting for any additional uncertainty, to account for circumstances specific to the country, including its technical capacity described in paragraph (2)(A);

"(E) the Administrator has determined that the country within which the activity occurs has in place a publicly available strategic

plan that includes the criteria listed in paragraph (2)(C);

"(F) the activity is designed, carried out, and managed—

"(i) in accordance with forest management practices that—

"(I) improve the livelihoods of forest communities;

"(II) maintain the natural biodiversity, resilience, and carbon storage capacity of forests; and

"(III) do not adversely impact the permanence of forest carbon stocks or emission reductions;

"(ii) to promote or restore native forest species and ecosystems where practicable, and to avoid the introduction of invasive nonnative species;

"(iii) in a manner that gives due regard to the rights and interests of local communities, indigenous peoples, forest-dependent communities, and vulnerable social groups;

"(iv) with consultations with, and full participation of, local communities, indige-

nous peoples, and forest-dependent communities, in affected areas, as partners and primary stakeholders, prior to and during the design, planning, implementation, and monitoring and evaluation of activities;

''(v) with transparent and equitable sharing of profits and benefits derived from offset credits with local communities, indigenous peoples, and forest-dependent communities;

''(vi) with full transparency, third-party independent oversight, and public dissemination of related financial and contractual arrangements, and

''(vii) so that the social and environmental impacts of these activities are monitored and reported in sufficient detail to allow appropriate officials to determine compliance with the requirements of this section;

''(G) the reduction otherwise satisfies and is consistent with any relevant requirements established by an agreement reached under the auspices of the United Nations Framework

Convention on Climate Change, done at New York on May 9, 1992; and

"(H) in the case that offsets are determined by comparing the national emissions from deforestation relative to a national, state-level, or province-level deforestation baseline as provided in paragraph (4) or (5)—

"(i) a list of activities to reduce deforestation is provided to the Administrator and made publicly available;

"(ii) the social and environmental impacts of these activities are monitored and reported in sufficient detail to allow the Administrator to determine compliance with the requirements of this section; and

"(iii) the distribution of revenues for activities to reduce deforestation is transparent, subject to independent third-party oversight, and publicly disseminated.

"(2) ELIGIBLE COUNTRIES.—The Administrator, in consultation with the Secretary of State and the Administrator of the United States Agency for International Development, and in accordance with an agreement or arrangement described in subsection (b)(2)(A), shall establish, and periodically re-

view and update, a list of the developing countries that have the capacity to participate in deforestation reduction activities at a national level, including—

"(A) the technical capacity to monitor, measure, report, and verify forest carbon fluxes for all significant sources of greenhouse gas emissions from deforestation with an acceptable level of uncertainty, as determined taking into account relevant internationally accepted methodologies, such as those established by the Intergovernmental Panel on Climate Change;

"(B) the institutional capacity to reduce emissions from deforestation, including strong forest governance and mechanisms to ensure transparency and third-party independent oversight of offset activities and revenues, and the transparent and equitable distribution of offset revenues for local actions; and

"(C) a land use or forest sector strategic plan that—

"(i) assesses national and local drivers of deforestation and forest degradation and identifies reforms to national policies needed to address them;

"(ii) estimates the country's emissions from deforestation and forest degradation;

"(iii) identifies improvements in and a timeline for data collection, monitoring, and institutional capacity necessary to implement an effective national deforestation reduction program that meets the criteria set forth in this section (including a national deforestation baseline);

"(iv) establishes a timeline for implementing the program and transitioning forest-based economies to low-emissions development pathways with respect to emissions from forest and land use activities;

"(v) includes a national policy for consultations with, and full participation of, all stakeholders, especially indigenous and forest-dependent communities, in its design, planning, and implementation of activities, whether at the national or local level, to reduce deforestation in the country (including a national process for addressing grievances if stakeholders have been caused social, environmental, or economic harm);

"(vi) provides for the distribution of revenues for activities to reduce deforestation transparently and publicly, subject to independent third-party oversight; and

"(vii) includes a national platform or a type of registry for information relating to deforestation and degradation policy and program implementation processes, including a mechanism for the monitoring and reporting of the social and environmental impacts of those activities.

"(3) PROTECTION OF INTERESTS.—With respect to an agreement or arrangement described in subsection (b)(2)(A) with a country that addresses international offset credits under this subsection, the Administrator, in consultation with the Secretary of State and the Administrator of the United States Agency for International Development, shall undertake due diligence to ensure the establishment and enforcement by such country of legal regimes, processes, standards, and safeguards that—

"(A) give due regard to the rights and interests of local communities, indigenous peoples, forest-dependent communities, and vulnerable social groups;

"(B) promote consultations with, and full participation of, forest-dependent communities and indigenous peoples in affected areas, as partners and primary stakeholders, prior to and during the design, planning, implementation, and monitoring and evaluation of activities; and

"(C) encourage transparent and equitable sharing of profits and benefits derived from international offset credits with local communities, indigenous peoples, and forest-dependent communities.

"(4) NATIONAL DEFORESTATION BASELINE.—A national deforestation baseline established under this subsection shall—

"(A) be national in scope;

"(B) be consistent with nationally appropriate mitigation commitments or actions with respect to deforestation, taking into consideration the average annual historical deforestation rates of the country during a period of at least 5 years, the applicable drivers of deforestation, and other factors to ensure that only reductions that are in addition to such commitments or actions will generate offsets;

"(C) establish a trajectory that would result in zero net deforestation by not later than 20 years after the national deforestation baseline has been established, including a spatially explicit land use plan that identifies intact and primary forest areas and managed forest areas that are to remain while the country is reaching the zero net deforestation trajectory;

"(D) be adjusted over time to take account of changing national circumstances;

"(E) be designed to account for all significant sources of greenhouse gas emissions from deforestation in the country; and

"(F) be consistent with the national deforestation baseline, if any, established for such country under section 753.

"(5) STATE-LEVEL OR PROVINCE-LEVEL ACTIVITIES.—

"(A) ELIGIBLE STATES OR PROVINCES.—The Administrator, in consultation with the Secretary of State and the Administrator of the United States Agency for International Development, shall establish, and periodically review and update, a list of States or provinces in developing countries where—

"(i) the developing country is not included on the list of countries established pursuant to paragraph (6)(A);

"(ii) the State or province is undertaking deforestation reduction activities;

"(iii) the State or province has the capacity to engage in deforestation reduction activities at the State or province level, including—

"(I) the technical capacity to monitor and measure forest carbon fluxes for all significant sources of greenhouse gas emissions from deforestation with an acceptable amount of uncertainty, including a spatially explicit land use plan that identifies intact and primary forest areas and managed forest areas that are to remain while the country is reaching the zero net deforestation trajectory; and

"(II) the institutional capacity to reduce emissions from deforestation, including strong forest governance and mechanisms to deliver forest conservation resources for local actions;

"(iv) the State or province meets the eligibility criteria in paragraphs (2) and (3) for the geographic area under its jurisdiction; and

"(v) the country—

"(I) demonstrates that efforts are underway to transition to a national program within 5 years; or

"(II) in the determination of the Administrator, is making a good-faith effort to develop a land use or forest sector strategic national plan or program that meets the criteria described in paragraph (2)(C).

"(B) ACTIVITIES.—The Administrator may issue international offset credits for greenhouse gas emission reductions achieved through activities to reduce deforestation at a State or provincial level that meet the requirements of this section. Such credits shall be determined by comparing the emissions from deforestation within that State or province relative to the State or province deforestation baseline for that State or province established, in accordance with an agreement or arrangement described in

subsection (b)(2)(A), pursuant to subparagraph (C) of this paragraph.

"(C) STATE-LEVEL OR PROVINCE-LEVEL DEFORESTATION BASELINE.—A State-level or province-level deforestation baseline shall—

"(i) be consistent with any existing nationally appropriate mitigation commitments or actions for the country in which the activity is occurring, so that only reductions that are in addition to those commitments or actions will generate offsets;

"(ii) be developed taking into consideration the average annual historical deforestation rates of the State or province during a period of at least 5 years, relevant drivers of deforestation, and other factors to ensure additionality;

"(iii) establish a trajectory that would result in zero net deforestation by not later than 20 years after the State-level or province-level deforestation baseline has been established; and

"(iv) be designed to account for all significant sources of greenhouse gas emissions from deforestation in the State or

province and adjusted to fully account for emissions leakage outside the State or province through monitoring of major forested areas in the host country and other areas of the host country susceptible to leakage.

"(D) PHASE-OUT.—Beginning 5 years after the first calendar year for which a covered entity must demonstrate compliance with section 722(a), the Administrator shall issue no further international offset credits for eligible State-level or province-level activities to reduce deforestation pursuant to this paragraph.

"(6) PROJECTS AND PROGRAMS TO REDUCE DEFORESTATION.—

"(A) ELIGIBLE COUNTRIES.—The Administrator, in consultation with the Secretary of State and the Administrator of the United States Agency for International Development, shall establish, and periodically review and update, a list of developing countries that—

"(i) the Administrator determines, based on recent, credible, and reliable emissions data, account for less than 1 percent of global greenhouse gas emissions

and less than 3 percent of global forest-sector and land use change greenhouse gas emissions;

"(ii) have, or in the determination of the Administrator are making a good faith effort to develop, a land use or forest sector strategic plan that meets the criteria described in paragraph (2)(C); and

"(iii) has made, or in the determination of the Administrator, is making, a good-faith effort to develop, through the implementation of activities under this section, a monitoring program for major forested areas in a host country and other areas in a host country susceptible to leakage, including a spatially explicit land use plan that identifies intact and primary forest areas and managed forest areas that are to remain while country is reaching the zero net deforestation trajectory.

"(B) ACTIVITIES.—The Administrator may issue international offset credits for greenhouse gas emission reductions achieved through project or program level activities to reduce deforestation in countries listed under subpara-

graph (A) that meet the requirements of this section. The quantity of international offset credits shall be determined by comparing the project-level or program-level emissions from deforestation to a deforestation baseline for such project or program established pursuant to subparagraph (C).

"(C) PROJECT-LEVEL OR PROGRAM-LEVEL BASELINE.—A project-level or program-level deforestation baseline shall—

"(i) be consistent with any existing nationally appropriate mitigation commitments or actions for the country in which the project or program is occurring, so that only reductions that are in addition to such commitments or actions will generate offsets;

"(ii) be developed taking into consideration the average annual historical deforestation rates in the project or program boundary during a period of at least 5 years, applicable drivers of deforestation, and other factors to ensure additionality;

"(iii) be designed to account for all significant sources of greenhouse gas emis-

sions from deforestation in the project or program boundary; and

"(iv) be adjusted to fully account for emissions leakage outside the project or program boundary, including—

"(I) estimation through monitoring of major forested areas in a host country and other areas in a host country susceptible to leakage, pursuant to section 744(e)(5); and

"(II) a spatially explicit land use plan that identifies intact and primary forest areas and managed forest areas that are to remain while country is reaching the zero net deforestation trajectory.

"(D) PHASE-OUT.—

"(i) IN GENERAL.—Beginning on the date that is 8 years after the first calendar year for which a covered entity must demonstrate compliance with section 722(a), the Administrator shall issue no further international offset credits for project-level or program-level activities as described in

this paragraph, except as provided in clause (ii).

"(ii) EXTENSION.—The Administrator may extend the phase out deadline for the issuance of international offset credits under this section by up to 5 years with respect to eligible activities taking place in a least developed country, which is a foreign country that the United Nations has identified as among the least developed of developing countries at the time that the Administrator determines to provide an extension, provided that the Administrator, in consultation with the Secretary of State and the Administrator of the United States Agency for International Development, determines the country—

"(I) lacks sufficient capacity to adopt and implement effective programs to achieve reductions in deforestation measured against national baselines;

"(II) is receiving support under part E to develop such capacity; and

"(III) has developed and is working to implement a credible national strategy or plan to reduce deforestation.

"(7) EXPANSION OF SCOPE.—In implementing this subsection, the Administrator, taking into consideration the recommendations of the Advisory Board, may—

"(A) expand credible activities to include forest degradation; and

"(B) include soil carbon losses associated with forested wetlands or peatlands.

"(f) MODIFICATION OF REQUIREMENTS.—In promulgating regulations under subsection (b)(1) with respect to the issuance of international offset credits under subsection (c), (d), or (e), the Administrator, in consultation with the Secretary of State and the Administrator of the United States Agency for International Development, may modify or omit a requirement of this part (excluding the requirements of this section) if the Administrator determines that the application of that requirement to such subsection is not feasible or would result in the creation of offset credits that would not be eligible to satisfy emissions reduction commitments made by the United States pursuant to the United Nations Framework Convention

on Climate Change, done at New York on May 9, 1992 (or any successor agreement). In modifying or omitting such a requirement on the basis of infeasibility, the Administrator, in consultation with the Secretary of State and the Administrator of the United States Agency for International Development, shall ensure, with an adequate margin of safety, the integrity of international offset credits issued under this section and of the greenhouse gas emissions limitations established pursuant to section 703.

''(g) AVOIDING DOUBLE COUNTING.—The Administrator, in consultation with the Secretary of State, shall seek, by whatever means appropriate, including agreements, arrangements, or technical cooperation, to ensure that activities on the basis of which international offset credits are issued under this section are not used for compliance with an obligation to reduce or avoid greenhouse gas emissions, or increase greenhouse gas sequestration, under a foreign or international regulatory system. In addition, no international offset credits shall be issued for emission reductions from activities with respect to which emission allowances were allocated under section 771(d) for distribution under part E.

''(h) LIMITATION.—The Administrator shall not issue international offset credits generated by projects based on the destruction of hydrofluorocarbons.''.

SEC. 102. DEFINITIONS.

Title VII of the Clean Air Act (as added by section 101 of this division) is amended by inserting before part A the following:

"SEC. 700. DEFINITIONS.

''In this title:

''(1) ADDITIONAL.—The term 'additional', when used with respect to reductions or avoidance of greenhouse gas emissions, or to sequestration of greenhouse gases, means reductions, avoidance, or sequestration that result in a lower level of net greenhouse gas emissions or atmospheric concentrations than would occur in the absence of an offset credit.

''(2) ADDITIONALITY.—The term 'additionality' means the extent to which reductions or avoidance of greenhouse gas emissions, or sequestration of greenhouse gases, are additional.

''(3) ADVISORY BOARD.—The term 'Advisory Board' means the Offsets Integrity Advisory Board established under section 731.

''(4) AFFILIATED.—The term 'affiliated'—

''(A) when used in relation to an entity, means owned or controlled by, or under common ownership or control with, another entity, as determined by the Administrator; and

"(B) when used in relation to a natural gas local distribution company, means owned or controlled by, or under common ownership or control with, another natural gas local distribution company, as determined by the Administrator.

"(5) ALLOWANCE.—The term 'allowance' means a limited authorization to emit, or have attributable greenhouse gas emissions in an amount of, 1 ton of carbon dioxide equivalent of a greenhouse gas in accordance with this title; it includes an emission allowance, a compensatory allowance, or an international emission allowance.

"(6) ATTRIBUTABLE GREENHOUSE GAS EMISSIONS.—The term 'attributable greenhouse gas emissions' means—

"(A) for a covered entity that is a fuel producer or importer described in paragraph (13)(B), greenhouse gases that would be emitted from the combustion of any petroleum-based or coal-based liquid fuel, petroleum coke, or natural gas liquid, produced or imported by that covered entity for sale or distribution in interstate commerce, assuming no capture and sequestration of any greenhouse gas emissions;

"(B) for a covered entity that is an industrial gas producer or importer described in paragraph (13)(C), the tons of carbon dioxide equivalent of fossil fuel-based carbon dioxide, nitrous oxide, any fluorinated gas, other than nitrogen trifluoride, that is a greenhouse gas, or any combination thereof—

"(i) produced or imported by such covered entity during the previous calendar year for sale or distribution in interstate commerce; or

"(ii) released as fugitive emissions in the production of fluorinated gas; and

"(C) for a natural gas local distribution company described in paragraph (13)(J), greenhouse gases that would be emitted from the combustion of the natural gas, and any other gas meeting the specifications for commingling with natural gas for purposes of delivery, that such entity delivered during the previous calendar year to customers that are not covered entities, assuming no capture and sequestration of that greenhouse gas.

"(7) BIOLOGICAL SEQUESTRATION; BIOLOGICALLY SEQUESTERED.—The terms 'biological

sequestration' and 'biologically sequestered' mean the removal of greenhouse gases from the atmosphere by terrestrial biological means, such as by growing plants, and the storage of those greenhouse gases in plants or soils.

"(8) CAPPED EMISSIONS.—The term 'capped emissions' means greenhouse gas emissions to which section 722 applies, including emissions from the combustion of natural gas, petroleum-based or coal-based liquid fuel, petroleum coke, or natural gas liquid to which section 722(b)(2) or (8) applies.

"(9) CAPPED SOURCE.—The term 'capped source' means a source that directly emits capped emissions.

"(10) CARBON DIOXIDE EQUIVALENT.—The term 'carbon dioxide equivalent' means the unit of measure, expressed in metric tons, of greenhouse gases as provided under section 711 or 712.

"(11) CARBON STOCK.—The term 'carbon stock' means the quantity of carbon contained in a biological reservoir or system which has the capacity to accumulate or release carbon.

"(12) COMPENSATORY ALLOWANCE.—The term 'compensatory allowance' means an allowance issued under section 721(f).

"(13) COVERED ENTITY.—The term 'covered entity' means each of the following:

"(A) Any electricity source.

"(B)(i) Any stationary source that produces petroleum-based or coal-based liquid fuel, petroleum coke, or natural gas liquid, the combustion of which would emit 25,000 or more tons of carbon dioxide equivalent, as determined by the Administrator.

"(ii) Any entity that (or any group of 2 or more affiliated entities that, in the aggregate) imports petroleum-based or coal-based liquid fuel, petroleum coke, or natural gas liquid, the combustion of which would emit 25,000 or more tons of carbon dioxide equivalent, as determined by the Administrator.

"(C) Any stationary source that produces, and any entity that (or any group of two or more affiliated entities that, in the aggregate) imports, for sale or distribution in interstate commerce, in bulk, or in products designated by the Administrator, in 2008 or any subsequent year more than 25,000 tons of carbon dioxide equivalent of—

"(i) fossil fuel-based carbon dioxide;

"(ii) nitrous oxide;

"(iii) except as otherwise provided in section 714, perfluorocarbons;

"(iv) sulfur hexafluoride;

"(v) any other fluorinated gas, except for nitrogen trifluoride, that is a greenhouse gas, as designated by the Administrator under section 711(b) or (c); or

"(vi) any combination of greenhouse gases described in clauses (i) through (v).

"(D) Any stationary source that has emitted 25,000 or more tons of carbon dioxide equivalent of nitrogen trifluoride in 2008 or any subsequent year.

"(E) Any geologic sequestration site.

"(F) Any stationary source in the following industrial sectors:

"(i) Adipic acid production.

"(ii) Primary aluminum production.

"(iii) Ammonia manufacturing.

"(iv) Cement production, excluding grinding-only operations.

"(v) Hydrochlorofluorocarbon production.

"(vi) Lime manufacturing.

"(vii) Nitric acid production.

"(viii) Petroleum refining.

"(ix) Phosphoric acid production.

"(x) Silicon carbide production.

"(xi) Soda ash production.

"(xii) Titanium dioxide production.

"(xiii) Coal-based liquid or gaseous fuel production.

"(G) Any stationary source in the chemical or petrochemical sector that, in 2008 or any subsequent year—

"(i) produces acrylonitrile, carbon black, ethylene, ethylene dichloride, ethylene oxide, or methanol; or

"(ii) produces a chemical or petrochemical product if producing that product results in annual combustion plus process emissions of 25,000 or more tons of carbon dioxide equivalent.

"(H) Any stationary source that—

"(i) is in one of the following industrial sectors: ethanol production; ferroalloy production; fluorinated gas production; food processing; glass production; hydrogen production; metal ore production or other

processing; iron and steel production; lead production; pulp and paper manufacturing; and zinc production; and

"(ii) has emitted 25,000 or more tons of carbon dioxide equivalent in 2008 or any subsequent year.

"(I) Any fossil fuel-fired combustion device (such as a boiler) or grouping of such devices that—

"(i) is all or part of an industrial source not specified in subparagraph (D), (F), (G), or (H); and

"(ii) has emitted 25,000 or more tons of carbon dioxide equivalent in 2008 or any subsequent year.

"(J) Any natural gas local distribution company that (or any group of 2 or more affiliated natural gas local distribution companies that, in the aggregate) in 2008 or any subsequent year, delivers 460,000,000 cubic feet or more of natural gas to customers that are not covered entities.

"(14) CREDITING PERIOD.—The term 'crediting period' means the period with respect to which an

offset project is eligible to earn offset credits under part D, as determined under section 734(c).

"(15) DESIGNATED REPRESENTATIVE.—The term 'designated representative' means, with respect to a covered entity, a reporting entity, an offset project developer, or any other entity receiving or holding allowances or offset credits under this title, an individual authorized, through a certificate of representation submitted to the Administrator by the owners and operators or similar entity official, to represent the owners and operators or similar entity official in all matters pertaining to this title (including the holding, transfer, or disposition of allowances or offset credits), and to make all submissions to the Administrator under this title.

"(16) DEVELOPING COUNTRY.—The term 'developing country' means a country eligible to receive official development assistance according to the income guidelines of the Development Assistance Committee of the Organization for Economic Cooperation and Development.

"(17) DOMESTIC OFFSET CREDIT.—

"(A) IN GENERAL.—The term 'domestic offset credit' means an offset credit issued

under part D, other than an international offset credit.

"(B) EXCLUSION.—The term 'domestic offset credit' does not include a term offset credit.

"(18) ELECTRICITY SOURCE.—The term 'electricity source' means a stationary source that includes one or more utility units.

"(19) EMISSION.—The term 'emission' means the release of a greenhouse gas into the ambient air. Such term does not include gases that are captured and sequestered, except to the extent that they are later released into the atmosphere, in which case compliance must be demonstrated pursuant to section 722(b)(5).

"(20) EMISSION ALLOWANCE.—The term 'emission allowance' means an allowance established under section 721(a) or 726(g)(2).

"(21) FAIR MARKET VALUE.—The term 'fair market value' means the average daily closing price on registered exchanges or, if such a price is unavailable, the average price as determined by the Administrator, during a specified time period, of an emission allowance.

"(22) FEDERAL LAND.—The term 'Federal land' means land that is owned by the United States, other than land held in trust for an Indian or Indian tribe.

"(23) FOSSIL FUEL.—The term 'fossil fuel' means natural gas, petroleum, or coal, or any form of solid, liquid, or gaseous fuel derived from such material, including consumer products that are derived from such materials and are combusted.

"(24) FOSSIL FUEL-FIRED.—The term 'fossil fuel-fired' means powered by combustion of fossil fuel, alone or in combination with any other fuel, regardless of the percentage of fossil fuel consumed.

"(25) FUGITIVE EMISSIONS.—The term 'fugitive emissions' means emissions from leaks, valves, joints, or other small openings in pipes, ducts, or other equipment, or from vents.

"(26) GEOLOGIC SEQUESTRATION; GEOLOGICALLY SEQUESTERED.—The terms 'geologic sequestration' and 'geologically sequestered' mean the sequestration of greenhouse gases in subsurface geologic formations for purposes of permanent storage.

"(27) GEOLOGIC SEQUESTRATION SITE.—The term 'geologic sequestration site' means a site where carbon dioxide is geologically sequestered.

"(28) GREENHOUSE GAS.—The term 'greenhouse gas' means any gas described in section 711(a) or designated under section 711(b), (c), or (e), except to the extent that it is regulated under title VI.

"(29) HIGH CONSERVATION PRIORITY LAND.—The term 'high conservation priority land' means land that is not Federal land and is—

"(A) globally or State ranked as critically imperiled or imperiled under a State Natural Heritage Program; or

"(B) old-growth or late-successional forest, as identified by the office of the State Forester or relevant State agency with regulatory jurisdiction over forestry activities.

"(30) HOLD.—The term 'hold' means, with respect to an allowance, offset credit, or term offset credit, to have in the appropriate account in the allowance tracking system, or submit to the Administrator for recording in such account.

"(31) INDUSTRIAL SOURCE.—The term 'industrial source' means any stationary source that—

"(A) is not an electricity source; and

"(B) is in—

"(i) the manufacturing sector (as defined in North American Industrial Classification System codes 31, 32, and 33); or

"(ii) the natural gas processing or natural gas pipeline transportation sector (as defined in North American Industrial Classification System codes 211112 or 486210).

"(32) INTERNATIONAL EMISSION ALLOWANCE.—The term 'international emission allowance' means a tradable authorization to emit 1 ton of carbon dioxide equivalent of greenhouse gas that is issued by a national or supranational foreign government pursuant to a qualifying international program designated by the Administrator pursuant to section 728(a).

"(33) INTERNATIONAL OFFSET CREDIT.—The term 'international offset credit' means an offset credit issued by the Administrator under section 744.

"(34) LEAKAGE.—The term 'leakage' means a significant increase in greenhouse gas emissions, or significant decrease in sequestration, which is caused by an offset project and occurs outside the boundaries of the offset project.

"(35) MARKET STABILITY RESERVE ALLOWANCE.—The term 'market stability reserve allowance' means an emission allowance reserved for, transferred to, or deposited in the market stability reserve, or established, under section 726.

"(36) MINERAL SEQUESTRATION.—The term 'mineral sequestration' means sequestration of carbon dioxide from the atmosphere by capturing carbon dioxide into a permanent mineral, such as the aqueous precipitation of carbonate minerals that results in the storage of carbon dioxide in a mineral form.

"(37) NATURAL GAS LIQUID.—The term 'natural gas liquid' means ethane, butane, isobutane, natural gasoline, and propane which is ready for commercial sale or use.

"(38) NATURAL GAS LOCAL DISTRIBUTION COMPANY.—The term 'natural gas local distribution company' has the meaning given the term 'local distribution company' in section 2(17) of the Natural Gas Policy Act of 1978 (15 U.S.C. 3301(17)).

"(39) OFFSET CREDIT.—

"(A) IN GENERAL.—The term 'offset credit' means an offset credit issued under part D.

"(B) EXCLUSION.—The term 'offset credit' does not include a term offset credit.

"(40) OFFSET PROJECT.—The term 'offset project' means a project or activity that reduces or avoids greenhouse gas emissions, or sequesters greenhouse gases, and for which offset credits are or may be issued under part D.

"(41) OFFSET PROJECT DEVELOPER.—The term 'offset project developer' means the individual or entity designated as the offset project developer in an offset project approval petition under section 735(c)(1).

"(42) QUALIFIED R&D FACILITY.—The term 'qualified R&D facility' means a facility that conducts research and development, that was in operation as of the date of enactment of this title, and that is part of a covered entity subject to paragraphs (1) through (8) of section 722(b).

"(43) PETROLEUM.—The term 'petroleum' includes crude oil, tar sands, oil shale, and heavy oils.

"(44) REPEATED INTENTIONAL REVERSALS.—The term 'repeated intentional reversals' means at least 3 intentional reversals, as determined by the Administrator or a court under section 734(b)(3)(B)(ii).

"(45) RESEARCH AND DEVELOPMENT.—The term 'research and development' means activities—

"(A) that are conducted in process units or at laboratory bench-scale settings;

"(B) whose purpose is to conduct research and development for new processes, technologies, or products that contribute to lower greenhouse gas emissions; and

"(C) that do not manufacture products for sale.

"(46) RENEWABLE BIOMASS.—The term 'renewable biomass' means any of the following:

"(A) Plant material, including waste material, harvested or collected from actively managed agricultural land that was in cultivation, cleared, or fallow and nonforested on January 1, 2009.

"(B) Plant material, including waste material, harvested or collected from pastureland that was nonforested on January 1, 2009.

"(C) Nonhazardous vegetative matter derived from waste, including separated yard waste, landscape right-of-way trimmings, construction and demolition debris, or food waste (but not municipal solid waste, recyclable waste

paper, painted, treated or pressurized wood, or wood contaminated with plastic or metals).

"(D) Animal waste or animal byproducts, including products of animal waste digesters.

"(E) Algae.

"(F) Trees, brush, slash, residues, or any other vegetative matter removed from within 600 feet of any building, campground, or route designated for evacuation by a public official with responsibility for emergency preparedness, or from within 300 feet of a paved road, electric transmission line, utility tower, or water supply line.

"(G) Residues from or byproducts of milled logs.

"(H) Any of the following removed from forested land that is not Federal and is not high conservation priority land:

"(i) Trees, brush, slash, residues, interplanted energy crops, or any other vegetative matter removed from an actively managed tree plantation established—

"(I) prior to January 1, 2009; or

"(II) on land that, as of January 1, 2009, was cultivated or fallow and non-forested.

"(ii) Trees, logging residue, thinnings, cull trees, pulpwood, and brush removed from naturally regenerated forests or other non-plantation forests, including for the purposes of hazardous fuel reduction or preventative treatment for reducing or containing insect or disease infestation.

"(iii) Logging residue, thinnings, cull trees, pulpwood, brush, and species that are non-native and noxious, from stands that were planted and managed after January 1, 2009, to restore or maintain native forest types.

"(iv) Dead or severely damaged trees removed within 5 years of fire, blowdown, or other natural disaster, and badly infested trees.

"(I) Materials, pre-commercial thinnings, or removed invasive species from National Forest System land and public lands (as defined in section 103 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702)),

including those that are byproducts of preventive treatments (such as trees, wood, brush, thinnings, chips, and slash), that are removed as part of a federally recognized timber sale, or that are removed to reduce hazardous fuels, to reduce or contain disease or insect infestation, or to restore ecosystem health, and that are—

"(i) not from components of the National Wilderness Preservation System, Wilderness Study Areas, Inventoried Roadless Areas, old growth or mature forest stands, components of the National Landscape Conservation System, National Monuments, National Conservation Areas, Designated Primitive Areas; or Wild and Scenic Rivers corridors;

"(ii) harvested in environmentally sustainable quantities, as determined by the appropriate Federal land manager; and

"(iii) are harvested in accordance with Federal and State law, and applicable land management plans.

"(47) RETIRE.—The term 'retire', with respect to an allowance, offset credit, or term offset credit established or issued under this title, means to dis-

qualify such allowance or offset credit for any subsequent use under this title, regardless of whether the use is a sale, exchange, or submission of the allowance, offset credit, or term offset credit to satisfy a compliance obligation.

"(48) REVERSAL.—The term 'reversal' means an intentional or unintentional loss of sequestered greenhouse gases to the atmosphere.

"(49) SEQUESTERED AND SEQUESTRATION.—The terms 'sequestered' and 'sequestration' mean the separation, isolation, or removal of greenhouse gases from the atmosphere, as determined by the Administrator. The terms include biological, geologic, and mineral sequestration, but do not include ocean fertilization techniques.

"(50) STATIONARY SOURCE.—The term 'stationary source' means any integrated operation comprising any plant, building, structure, or stationary equipment, including support buildings and equipment, that is located within one or more contiguous or adjacent properties, is under common control of the same person or persons, and emits or may emit a greenhouse gas.

"(51) TON.—The term 'ton' means a metric ton.

"(52) UNCAPPED EMISSIONS.—The term 'uncapped emissions' means emissions of greenhouse gases emitted after December 31, 2011, that are not capped emissions.

"(53) UNITED STATES GREENHOUSE GAS EMISSIONS.—The term 'United States greenhouse gas emissions' means the total quantity of annual greenhouse gas emissions from the United States, as calculated by the Administrator and reported to the United Nations Framework Convention on Climate Change Secretariat.

"(54) UTILITY UNIT.—The term 'utility unit' means a combustion device that, on January 1, 2009, or any date thereafter, is fossil fuel-fired and serves a generator that produces electricity for sale, unless such combustion device, during the 12-month period starting the later of January 1, 2009, or the commencement of commercial operation and each calendar year starting after such later date—

"(A) is part of an integrated cycle system that cogenerates steam and electricity during normal operation and that supplies one-third or less of its potential electric output capacity and 25 MW or less of electrical output for sale; or

"(B) combusts materials of which more than 95 percent is municipal solid waste on a heat input basis.

"(55) VINTAGE YEAR.—The term 'vintage year' means the calendar year for which an emission allowance is established under section 721(a) or which is assigned to an emission allowance under section 726(g)(3)(A), except that the vintage year for a market stability reserve allowance shall be the year in which such allowance is purchased at auction.".

SEC. 103. OFFSET REPORTING REQUIREMENTS.

Section 114 of Clean Air Act (42 U.S.C. 7414) is amended by adding at the end the following:

"(e) RECORDKEEPING FOR CARBON OFFSETS PROGRAM.—For the purpose of implementing the carbon offsets program set forth in subtitle D of title VII, the Administrator shall require any person who is an offset project developer, and may require any person who is a third-party verifier, to establish and maintain records, for a period of not less than the crediting period under section 734(c) plus 5 years, relating to—

"(1) any offset project approval petition submitted to the appropriate officials under section 735;

"(2) any reversals which occur with respect to an offset project;

"(3) any verification reports; and

"(4) any other aspect of the offset project that the appropriate officials determines is appropriate.".

Subtitle B—Disposition of Allowances

SEC. 111. DISPOSITION OF ALLOWANCES FOR GLOBAL WARMING POLLUTION REDUCTION PROGRAM.

Title VII of the Clean Air Act (as amended by section 141 of this division) is amended by adding at the end the following:

"PART H—DISPOSITION OF ALLOWANCES

"SEC. 771. ALLOCATION OF EMISSION ALLOWANCES.

"(a) ALLOCATION.—The Administrator shall allocate emission allowances for the following purposes:

"(1) The program for electricity consumers pursuant to section 772.

"(2) The program for natural gas consumers pursuant to section 773.

"(3) The program for home heating oil and propane consumers pursuant to section 774.

"(4) The program for domestic fuel production, including petroleum refiners and small business refiners, under section 775.

"(5) The program to ensure real reductions in industrial emissions under part F.

"(6) The program for commercial deployment of carbon capture and sequesration technologies under section 780.

"(7) The program for early action recognition pursuant to section 782.

"(8) The program for State and local investment in energy efficiency and renewable energy under section 202 of division B of the Clean Energy Jobs and American Power Act.

"(9) The program for energy efficiency in building codes under section 163 of division A, and section 203 of division B, of the Clean Energy Jobs and American Power Act.

"(10) The program for retrofit for energy and environmental performance under section 164 of division A, and 204 of division B, of the Clean Energy Jobs and American Power Act.

"(11) The program for Energy Innovation Hubs pursuant to section 205 of division B of the Clean Energy Jobs and American Power Act.

"(12) The program for ARPA–E research pursuant to section 206 of division B of the Clean Energy Jobs and American Power Act.

"(13) The International Clean Energy Deployment Program under section 323 of division A, and section 207 of division B, of the Clean Energy Jobs and American Power Act.

"(14) The international climate change adaptation and global security program under section 324 of division A, and section 208 of division B, of the Clean Energy Jobs and American Power Act.

"(b) AUCTIONS.—The Administrator shall auction, pursuant to section 778, emission allowances for the following purposes:

"(1) The Market Stability Reserve Fund under section 726.

"(2) The program for climate change consumer refunds and low- and moderate-income consumers pursuant to section 776, including—

"(A) consumer rebates under section 776(a); and

"(B) energy refunds under section 776(b).

"(3) The program for investment in clean vehicle technology under section 201 of division B of the Clean Energy Jobs and American Power Act.

"(4) The program for State and local investment in energy efficiency and renewable energy

under section 202 of division B of the Clean Energy Jobs and American Power Act.

''(5) The program for energy efficiency and renewable energy worker training under section 209 of division B of the Clean Energy Jobs and American Power Act.

''(6) The program for worker transition under part 2 of subtitle A of title III of division A, and section 210 of division B, of the Clean Energy Jobs and American Power Act.

''(7) The State programs for greenhouse gas reduction and climate adaptation pursuant to section 211 of division B of the Clean Energy Jobs and American Power Act.

''(8) The program for public health and climate change under subpart B of part 1 of subtitle C of title III of division A, and section 212 of division B, of the Clean Energy Jobs and American Power Act.

''(9) The program for climate change safeguards for natural resources conservation under subpart C of part 1 of subtitle C of title III of division A, and section 213 of division B, of the Clean Energy Jobs and American Power Act.

"(10) Nuclear worker training under section 132 of division A, and section 214 of division B, of the Clean Energy Jobs and American Power Act.

"(11) The supplemental agriculture and forestry greenhouse gas reduction and renewable energy program under section 155 of division A, and section 215 of division B, of the Clean Energy Jobs and American Power Act.

"(c) DEFICIT REDUCTION.—

"(1) IN GENERAL.—The Administrator shall—

"(A) auction, pursuant to section 778, emission allowances for deficit reduction in the amounts described in paragraph (2); and

"(B) deposit those proceeds immediately on receipt in the Deficit Reduction Fund established by section 783.

"(2) AMOUNTS.—For vintage years 2012 through 2050, 25.0 percent of emission allowances established for each year under section 721(a) shall be auctioned and the proceeds deposited pursuant to paragraph (1) to ensure that this title does not contribute to the deficit for that particular calendar year.

"(d) SUPPLEMENTAL REDUCTIONS.—

"(1) IN GENERAL.—The Administrator shall allocate allowances for each vintage year to achieve supplemental reductions pursuant to section 753.

"(2) ADJUSTMENT.—The Administrator shall modify the allowances allocated under paragraph (1) as necessary to ensure the achievement of the annual supplemental emissions reduction objective for 2020 set forth in section 704.

"SEC. 772. ELECTRICITY CONSUMERS.

"(a) DEFINITIONS.—For purposes of this section:

"(1) CHP SAVINGS.—The term 'CHP savings' means—

"(A) CHP system savings from a combined heat and power system that commences operation after the date of enactment of this section; and

"(B) the increase in CHP system savings from, at any time after the date of the enactment of this section, upgrading, replacing, expanding, or increasing the utilization of a combined heat and power system that commenced operation on or before the date of enactment of this section.

"(2) CHP SYSTEM SAVINGS.—The term 'CHP system savings' means the increment of electric out-

put of a combined heat and power system that is attributable to the higher efficiency of the combined system (as compared to the efficiency of separate production of the electric and thermal outputs).

"(3) COAL-FUELED UNIT.—The term 'coal-fueled unit' means a utility unit that derives at least 85 percent of its heat input from coal, petroleum coke, or any combination of those 2 fuels.

"(4) COST-EFFECTIVE.—The term 'cost-effective', with respect to an energy efficiency program, means that the program meets the total resource cost test, which requires that the net present value of economic benefits over the life of the program, including avoided supply and delivery costs and deferred or avoided investments, is greater than the net present value of the economic costs over the life of the program, including program costs and incremental costs borne by the energy consumer.

"(5) ELECTRICITY LOCAL DISTRIBUTION COMPANY.—The term 'electricity local distribution company' means an electric utility—

"(A) that has a legal, regulatory, or contractual obligation to deliver electricity directly to retail consumers in the United States, regardless of whether that entity or another enti-

ty sells the electricity as a commodity to those retail consumers; and

"(B) the retail rates of which, except in the case of an electric cooperative, are regulated or set by—

"(i) a State regulatory authority;

"(ii) a State or political subdivision thereof (or an agency or instrumentality of, or corporation wholly owned by, either of the foregoing); or

"(iii) an Indian tribe pursuant to tribal law.

"(6) ELECTRICITY SAVINGS.—The term 'electricity savings' means reductions in electricity consumption, relative to business-as-usual projections, achieved through measures implemented after the date of enactment of this section, limited to—

"(A) customer facility savings of electricity, adjusted to reflect any associated increase in fuel consumption at the facility;

"(B) reductions in distribution system losses of electricity achieved by a retail electricity distributor, as compared to losses attributable to new or replacement distribution system equipment of average efficiency;

"(C) CHP savings; and

"(D) fuel cell savings.

"(7) FUEL CELL.—The term 'fuel cell' means a device that directly converts the chemical energy of a fuel and an oxidant into electricity by electrochemical processes occurring at separate electrodes in the device.

"(8) FUEL CELL SAVINGS.—The term 'fuel cell savings' means the electricity saved by a fuel cell that is installed after the date of enactment of this section, or by upgrading a fuel cell that commenced operation on or before the date of enactment of this section, as a result of the greater efficiency with which the fuel cell transforms fuel into electricity as compared with sources of electricity delivered through the grid, provided that—

"(A) the fuel cell meets such requirements relating to efficiency and other operating characteristics as the Federal Energy Regulatory Commission may promulgate by regulation; and

"(B) the net sales of electricity from the fuel cell to customers not consuming the thermal output from the fuel cell, if any, do not exceed 50 percent of the total annual electricity generation by the fuel cell.

"(9) INDEPENDENT POWER PRODUCTION FACILITY.—The term 'independent power production facility' means a facility—

"(A) that is used for the generation of electric energy, at least 80 percent of which is sold at wholesale; and

"(B) the sales of the output of which are not subject to retail rate regulation or setting of retail rates by—

"(i) a State regulatory authority;

"(ii) a State or political subdivision thereof (or an agency or instrumentality of, or corporation wholly owned by, either of the foregoing);

"(iii) an electric cooperative; or

"(iv) an Indian tribe pursuant to tribal law.

"(10) LONG-TERM CONTRACT GENERATOR.—The term 'long-term contract generator' means a qualifying small power production facility, a qualifying cogeneration facility), an independent power production facility, or a facility for the production of electric energy for sale to others that is owned and operated by an electric cooperative that is—

"(A) a covered entity; and

"(B) as of the date of enactment of this title—

"(i) a facility with 1 or more sales or tolling agreements executed before March 1, 2007, that govern the facility's electricity sales and provide for sales at a price (whether a fixed price or a price formula) for electricity that does not allow for recovery of the costs of compliance with the limitation on greenhouse gas emissions under this title, provided that such agreements are not between entities that are affiliates of one another; or

"(ii) a facility consisting of 1 or more cogeneration units that makes useful thermal energy available to an industrial or commercial process with 1 or more sales agreements executed before March 1, 2007, that govern the facility's useful thermal energy sales and provide for sales at a price (whether a fixed price or price formula) for useful thermal energy that does not allow for recovery of the costs of compliance with the limitation on greenhouse gas emissions under this title, provided

that such agreements are not between entities that are affiliates of one another.

"(11) MERCHANT COAL UNIT.—The term 'merchant coal unit' means a coal-fueled unit that—

"(A) is or is part of a covered entity;

"(B) is not owned by a Federal, State, or regional agency or power authority; and

"(C) generates electricity solely for sale to others, provided that all or a portion of such sales are made by a separate legal entity that—

"(i) has a full or partial ownership or leasehold interest in the unit, as certified in accordance with such requirements as the Administrator shall prescribe; and

"(ii) is not subject to retail rate regulation or setting of retail rates by—

"(I) a State regulatory authority;

"(II) a State or political subdivision thereof (or an agency or instrumentality of, or corporation wholly owned by, either of the foregoing);

"(III) an electric cooperative; or

"(IV) an Indian tribe pursuant to tribal law.

"(12) MERCHANT COAL UNIT SALES.—The term 'merchant coal unit sales' means sales to others of electricity generated by a merchant coal unit that are made by the owner or leaseholder described in paragraph (11)(C).

"(13) NEW COAL-FUELED UNIT.—The term 'new coal-fueled unit' means a coal-fueled unit that commenced operation on or after January 1, 2009 and before January 1, 2013.

"(14) NEW MERCHANT COAL UNIT.—The term 'new merchant coal unit' means a merchant coal unit—

"(A) that commenced operation on or after January 1, 2009 and before January 1, 2013; and

"(B) the actual, on-site construction of which commenced prior to January 1, 2009.

"(15) QUALIFIED HYDROPOWER.—The term 'qualified hydropower' means—

"(A) energy produced from increased efficiency achieved, or additions of capacity made, on or after January 1, 1988, at a hydroelectric facility that was placed in service before that date and does not include additional energy generated as a result of operational changes not

1 directly associated with efficiency improvements
2 or capacity additions; or
3 ''(B) energy produced from generating ca-
4 pacity added to a dam on or after January 1,
5 1988, provided that the Federal Energy Regu-
6 latory Commission certifies that—
7 ''(i) the dam was placed in service be-
8 fore the date of the enactment of this sec-
9 tion and was operated for flood control,
10 navigation, or water supply purposes and
11 was not producing hydroelectric power
12 prior to the addition of such capacity;
13 ''(ii) the hydroelectric project installed
14 on the dam is licensed (or is exempt from
15 licensing) by the Federal Energy Regu-
16 latory Commission and is in compliance
17 with the terms and conditions of the li-
18 cense or exemption, and with other appli-
19 cable legal requirements for the protection
20 of environmental quality, including applica-
21 ble fish passage requirements; and
22 ''(iii) the hydroelectric project in-
23 stalled on the dam is operated so that the
24 water surface elevation at any given loca-
25 tion and time that would have occurred in

the absence of the hydroelectric project is maintained, subject to any license or exemption requirements that require changes in water surface elevation for the purpose of improving the environmental quality of the affected waterway.

"(16) QUALIFYING SMALL POWER PRODUCTION FACILITY; QUALIFYING COGENERATION FACILITY.—The terms 'qualifying small power production facility' and 'qualifying cogeneration facility' have the meanings given those terms in section 3(17)(C) and 3(18)(B) of the Federal Power Act (16 U.S.C. 796(17)(C) and 796(18)(B)).

"(17) RENEWABLE ENERGY RESOURCE.—The term 'renewable energy resource' means each of the following:

"(A) Wind energy.

"(B) Solar energy.

"(C) Geothermal energy.

"(D) Renewable biomass.

"(E) Biogas derived exclusively from renewable biomass.

"(F) Biofuels derived exclusively from renewable biomass.

"(G) Qualified hydropower.

"(H) Marine and hydrokinetic renewable energy, as that term is defined in section 632 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17211).

"(18) SMALL LDC.—The term 'small LDC' means, for any given year, an electricity local distribution company that delivered less than 4,000,000 megawatt hours of electric energy directly to retail consumers in the preceding year.

"(19) STATE REGULATORY AUTHORITY.—The term 'State regulatory authority' has the meaning given that term in section 3(17) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2602(17)).

"(20) USEFUL THERMAL ENERGY.—The term 'useful thermal energy' has the meaning given that term in section 371(7) of the Energy Policy and Conservation Act (42 U.S.C. 6341(7)).

"(b) ELECTRICITY LOCAL DISTRIBUTION COMPANIES.—

"(1) DISTRIBUTION OF ALLOWANCES.—The Administrator shall distribute to electricity local distribution companies for the benefit of retail ratepayers the quantity of emission allowances allocated for the following vintage year pursuant to section

771(a)(1). Notwithstanding the preceding sentence, the Administrator shall withhold from distribution under this subsection a quantity of emission allowances equal to the lesser of 14.3 percent of the quantity of emission allowances allocated under section 771(a)(1) for the relevant vintage year, or 105 percent of the emission allowances for the relevant vintage year that the Administrator anticipates will be distributed to merchant coal units and to long-term contract generators, respectively, under subsections (c) and (d). If not required by subsections (c) and (d) to distribute all of these reserved allowances, the Administrator shall distribute any remaining emission allowances to electricity local distribution companies in accordance with this subsection.

"(2) DISTRIBUTION BASED ON EMISSIONS.—

"(A) IN GENERAL.—For each vintage year, 50 percent of the emission allowances available for distribution under paragraph (1), after reserving allowances for distribution under subsections (c) and (d), shall be distributed by the Administrator among individual electricity local distribution companies ratably based on the annual average carbon dioxide emissions attributable to generation of electricity delivered at

retail by each such company during the base period determined under subparagraph (B).

"(B) BASE PERIOD.—

"(i) VINTAGE YEARS 2012 AND 2013.—For vintage years 2012 and 2013, an electricity local distribution company's base period shall be—

"(I) calendar years 2006 through 2008; or

"(II) any 3 consecutive calendar years between 1999 and 2008, inclusive, that such company selects, provided that the company timely informs the Administrator of such selection.

"(ii) VINTAGE YEARS 2014 AND THEREAFTER.—For vintage years 2014 and thereafter, the base period shall be—

"(I) the base period selected under clause (i); or

"(II) calendar year 2012, in the case of an electricity local distribution company that owns, co-owns, or purchases through a power purchase agreement (whether directly or through a cooperative arrangement) a

substantial portion of the electricity generated by a new coal-fueled unit, provided that such company timely informs the Administrator of its election to use 2012 as its base period.

"(C) DETERMINATION OF EMISSIONS.—

"(i) DETERMINATION FOR 1999–2008.—As part of the regulations promulgated pursuant to subsection (g), the Administrator, after consultation with the Energy Information Administration, shall determine the average amount of carbon dioxide emissions attributable to generation of electricity delivered at retail by each electricity local distribution company for each of the years 1999 through 2008, taking into account entities' electricity generation, electricity purchases, and electricity sales. In the case of any electricity local distribution company that owns, co-owns, or purchases through a power purchase agreement (whether directly or through a cooperative arrangement) a substantial portion of the electricity generated by, a coal-fueled unit that commenced op-

eration after January 1, 2006, and before December 31, 2008, the Administrator shall adjust the emissions attributable to such company's retail deliveries in calendar years 2006 through 2008 to reflect the emissions that would have occurred if the relevant unit were in operation during the entirety of such 3-year period.

"(ii) ADJUSTMENTS FOR NEW COAL-FUELED UNITS.—

"(I) VINTAGE YEARS 2012 AND 2013.—For purposes of emission allowance distributions for vintage years 2012 and 2013, in the case of any electricity local distribution company that owns, co-owns, or purchases through a power purchase agreement (whether directly or through a cooperative arrangement) a substantial portion of the electricity generated by, a new coal-fueled unit, the Administrator shall adjust the emissions attributable to such company's retail deliveries in the applicable base period to reflect the emissions that would

have occurred if the new coal-fueled unit were in operation during such period.

"(II) VINTAGE YEAR 2014 AND THEREAFTER.—Not later than necessary for use in making emission allowance distributions under this subsection for vintage year 2014, the Administrator shall, for any electricity local distribution company that owns, co-owns, or purchases through a power purchase agreement (whether directly or through a cooperative arrangement) a substantial portion of the electricity generated by a new coal-fueled unit and has selected calendar year 2012 as its base period pursuant to subparagraph (B)(ii)(II), determine the amount of carbon dioxide emissions attributable to generation of electricity delivered at retail by such company in calendar year 2012. If the relevant new coal-fueled unit was not yet operational by January 1, 2012, the Administrator shall adjust

such determination to reflect the emissions that would have occurred if such unit were in operation for all of calendar year 2012.

"(iii) REQUIREMENTS.—Determinations under this paragraph shall be as precise as practicable, taking into account the nature of data currently available and the nature of markets and regulation in effect in various regions of the country. The following requirements shall apply to such determinations:

"(I) The Administrator shall determine the amount of fossil fuel-based electricity delivered at retail by each electricity local distribution company, and shall use appropriate emission factors to calculate carbon dioxide emissions associated with the generation of such electricity.

"(II) Where it is not practical to determine the precise fuel mix for the electricity delivered at retail by an individual electricity local distribution company, the Administrator may use

the best available data, including average data on a regional basis with reference to Regional Transmission Organizations or regional entities (as that term is defined in section 215(a)(7) of the Federal Power Act (16 U.S.C. 824o(a)(7)), to estimate fuel mix and emissions. Different methodologies may be applied in different regions if appropriate to obtain the most accurate estimate.

"(3) DISTRIBUTION BASED ON DELIVERIES.—

"(A) INITIAL FORMULA.—Except as provided in subparagraph (B), for each vintage year, the Administrator shall distribute 50 percent of the emission allowances available for distribution under paragraph (1), after reserving allowances for distribution under subsections (c) and (d), among individual electricity local distribution companies ratably based on each electricity local distribution company's annual average retail electricity deliveries for calendar years 2006 through 2008, unless the owner or operator of the company selects 3 other consecutive years between 1999

and 2008, inclusive, and timely notifies the Administrator of its selection.

"(B) UPDATING.—Prior to distributing 2015 vintage year emission allowances under this paragraph and at 3-year intervals thereafter, the Administrator shall update the distribution formula under this paragraph to reflect changes in each electricity local distribution company's service territory since the most recent formula was established. For each successive 3-year period, the Administrator shall distribute allowances ratably among individual electricity local distribution companies based on the product of—

"(i) each electricity local distribution company's average annual deliveries per customer during calendar years 2006 through 2008, or during the 3 alternative consecutive years selected by such company under subparagraph (A); and

"(ii) the number of customers of such electricity local distribution company in the most recent year in which the formula is updated under this subparagraph.

"(4) PROHIBITION AGAINST EXCESS DISTRIBUTIONS.—The regulations promulgated under subsection (g) shall ensure that, notwithstanding paragraphs (2) and (3), no electricity local distribution company shall receive a greater quantity of allowances under this subsection than is necessary to offset any increased electricity costs to such company's retail ratepayers, including increased costs attributable to purchased power costs, due to enactment of this title. Any emission allowances withheld from distribution to an electricity local distribution company pursuant to this paragraph shall be distributed among all remaining electricity local distribution companies ratably based on emissions pursuant to paragraph (2).

"(5) USE OF ALLOWANCES.—

"(A) RATEPAYER BENEFIT.—Emission allowances distributed to an electricity local distribution company under this subsection shall be used exclusively for the benefit of retail ratepayers of such electricity local distribution company and may not be used to support electricity sales or deliveries to entities or persons other than such ratepayers.

"(B) RATEPAYER CLASSES.—In using emission allowances distributed under this subsection for the benefit of ratepayers, an electricity local distribution company shall ensure that ratepayer benefits are distributed—

"(i) among ratepayer classes ratably based on electricity deliveries to each class; and

"(ii) equitably among individual ratepayers within each ratepayer class, including entities that receive emission allowances pursuant to part F.

"(C) LIMITATION.—In general, an electricity local distribution company shall not use the value of emission allowances distributed under this subsection to provide to any ratepayer a rebate that is based solely on the quantity of electricity delivered to such ratepayer. To the extent an electricity local distribution company uses the value of emission allowances distributed under this subsection to provide rebates, it shall, to the maximum extent practicable, provide such rebates with regard to the fixed portion of ratepayers' bills or as a fixed credit or rebate on electricity bills.

"(D) RESIDENTIAL AND INDUSTRIAL RATEPAYERS.—Notwithstanding subparagraph (C), if compliance with the requirements of this title results (or would otherwise result) in an increase in electricity costs for residential or industrial retail ratepayers of any given electricity local distribution company (including entities that receive emission allowances pursuant to part F), such electricity local distribution company—

"(i) shall pass through to residential retail ratepayers as a class their ratable share (based on deliveries to each ratepayer class) of the value of the emission allowances that reduce electricity cost impacts on such ratepayers; and

"(ii) shall pass through to industrial ratepayers as a class their ratable share (based on deliveries to each ratepayer class) of the value of the emission allowances that reduce electricity cost impacts on such ratepayers. The electricity local distribution company may do so based on the quantity of electricity delivered to individual industrial retail ratepayers.

"(E) GUIDELINES.—As part of the regulations promulgated under subsection (g), the Administrator shall, after consultation with State regulatory authorities, prescribe guidelines for the implementation of the requirements of this paragraph. Such guidelines shall include—

"(i) requirements to ensure that residential and industrial retail ratepayers (including entities that receive emission allowances under part F) receive their ratable share of the value of the allowances distributed to each electricity local distribution company pursuant to this subsection; and

"(ii) requirements for measurement, verification, reporting, and approval of methods used to assure the use of allowance values to benefit retail ratepayers.

"(6) REGULATORY PROCEEDINGS.—

"(A) REQUIREMENT.—No electricity local distribution company shall be eligible to receive emission allowances under this subsection or subsection (e) unless the State regulatory authority with authority over such company's retail rates, or the entity with authority to regu-

late or set retail electricity rates of an electricity local distribution company not regulated by a State regulatory authority, has—

"(i) after public notice and an opportunity for comment, promulgated a regulation or completed a rate proceeding (or the equivalent, in the case of a ratemaking entity other than a State regulatory authority) that provides for the full implementation of the requirements of paragraph (5) of this subsection and the requirements of subsection (e); and

"(ii) made available to the Administrator and the public a report describing, in adequate detail, the manner in which the requirements of paragraph (5) and the requirements of subsection (e) will be implemented.

"(B) UPDATING.—The Administrator shall require, as a condition of continued receipt of emission allowances under this subsection by an electricity local distribution company, that a new regulation be promulgated or rate proceeding be completed, after public notice and an opportunity for comment, and a new report be

made available to the Administrator and the public, pursuant to subparagraph (A), not less frequently than every 5 years.

"(7) PLANS AND REPORTING.—

"(A) REGULATIONS.—As part of the regulations promulgated under subsection (g), the Administrator shall prescribe requirements governing plans and reports to be submitted in accordance with this paragraph.

"(B) PLANS.—Not later than April 30 of 2011 and every 5 years thereafter through 2026, each electricity local distribution company shall submit to the Administrator a plan, approved by the State regulatory authority or other entity charged with regulating tor setting the retail rates of such company, describing such company's plans for the disposition of the value of emission allowances to be received pursuant to this subsection and subsection (e), in accordance with the requirements of this subsection and subsection (e). Such plan shall include a description of the manner in which the company will provide to industrial retail ratepayers (including entities that receive emission

allowances under part F) their ratable share of the value of such allowances.

"(C) REPORTS.—Not later than June 30, 2013, and each calendar year thereafter through 2031, each electricity local distribution company shall submit a report to the Administrator, and to the relevant State regulatory authority or other entity charged with regulating or setting the retail electricity rates of such company, describing the disposition of the value of any emission allowances received by such company in the prior calendar year pursuant to this subsection and subsection (e), including—

"(i) a description of sales, transfer, exchange, or use by the company for compliance with obligations under this title, of any such emission allowances;

"(ii) the monetary value received by the company, whether in money or in some other form, from the sale, transfer, or exchange of any such emission allowances;

"(iii) the manner in which the company's disposition of any such emission allowances complies with the requirements of this subsection and of subsection (e), in-

cluding each of the requirements of paragraph (5) of this subsection, including the requirement that industrial retail ratepayers (including entities that receive emission allowances under part F) receive their ratable share of the value of such allowances; and

"(iv) such other information as the Administrator may require pursuant to subparagraph (A).

"(D) PUBLICATION.—The Administrator shall make available to the public all plans and reports submitted under this subsection, including by publishing such plans and reports on the Internet.

"(8) ADMINISTRATOR AUDIT REPORTS.—

"(A) IN GENERAL.—Each year, the Administrator shall audit a representative sample of electricity local distribution companies to ensure that emission allowances distributed under this subsection have been used exclusively for the benefit of retail ratepayers and that such companies are complying with the requirements of this subsection and of subsection (e), including the requirement that residential and indus-

trial retail ratepayers (including entities that receive emission allowances under part F) receive their ratable share of the value of such allowances. The Administrator shall assess the degree to which electric local distribution companies have maintained a marginal electric price signal while protecting consumers on total cost using the value of emissions allowances. In selecting companies for audit, the Administrator shall take into account any credible evidence of noncompliance with such requirements. The Administrator shall make available to the public a report describing the results of each such audit, including by publishing such report on the Internet.

"(B) GAO AUDIT REPORT.—Not later than April 30, 2015, and every 3 years thereafter through 2026, the Comptroller General of the United States, incorporating results from the Administrators' audit report and other relevant information including distribution company reports, shall conduct an in-depth evaluation and make available to the public a report on the investments made pursuant to paragraph (5). Said report shall be made available to the

State regulatory authority, or the entity with authority to regulate or set retail electricity rates in the case of an electricity distribution company that is not regulated by a State regulatory authority, and shall include a description of how the distribution companies in the audit meet or fail to meet the requirement of paragraph (5), including for investments made in cost-effective end-use energy efficiency programs, the lifetime and annual energy saving benefits, and capacity benefits of said programs.

"(C) ADMINISTRATOR COST CONTAINMENT REPORT.—Not later than April 30, 2015 and every 3 years thereafter through 2026, the Administrator shall transmit a report to Congress containing an evaluation of the disposition of the value of emission allowances received pursuant to this subsection and subsection (e) and recommendations of ways to more effectively direct the value of allowances to reduce costs for consumers, contain the overall costs of the greenhouse gas emissions reduction program, and meet the pollution reduction targets of the Act. The Administrator shall make available to

the public such report, including by publishing such report on the Internet.

"(9) ENFORCEMENT.—A violation of any requirement of this subsection or of subsection (e), irrespective of approval by a State regulatory authority, shall be a violation of this Act. Each emission allowance the value of which is used in violation of the requirements of this subsection or of subsection (e) shall be a separate violation.

"(c) MERCHANT COAL UNITS.—

"(1) QUALIFYING EMISSIONS.—The qualifying emissions for a merchant coal unit for a given calendar year shall be the product of the number of megawatt hours of merchant coal unit sales generated by such unit in such calendar year and the average carbon dioxide emissions per megawatt hour generated by such unit during the base period under paragraph (2), provided that the number of megawatt hours in a given calendar year for purposes of such calculation shall be reduced in proportion to the portion of such unit's carbon dioxide emissions that are either—

"(A) captured and sequestered in such calendar year; or

"(B) attributable to the combustion or gasification of biomass, to the extent that the owner or operator of the unit is not required to hold emission allowances for such emissions.

"(2) BASE PERIOD.—For purposes of this subsection, the base period for a merchant coal unit shall be—

"(A) calendar years 2006 through 2008; or

"(B) in the case of a new merchant coal unit—

"(i) the first full calendar year of operation of such unit, if such unit commences operation before January 1, 2012;

"(ii) calendar year 2012, if such unit commences operation on or after January 1, 2012, and before October 1, 2012; or

"(iii) calendar year 2013, if such unit commences operation on or after October 1, 2012, and before January 1, 2013.

"(3) PHASE-DOWN SCHEDULE.—The Administrator shall identify an annual phase-down factor, applicable to distributions to merchant coal units for each of vintage years 2012 through 2029, that corresponds to the overall decline in the amount of emission allowances allocated to the electricity sector

in such years pursuant to section 771(a)(1). Such factor shall—

"(A) for vintage year 2012, be equal to 1.0;

"(B) for each of vintage years 2013 through 2029, correspond to the quotient of—

"(i) the quantity of emission allowances allocated under section 771(a)(1) for such vintage year; divided by

"(ii) the quantity of emission allowances allocated under section 771(a)(1) for vintage year 2012.

"(4) DISTRIBUTION OF EMISSION ALLOWANCES.—Not later than March 1 of 2013 and each calendar year through 2030, the Administrator shall distribute emission allowances of the preceding vintage year to the owner or operator of each merchant coal unit described in subsection (a)(11)(C) in an amount equal to the product of—

"(A) 0.5;

"(B) the qualifying emissions for such merchant coal unit for the preceding year, as determined under paragraph (1); and

"(C) the phase-down factor for the preceding calendar year, as identified under paragraph (3).

"(5) ADJUSTMENT.—

"(A) STUDY.—Not later than July 1, 2014, the Administrator, in consultation with the Federal Energy Regulatory Commission, shall complete a study to determine whether the allocation formula under paragraph (3) is resulting in, or is likely to result in, windfall profits to merchant coal generators or substantially disparate treatment of merchant coal generators operating in different markets or regions.

"(B) REGULATION.—If the Administrator, in consultation with the Federal Energy Regulatory Commission, makes an affirmative finding of windfall profits or disparate treatment under subparagraph (A), the Administrator shall, not later than 18 months after the completion of the study described in subparagraph (A), promulgate regulations providing for the adjustment of the allocation formula under paragraph (3) to mitigate, to the extent practicable, such windfall profits, if any, and such disparate treatment, if any.

"(6) LIMITATION ON ALLOWANCES.—Notwithstanding paragraph (4) or (5), for each vintage year the Administrator shall distribute under this subsection no more than 10 percent of the total quantity of emission allowances available for such vintage year for distribution to the electricity sector under section 771(a)(1). If the quantity of emission allowances that would otherwise be distributed pursuant to paragraph (4) or (5) for any vintage year would exceed such limit, the Administrator shall distribute 10 percent of the total emission allowances available for distribution under section 771(a)(1) for such vintage year ratably among merchant coal generators based on the applicable formula under paragraph (4) or (5).

"(7) ELIGIBILITY.—The owner or operator of a merchant coal unit shall not be eligible to receive emission allowances under this subsection for any vintage year for which such owner or operator has elected to receive emission allowances for the same unit under subsection (d).

"(d) LONG-TERM CONTRACT GENERATORS.—

"(1) DISTRIBUTION.—Not later than March 1, 2013, and each calendar year through 2030, the Administrator shall distribute to the owner or operator

of each long-term contract generator a quantity of emission allowances of the preceding vintage year that is equal to the sum of—

"(A) the number of tons of carbon dioxide emitted as a result of a qualifying electricity sales agreement referred to in subsection (a)(10)(B)(i); and

"(B) the incremental number of tons of carbon dioxide emitted solely as a result of a qualifying thermal sales agreement referred to in subsection (a)(10)(B)(ii), provided that in no event shall the Administrator distribute more than 1 emission allowance for the same ton of emissions.

"(2) LIMITATION ON ALLOWANCES.—Notwithstanding paragraph (1), for each vintage year the Administrator shall distribute under this subsection no more than 4.3 percent of the total quantity of emission allowances available for such vintage year for distribution to the electricity sector under section 771(a)(1). If the quantity of emission allowances that would otherwise be distributed pursuant to paragraph (1) for any vintage year would exceed such limit, the Administrator shall distribute 4.3 percent of the total emission allowances available for

distribution under section 771(a)(1) for such vintage year ratably among long-term contract generators based on paragraph (1).

"(3) ELIGIBILITY.—

"(A) FACILITY ELIGIBILITY.—The owner or operator of a facility shall cease to be eligible to receive emission allowances under this subsection upon the earliest date on which the facility no longer meets each and every element of the definition of a long-term contract generator under subsection (a)(10).

"(B) CONTRACT ELIGIBILITY.—The owner or operator of a facility shall cease to be eligible to receive emission allowances under this subsection based on an electricity or thermal sales agreement referred to in subsection (a)(10)(B) upon the earliest date that such agreement—

"(i) expires;

"(ii) is terminated; or

"(iii) is amended in any way that changes the location of the facility, the price (whether a fixed price or price formula) for electricity or thermal energy sold under such agreement, the quantity of electricity or thermal energy sold under the

agreement, or the expiration or termination date of the agreement.

"(4) DEMONSTRATION OF ELIGIBILITY.—To be eligible to receive allowance distributions under this subsection, the owner or operator of a long-term contract generator shall submit each of the following in writing to the Administrator within 180 days after the date of enactment of this title, and not later than September 30 of each vintage year for which such generator wishes to receive emission allowances:

"(A) A certificate of representation described in section 700(15).

"(B) An identification of each owner and each operator of the facility.

"(C) An identification of the units at the facility and the location of the facility.

"(D) A written certification by the designated representative that the facility meets all the requirements of the definition of a long-term contract generator.

"(E) The expiration date of each qualifying electricity or thermal sales agreement referred to in subsection (a)(10)(B).

"(F) A copy of each qualifying electricity or thermal sales agreement referred to in subsection (a)(10)(B).

"(5) NOTIFICATION.—Not later than 30 days after, in accordance with paragraph (3), a facility or an agreement ceases to meet the eligibility requirements for distribution of emission allowances pursuant to this subsection, the designated representative of such facility shall notify the Administrator in writing when, and on what basis, such facility or agreement ceased to meet such requirements.

"(e) SMALL LDCs.—

"(1) DISTRIBUTION.—The Administrator shall, in accordance with this subsection, distribute emission allowances allocated pursuant to section 771(a)(1) for the following vintage year. Such allowances shall be distributed ratably among small LDCs based on historic emissions in accordance with the same measure of such emissions applied to each such small LDC for the relevant vintage year under subsection (b)(2) of this section.

"(2) USES.—A small LDC receiving allowances under this section shall use such allowances exclusively for the following purposes:

"(A) Cost-effective programs to achieve electricity savings, provided that such savings shall not be transferred or used for compliance with any renewable electricity standard established under the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.).

"(B) Deployment of technologies to generate electricity from renewable energy resources, provided that any Federal renewable electricity credits issued based on generation supported under this section shall be submitted to the Federal Energy Regulatory Commission for voluntary retirement and shall not be used for compliance with the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.).

"(C) Assistance programs to reduce electricity costs for low-income residential ratepayers of such small LDC, provided that such assistance is made available equitably to all residential ratepayers below a certain income level, which shall not be higher than 200 percent of the poverty line (as that term is defined in section 673(2) of the Community Services Block Grant Act (42 U.S.C. 9902(2)).

"(3) REQUIREMENTS.—As part of the regulations promulgated under subsection (g), the Administrator shall prescribe—

"(A) after consultation with the Federal Energy Regulatory Commission, requirements to ensure that programs and projects under paragraph (2)(A) and (B) are consistent with the standards established by, and effectively supplement electricity savings and generation of electricity from renewable energy resources achieved by, the Combined Efficiency and Renewable Electricity Standard established by law;

"(B) eligibility criteria and guidelines for consumer assistance programs for low-income residential ratepayers under paragraph (2)(C); and

"(C) such other requirements as the Administrator determines appropriate to ensure compliance with the requirements of this subsection.

"(4) REPORTING.—Reports submitted under subsection (b)(7) shall include, in accordance with such requirements as the Administrator may prescribe—

"(A) a description of any facilities deployed under paragraph (2)(A), the quantity of resulting electricity generation from renewable energy resources;

"(B) an assessment demonstrating the cost-effectiveness of, and electricity savings achieved by, programs supported under paragraph (2)(B); and

"(C) a description of assistance provided to low-income retail ratepayers under paragraph (2)(C).

"(f) CERTAIN COGENERATION FACILITIES.—

"(1) ELIGIBLE COGENERATION FACILITIES.—For purposes of this subsection, an 'eligible cogeneration facility' is a facility that—

"(A) is a qualifying co-generation facility (as that term is defined in section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B));

"(B) derives 80 percent or more of its heat input from coal, petroleum coke, or any combination of these 2 fuels;

"(C) has a nameplate capacity of 100 megawatts or greater;

"(D) was in operation as of January 1, 2009, and remains in operation as of the date

of any distribution of emission allowances under this subsection;

"(E) in calendar years 2006 through 2008 sold, and as of the date of any distribution of emission allowances under this section sells, steam or electricity directly and solely to multiple, separately owned industrial or commercial facilities co-located at the same site with the cogeneration facility; and

"(F) is not eligible to receive allowances under any other subsection of this section or under part F of this title.

"(2) DISTRIBUTION.—The Administrator shall distribute the emission allowances allocated pursuant to section 771(a)(1) to owners or operators of eligible cogeneration facilities ratably based on the carbon dioxide emissions of each such facility in calendar years 2006 through 2008. The Administrator—

"(A) shall not, in any year, distribute emission allowances under this subsection to the owner or operator of any eligible cogeneration facility in excess of the amount necessary to offset such facility's cost of compliance with the requirements of this title in that year; and

"(B) may distribute such allowances over a period of years if annual distributions under this subsection would otherwise exceed the limitation in subparagraph (A), provided that in no event shall distributions be made under this subsection after calendar year 2025.

"(3) REQUIREMENTS.—The Administrator shall, by regulation, establish requirements to ensure that the value of any emission allowances distributed pursuant to this subsection are passed through, on an equitable basis, to the facilities to which the relevant cogeneration facility provides electricity or steam deliveries, including any facility owned or operated by the owner or operator of the cogeneration facility.

"(g) REGULATIONS.—Not later than 2 years after the date of enactment of this title, the Administrator, in consultation with the Federal Energy Regulatory Commission, shall promulgate regulations to implement the requirements of this section.

"SEC. 773. NATURAL GAS CONSUMERS.

"(a) DEFINITION.—For purposes of this section, the term 'cost-effective', with respect to an energy efficiency program, means that the program meets the Total Resource Cost Test, which requires that the net present

value of economic benefits over the life of the program, including avoided supply and delivery costs and deferred or avoided investments, is greater than the net present value of the economic costs over the life of the program, including program costs and incremental costs borne by the energy consumer.

"(b) ALLOCATION.—Not later than June 30, 2015, and each calendar year thereafter through 2028, the Administrator shall distribute to natural gas local distribution companies for the benefit of retail ratepayers the quantity of emission allowances allocated for the following vintage year pursuant to section 771(a)(2). Such allowances shall be distributed among local natural gas distribution companies based on the following formula:

"(1) INITIAL FORMULA.—Except as provided in paragraph (2), for each vintage year, the Administrator shall distribute emission allowances among natural gas local distribution companies on a pro rata basis based on each such company's annual average retail natural gas deliveries for 2006 through 2008, unless the owner or operator of the company selects 3 other consecutive years between 1999 and 2008, inclusive, and timely notifies the Administrator of its selection.

"(2) UPDATING.—Prior to distributing 2019 vintage emission allowances and at 3-year intervals thereafter, the Administrator shall update the distribution formula under this subsection to reflect changes in each natural gas local distribution company's service territory since the most recent formula was established. For each successive 3-year period, the Administrator shall distribute allowances on a pro rata basis among natural gas local distribution companies based on the product of—

"(A) each natural gas local distribution company's average annual natural gas deliveries per customer during calendar years 2006 through 2008, or during the 3 alternative consecutive years selected by such company under paragraph (1); and

"(B) the number of customers of such natural gas local distribution company in the most recent year in which the formula is updated under this paragraph.

"(c) USE OF ALLOWANCES.—

"(1) RATEPAYER BENEFIT.—Emission allowances distributed to a natural gas local distribution company under this section shall be used exclusively for the benefit of retail ratepayers of such natural

gas local distribution company and may not be used to support natural gas sales or deliveries to entities or persons other than such ratepayers.

"(2) RATEPAYER CLASSES.—In using emission allowances distributed under this section for the benefit of ratepayers, a natural gas local distribution company shall ensure that ratepayer benefits are distributed—

"(A) among ratepayer classes on a pro rata basis based on natural gas deliveries to each class; and

"(B) equitably among individual ratepayers within each ratepayer class.

"(3) LIMITATION.—A natural gas local distribution company shall not use the value of emission allowances distributed under this section to provide to any ratepayer a rebate that is based solely on the quantity of natural gas delivered to such ratepayer. To the extent a natural gas local distribution company uses the value of emission allowances distributed under this section to provide rebates, it shall, to the maximum extent practicable, provide such rebates with regard to the fixed portion of ratepayers' bills or as a fixed creditor rebate on natural gas bills.

"(4) ENERGY EFFICIENCY PROGRAMS.—The value of no less than one-third of the emission allowances distributed to natural gas local distribution companies pursuant to this section in any calendar year shall be used for cost-effective energy efficiency programs for natural gas consumers. Such programs must be authorized and overseen by the State regulatory authority, or by the entity with regulatory authority over retail natural gas rates in the case of a natural gas local distribution company that is not regulated by a State regulatory authority.

"(5) GUIDELINES.—As part of the regulations promulgated under subsection (h), the Administrator shall prescribe specific guidelines for the implementation of the requirements of this subsection.

"(d) REGULATORY PROCEEDINGS.—

"(1) REQUIREMENT.—No natural gas local distribution company shall be eligible to receive emission allowances under this section unless the State regulatory authority with authority over such company, or the entity with authority to regulate retail rates of a natural gas local distribution company not regulated by a State regulatory authority, has—

"(A) promulgated a regulation or completed a rate proceeding (or the equivalent, in

the case of a ratemaking entity other than a State regulatory authority) that provides for the full implementation of the requirements of subsection (c); and

"(B) made available to the Administrator and the public a report describing, in adequate detail, the manner in which the requirements of subsection (c) will be implemented.

"(2) UPDATING.—The Administrator shall require, as a condition of continued receipt of emission allowances under this section, that a new regulation be promulgated or rate proceeding be completed, and a new report be made available to the Administrator and the public, pursuant to paragraph (1), not less frequently than every 5 years.

"(e) PLANS AND REPORTING.—

"(1) REGULATIONS.—As part of the regulations promulgated under subsection (h), the Administrator shall prescribe requirements governing plans and reports to be submitted in accordance with this subsection.

"(2) PLANS.—Not later than April 30, 2015, and every 5 years thereafter through 2025, each natural gas local distribution company shall submit to the Administrator a plan, approved by the State

regulatory authority or other entity charged with regulating the retail rates of such company, describing such company's plans for the disposition of the value of emission allowances to be received pursuant to this section, in accordance with the requirements of this section.

"(3) REPORTS.—Not later than June 30, 2017, and each calendar year thereafter through 2031, each natural gas local distribution company shall submit a report to the Administrator, approved by the relevant State regulatory authority or other entity charged with regulating the retail natural gas rates of such company, describing the disposition of the value of any emission allowances received by such company in the prior calendar year pursuant to this subsection, including—

"(A) a description of sales, transfer, exchange, or use by the company for compliance with obligations under this title, of any such emission allowances;

"(B) the monetary value received by the company, whether in money or in some other form, from the sale, transfer, or exchange of emission allowances received by the company under this section;

"(C) the manner in which the company's disposition of emission allowances received under this subsection complies with the requirements of this section, including each of the requirements of subsection (c);

"(D) the cost-effectiveness of, and energy savings achieved by, energy efficiency programs supported through such emission allowances; and

"(E) such other information as the Administrator may require pursuant to paragraph (1).

"(4) PUBLICATION.—The Administrator shall make available to the public all plans and reports submitted by natural gas local distribution companies under this subsection, including by publishing such plans and reports on the Internet.

"(f) AUDITING.—

"(1) ADMINISTRATOR AUDIT REPORT.—Each year, the Administrator shall audit a significant representative sample of natural gas local distribution companies to ensure that emission allowances distributed under this section have been used exclusively for the benefit of retail ratepayers and that such companies are complying with the requirements of this section. In selecting companies for audit, the

Administrator shall take into account any credible evidence of noncompliance with such requirements. The Administrator shall make available to the public a report describing the results of each such audit, including by publishing such report on the Internet.

"(2) GAO AUDIT REPORT.—Not later April 30, 2015 and every 3 years thereafter through April 30, 2026, the Comptroller General of the United States, incorporating results from the Administrators' audit report and other relevant information including distribution company reports, shall conduct an in-depth evaluation and make available to the public a report on the investments made pursuant to subsection (c). Said report shall be made available to the State regulatory authority, or the entity with authority to regulate or set retail natural gas rates in the case of a natural gas distribution company that is not regulated by a State regulatory authority, and shall include a description how the distribution companies in the audit meet or fail to meet the requirement of subsection (c), including for investments made in cost-effective end-use energy efficiency programs, the lifetime and annual energy saving benefits, and capacity benefits of said programs.

"(3) ADMINISTRATOR COST CONTAINMENT REPORT.—Not later April 30, 2015, and every 3 years thereafter through April 30, 2026, the Administrator shall transmit a report to Congress containing an evaluation of the disposition of the value of emission allowances received pursuant to this subsection and recommendations of ways to more effectively direct the value of allowances to reduce costs for consumers, contain the overall costs of the greenhouse gas emissions reduction program, and meet the pollution reduction targets of the Act. The Administrator shall make available to the public such report, including by publishing such report on the Internet.

"(g) ENFORCEMENT.—A violation of any requirement of this section, irrespective of approval by a State regulatory authority, shall be a violation of this Act. Each emission allowance the value of which is used in violation of the requirements of this section shall be a separate violation.

"(h) REGULATIONS.—Not later than January 1, 2014, the Administrator, in consultation with the Federal Energy Regulatory Commission, shall promulgate regulations to implement the requirements of this section.

"SEC. 774. HOME HEATING OIL AND PROPANE CONSUMERS.

"(a) DEFINITIONS.—For purposes of this section:

"(1) CARBON CONTENT.—The term 'carbon content' means the amount of carbon dioxide that would be emitted as a result of the combustion of a fuel.

"(2) COST-EFFECTIVE.—The term 'cost-effective' has the meaning given that term in section 773(a).

"(b) ALLOCATION.—The Administrator shall distribute among the States, in accordance with this section, the quantity of emission allowances allocated pursuant to section 771(a)(3). The Administrator shall distribute a percentage of such allowances determined by the Administrator, after consultation with the Secretary of the Interior, pursuant to subsection (f).

"(c) DISTRIBUTION AMONG STATES.—The Administrator shall distribute emission allowances among the States under this section each year on a pro rata basis based on the ratio of—

"(1) the carbon content of home heating oil and propane sold to consumers within each State in the preceding year for residential or commercial uses; to

"(2) the carbon content of home heating oil and propane sold to consumers within the United States in the preceding year for residential or commercial uses.

"(d) USE OF ALLOWANCES.—

"(1) IN GENERAL.—States shall use emission allowances distributed under this section exclusively for the benefit of consumers of home heating oil or propane for residential or commercial purposes. Such proceeds shall be used exclusively for—

"(A) cost-effective energy efficiency programs for consumers that use home heating oil or propane for residential or commercial purposes; or

"(B) rebates or other direct financial assistance programs for consumers of home heating oil or propane used for residential or commercial purposes.

"(2) ADMINISTRATION AND DELIVERY MECHANISMS.—In administering programs supported by this section, States shall—

"(A) use no less than 50 percent of the value of emission allowances received under this section for cost-effective energy efficiency programs to reduce consumers' overall fuel costs;

"(B) to the extent practicable, deliver consumer support under this section through existing energy efficiency and consumer energy assistance programs or delivery mechanisms, in-

cluding, where appropriate, programs or mechanisms administered by parties other than the State; and

"(C) seek to coordinate the administration and delivery of energy efficiency and consumer energy assistance programs supported under this section, with one another and with existing programs for various fuel types, so as to deliver comprehensive, fuel-blind, coordinated programs to consumers.

"(e) REPORTING.—Each State receiving emission allowances under this section shall submit to the Administrator, within 12 months of each receipt of such allowances, a report, in accordance with such requirements as the Administrator may prescribe, that—

"(1) describes the State's use of emission allowances distributed under this section, including a description of the energy efficiency and consumer assistance programs supported with such allowances;

"(2) demonstrates the cost-effectiveness of, and the energy savings achieved by, energy efficiency programs supported under this section; and

"(3) includes a report prepared by an independent third party, in accordance with such regulations as the Administrator may promulgate, evalu-

ating the performance of the energy efficiency and consumer assistance programs supported under this section.

"(f) ENFORCEMENT.—If the Administrator determines that a State is not in compliance with this section, the Administrator may withhold a portion of the emission allowances, the quantity of which is equal to up to twice the quantity of the allowances that the State failed to use in accordance with the requirements of this section, that such State would otherwise be eligible to receive under this section in later years. Allowances withheld pursuant to this subsection shall be distributed among the remaining States on a pro rata basis in accordance with the formula in subsection (c).

"SEC. 775. DOMESTIC FUEL PRODUCTION.

"(a) PURPOSE.—The purpose of this section is to provide emission allowance rebates to petroleum refineries in the United States in a manner that promotes energy efficiency and a reduction in greenhouse gas emissions at such facilities.

"(b) DEFINITIONS.—In this section:

"(1) EMISSIONS.—The term 'emissions' includes direct emissions from fuel combustion, process emissions, and indirect emissions from the generation of electricity, steam, and hydrogen used to

1 produce the output of a petroleum refinery or the
2 petroleum refinery sector.
3 "(2) PETROLEUM REFINERY.—The term 'petro-
4 leum refinery' means a facility classified under code
5 324110 of the North American Industrial Classifica-
6 tion System of 2002.
7 "(3) SMALL BUSINESS REFINER.—The term
8 'small business refiner' means a refiner that meets
9 the applicable Federal refinery capacity and em-
10 ployee limitations criteria described in section
11 45H(c)(1) of the Internal Revenue Code of 1986 (as
12 in effect on the date of enactment of this section and
13 without regard to section 45H(d)). Eligibility of a
14 small business refiner under this paragraph shall not
15 be recalculated or disallowed on account of (i) its
16 merger with another small business refiner or refin-
17 ers after December 31, 2002, or (ii) its acquisition
18 of another small business refiner (or refinery of such
19 refiner) after December 31, 2002.
20 "(c) IN GENERAL.—The Administrator shall dis-
21 tribute allowances pursuant to this section to owners and
22 operators of petroleum refineries, including small business
23 refiners, in the United States.
24 "(d) DISTRIBUTION SCHEDULE.—The Administrator
25 shall distribute emission allowances pursuant to the regu-

lations issued under subsection (e) for each vintage year no later than October 31 of the preceding calendar year.

"(e) REGULATIONS.—Not later than 3 years after the date of enactment of this title, the Administrator, in consultation with the Administrator of the Energy Information Administration, shall promulgate regulations that establish a formula for distributing emission allowances consistent with the purpose of this section. In establishing such formula, the Administrator shall consider the relative complexity of refinery processes and appropriate mechanisms to take energy efficiency and greenhouse gas reductions into account. If a petroleum refinery's electricity provider received a free allocation of emission allowances pursuant to section 771(a)(1), the Administrator shall take this free allocation into account when establishing such formula to avoid rebates to a petroleum refinery for costs that the Administrator determines were not incurred by the petroleum refinery because the allowances were freely allocated to the petroleum refinery's electricity provider and used for the benefit of the petroleum refinery. This formula shall apply separately to the distribution of allowances allocated pursuant to section 771(a)(4), including for petroleum refiners and small business refiners.

"SEC. 776. CONSUMER PROTECTION.

"(a) CONSUMER REBATES.—

"(1) ESTABLISHMENT OF FUND.—There is established in the Treasury a separate account, to be known as the 'Consumer Rebate Fund').

"(2) AVAILABILITY OF AMOUNTS.—All amounts deposited in the Consumer Rebate Fund shall be available without further appropriation or fiscal year limitation.

"(3) DISTRIBUTION OF AMOUNTS.—Beginning in 2026, for each year after deposits are made in the Consumer Rebate Fund pursuant to section 771(b)(2)(A), the President shall use the funds in accordance with Federal statutory authority to provide relief to consumers and others affected by the enactment of the Clean Energy Jobs and American Power Act (and amendments made by that Act).

"(b) ENERGY REFUND PROGRAM.—

"(1) ESTABLISHMENT OF FUND.—There is established in the Treasury a separate account, to be known as the 'Energy Refund Account').

"(2) AVAILABILITY OF AMOUNTS.—All amounts deposited in the Energy Refund Account shall be available without further appropriation or fiscal year limitation.

"(3) DISTRIBUTION OF AMOUNTS.—For each year after deposits are made to the Energy Refund

Account pursuant to section 771(b)(2)(B), the President shall use the funds in accordance with Federal statutory authority to offset energy cost impacts on low- and moderate-income households.

"SEC. 777. EXCHANGE FOR STATE-ISSUED ALLOWANCES.

"(a) IN GENERAL.—Not later than 1 year after the date of enactment of this title, the Administrator shall issue regulations allowing any person in the United States to exchange greenhouse gas emission allowances issued before the later of December 31, 2011, or the date that is 9 months after the first auction under section 778, by the State of California or for the Regional Greenhouse Gas Initiative, or the Western Climate Initiative (in this section referred to as 'State allowances') for emission allowances established by the Administrator under section 721(a).

"(b) REGULATIONS.—Regulations issued under subsection (a) shall—

"(1) provide that a person exchanging State allowances under this section receive emission allowances established under section 721(a) in the amount that is sufficient to compensate for the cost of obtaining and holding such State allowances;

"(2) establish a deadline by which persons must exchange the State allowances;

"(3) provide that the Federal emission allowances disbursed pursuant to this section shall be deducted from the allowances to be auctioned pursuant to section 771(b); and

"(4) require that, once exchanged, the credit or other instrument be retired for purposes of use under the program by or for which it was originally issued.

"(c) COST OF OBTAINING STATE ALLOWANCE.—For purposes of this section, the cost of obtaining a State allowance shall be the average auction price, for emission allowances issued in the year in which the State allowance was issued, under the program under which the State allowance was issued.

"SEC. 778. AUCTION PROCEDURES.

"(a) IN GENERAL.—To the extent that auctions of emission allowances by the Administrator are authorized by this part, such auctions shall be carried out pursuant to this section and the regulations established hereunder.

"(b) INITIAL REGULATIONS.—Not later than 12 months after the date of enactment of this title, the Administrator, in consultation with other agencies, as appropriate, shall promulgate regulations governing the auction of allowances under this section. Such regulations shall include the following requirements:

"(1) FREQUENCY; FIRST AUCTION.—Auctions shall be held four times per year at regular intervals, with the first auction to be held no later than March 31, 2011.

"(2) AUCTION SCHEDULE; CURRENT AND FUTURE VINTAGES.—The Administrator shall, at each quarterly auction under this section, offer for sale both a portion of the allowances with the same vintage year as the year in which the auction is being conducted and a portion of the allowances with vintage years from future years. The preceding sentence shall not apply to auctions held before 2012, during which period, by necessity, the Administrator shall auction only allowances with a vintage year that is later than the year in which the auction is held. Beginning with the first auction and at each quarterly auction held thereafter, the Administrator may offer for sale allowances with vintage years of up to 4 years after the year in which the auction is being conducted.

"(3) AUCTION FORMAT.—Auctions shall follow a single-round, sealed-bid, uniform price format.

"(4) PARTICIPATION; FINANCIAL ASSURANCE.—Auctions shall be open to any person, except that the Administrator may establish financial assurance

requirements to ensure that auction participants can and will perform on their bids.

"(5) DISCLOSURE OF BENEFICIAL OWNERSHIP.—Each bidder in the auction shall be required to disclose the person or entity sponsoring or benefitting from the bidder's participation in the auction if such person or entity is, in whole or in part, other than the bidder.

"(6) PURCHASE LIMITS.—No person may, directly or in concert with another participant, purchase more than 5 percent of the allowances offered for sale at any quarterly auction.

"(7) PUBLICATION OF INFORMATION.—After the auction, the Administrator shall, in a timely fashion, publish the identities of winning bidders, the quantity of allowances obtained by each winning bidder, and the auction clearing price.

"(8) OTHER REQUIREMENTS.—The Administrator may include in the regulations such other requirements or provisions as the Administrator, in consultation with other agencies, as appropriate, considers appropriate to promote effective, efficient, transparent, and fair administration of auctions under this section.

"(c) REVISION OF REGULATIONS.—The Administrator may, in consultation with other agencies, as appropriate, at any time, revise the initial regulations promulgated under subsection (b) by promulgating new regulations. Such revised regulations need not meet the requirements identified in subsection (b) if the Administrator determines that an alternative auction design would be more effective, taking into account factors including costs of administration, transparency, fairness, and risks of collusion or manipulation. In determining whether and how to revise the initial regulations under this subsection, the Administrator shall not consider maximization of revenues to the Federal Government.

"(d) RESERVE AUCTION PRICE.—The minimum reserve auction price shall be $10 (in constant 2005 dollars) for auctions occurring in 2012. The minimum reserve price for auctions occurring in years after 2012 shall be the minimum reserve auction price for the previous year increased by 5 percent plus the rate of inflation (as measured by the Consumer Price Index for all urban consumers).

"(e) DELEGATION OR CONTRACT.—Pursuant to regulations under this section, the Administrator may by delegation or contract provide for the conduct of auctions under the Administrator's supervision by other depart-

1 ments or agencies of the Federal Government or by non-
2 governmental agencies, groups, or organizations.
3 "(f) SMALL BUSINESS REFINER RESERVE.—The Ad-
4 ministrator shall, in accordance with this subsection, issue
5 regulations setting aside a specified number of allowances,
6 as determined by the Administrator, that small business
7 refiners may purchase at the average auction price and
8 may use to demonstrate compliance pursuant to section
9 722. These regulations shall provide the following:
10 "(1) ALLOWED PURCHASES.—From January 1
11 of the calendar year that matches the vintage year
12 for which allowances have been placed in the reserve,
13 through January 14 of the following year, small
14 business refiners (as defined in section 775(b)) may
15 purchase allowances from this reserve at the price
16 determined pursuant to paragraph (2).
17 "(2) PRICE.—The price for allowances pur-
18 chased from this reserve shall be the average auction
19 price for allowances of the same vintage year pur-
20 chased at auctions conducted pursuant to this sec-
21 tion during the 12 months preceding the purchase of
22 the allowances.
23 "(3) USE OF ALLOWANCES.—Allowances pur-
24 chased from this reserve shall only be used by the
25 purchaser to demonstrate compliance pursuant to

section 722 for attributable greenhouse gas emissions in the calendar year that matches the vintage year of the purchased allowance. Allowances purchased from this reserve may not be banked, traded or borrowed.

"(4) LIMITATIONS ON PURCHASE AMOUNT.—The Administrator, by regulation adopted after public notice and an opportunity for comment, shall establish procedures to distribute the ability to purchase allowances from the reserve fairly among all small business refiners interested in purchasing allowances from this reserve so as to address the potential that requests to purchase allowances exceed the number of allowances available in the reserve. This regulation may place limits on the number of allowances a small business refiner may purchase from the reserve.

"(5) UNSOLD ALLOWANCES.—Vintage year allowances not sold from the reserve on or before January 15 of the calendar year following the vintage year shall be sold at an auction conducted pursuant to this section no later than March 31 of the calendar year following the vintage year. If significantly more allowances are being placed in the reserve than are being purchased from the reserve several years

in a row, the Administrator may adjust either the percent of allowances placed in the reserve or the date by which allowances may be purchased from the reserve.

"SEC. 779. AUCTIONING ALLOWANCES FOR OTHER ENTITIES.

"(a) CONSIGNMENT.—Any entity holding emission allowances or compensatory allowances may request that the Administrator auction, pursuant to section 778, the allowances on consignment.

"(b) PRICING.—When the Administrator acts under this section as the agent of an entity in possession of emission allowances, the Administrator is not obligated to obtain the highest price possible for the emission allowances, and instead shall auction consignment allowances in the same manner and pursuant to the same rules as auctions of other allowances under section 778. The Administrator may permit the entity offering the allowance for sale to condition the sale of its allowances pursuant to this section on a minimum reserve price that is different than the reserve auction price set pursuant to section 778(d).

"(c) PROCEEDS.—For emission allowances and compensatory allowances auctioned pursuant to this section, notwithstanding section 3302 of title 31, United States Code, or any other provision of law, within 90 days of re-

ceipt, the United States shall transfer the proceeds from the auction to the entity which held the allowances auctioned. No funds transferred from a purchaser to a seller of emission allowances or compensatory allowances under this subsection shall be held by any officer or employee of the United States or treated for any purpose as public monies.

''(d) REGULATIONS.—The Administrator shall issue regulations within 24 months after the date of enactment of this title to implement this section.

"SEC. 780. COMMERCIAL DEPLOYMENT OF CARBON CAPTURE AND SEQUESTRATION TECHNOLOGIES.

''(a) DEFINITIONS.—In this section:

''(1) CARBON CAPTURE AND STORAGE.—The term 'carbon capture and sequestration' shall—

''(A) have such term as Administrator shall determine by regulation; and

''(B) include—

''(i) geological sequestration; and

''(ii) conversion of captured carbon dioxide to a stable form that will safely and permanently sequester the carbon dioxide.

''(2) QUALIFYING ELECTRIC GENERATING UNIT.—The term 'qualifying electric generating unit' means an electric utility unit that—

"(A) derives at least 50 percent of the annual fuel input of the unit from—

"(i) coal or waste coal;

"(ii) petroleum coke; or

"(iii) any combination of those 2 fuels; and

"(B)(i) has a nameplate capacity of 200 megawatts or more; or

"(ii) in the case of retrofit applications, the carbon capture and sequestration technology is applied to the flue gas or fuel gas stream from at least 200 megawatts of the total nameplate generating capacity of the unit.

"(3) QUALIFYING INDUSTRIAL SOURCE.—The term 'qualifying industrial source' means a source that—

"(A) is not a qualifying electric generating unit;

"(B) absent carbon capture and sequestration, would emit greater than 50,000 tons per year of carbon dioxide; and

"(C) does not produce a liquid transportation fuel from a solid fossil-based feedstock.

"(4) TREATED GENERATING CAPACITY.—

"(A) IN GENERAL.—The term 'treated generating capacity' means the portion of the total generating capacity of an electric generating unit (or industrial source, measured by such method as the Administrator may designate to be equivalent to the calculation under subparagraph (B)) for which the flue gas or fuel gas is treated by the carbon capture and sequestration technology.

"(B) CALCULATION.—In determining the treated portion of flue gas or fuel gas of an electric generating unit under subparagraph (A), the Administrator shall multiply the nameplate capacity of the unit by the ratio that—

"(i) the mass of flue gas or fuel gas that is treated by the carbon capture and sequestration technology; bears to

"(ii) the total mass of the flue gas or fuel gas that is produced when the unit is operating at maximum capacity.

"(b) REGULATIONS.—Not later than 2 years after the date of enactment of this title, the Administrator shall promulgate regulations providing for the distribution of emission allowances allocated under section 771(a)(6), pursuant to the requirements of this section, to support

the commercial deployment of carbon capture and sequestration technologies in electric power generation and industrial operations.

"(c) ELIGIBILITY CRITERIA AND METHOD OF DISTRIBUTION.—

"(1) ELIGIBILITY.—For an owner or operator of a project to be eligible to receive emission allowances under this section, the project shall—

"(A) implement carbon capture and sequestration technology—

"(i) at a qualifying electric generating unit that, upon implementation of the carbon capture and sequestration technology, will achieve an emission limitation that is at least a 50-percent reduction in emissions of the carbon dioxide produced by—

"(I) the unit, measured on an annual basis, as determined by the Administrator; or

"(II) in the case of retrofit applications described in subsection (a)(2)(B)(ii), the treated portion of flue gas from the unit, measured on an annual basis, as determined by the Administrator; or

"(ii) at a qualifying industrial source that, upon implementation, will achieve an emission limitation that is at least a 50-percent reduction in emissions of the carbon dioxide produced by the emission point, measured on an annual basis, as determined by the Administrator;

"(B)(i) geologically sequester carbon dioxide at a site that meets all applicable permitting and certification requirements for geological sequestration; or

"(ii) pursuant to such requirements as the Administrator may prescribe by regulation, convert captured carbon dioxide to a stable form that will safely and permanently sequester the carbon dioxide;

"(C) meet all other applicable State, tribal, and Federal permitting requirements; and

"(D) be located in the United States.

"(2) METHOD OF DISTRIBUTION.—

"(A) PERIOD.—The Administrator shall distribute emission allowances allocated under section 771(a)(6) to eligible projects for each of the first 10 calendar years for which each eligible project is in commercial operation.

"(B) BONUS ALLOWANCE FORMULA FOR ELECTRIC GENERATING UNITS.—

"(i) PHASE I DISTRIBUTION.—For each project that is certified under subsection (h), the quantity of emission allowances that the Administrator shall distribute for a calendar year to the owner or operator of the eligible project shall be equal to the quotient obtained by dividing—

"(I) the product obtained by multiplying—

"(aa) the number of metric tons of carbon dioxide emissions avoided through capture and sequestration of emissions by the project for a particular year, as determined pursuant to such methodology as the Administrator shall prescribe by regulation; and

"(bb) a bonus allowance value that is assigned to the project under subsection (d)(2); by

"(II) the average fair market value of an emission allowance during the calendar year preceding the year during which the project captured and sequestered the carbon dioxide emissions.

"(ii) PHASE II DISTRIBUTION.—For each project that qualifies under subsection (e), the quantity of emission allowances that the Administrator shall distribute for a calendar year to the owner or operator of the eligible project shall be determined through—

"(I) reverse auction, as prescribed by regulation under subsection (e)(3); or

"(II) if the Administrator decides not to distribute allowances through a reverse auction, an alternate distribution method established by regulation under subsection (e)(4).

"(C) FORMULA FOR INDUSTRIAL SOURCES.—For each project that qualifies under subsection (g), the quantity of emission allowances that the Administrator shall dis-

tribute for a calendar year to the owner or operator of the eligible project shall be determined in accordance with subsection (g)(2).

"(D) CONSISTENCY.—The Administrator shall develop a method of distribution for each category of eligible projects under this paragraph in a manner that is consistent with the certification and distribution requirements under subsection (h).

"(d) PHASE I DISTRIBUTION TO ELECTRIC GENERATING UNITS.—

"(1) APPLICABILITY.—

"(A) IN GENERAL.—Subject to subparagraph (B), this subsection shall apply to projects that are undertaken at qualifying electric generating units that the Administrator determines to be eligible to receive emission allowances under this section.

"(B) CAPACITY.—The total cumulative generating capacity of the projects described in subparagraph (A) shall be equal to approximately 20 gigawatts of the treated generating capacity.

"(2) BONUS ALLOWANCE VALUES.—

"(A) FIRST TRANCHE.—

"(i) IN GENERAL.—The first tranche shall include the first 10 gigawatts of treated generating capacity undertaken at qualifying electric generating units that receive emission allowances under this section.

"(ii) CERTAIN UNITS.—For an eligible project achieving capture and sequestration of 90 percent or more of the carbon dioxide that otherwise would be emitted by the unit, the bonus allowance value shall be $96 per ton of carbon dioxide emissions avoided through the use of capture and sequestration.

"(iii) BONUS ALLOWANCE VALUE.—The Administrator shall establish, by regulation, a bonus allowance value for each rate of capture and sequestration achieved by an eligible project—

"(I) beginning at a minimum of $50 per ton for a 50-percent rate; and

"(II) varying in direct proportion with increasing rates of capture and sequestration up to $96 per ton for an 90-percent rate.

"(B) SECOND TRANCHE.—

"(i) IN GENERAL.—The second tranche shall include the second 10 gigawatts of treated generating capacity undertaken at qualifying electric generating units that receive emission allowances under this section.

"(ii) CERTAIN UNITS.—For an eligible project achieving the capture and sequestration of 90 percent or more of the carbon dioxide that otherwise would be emitted by the eligible project, the bonus allowance value shall be $85 per ton of carbon dioxide emissions avoided through the use of capture and sequestration.

"(iii) BONUS ALLOWANCE VALUE.—The Administrator shall establish, by regulation, a bonus allowance value for each rate of capture and sequestration achieved by an eligible project—

"(I) beginning at a minimum of $50 per ton for a 50-percent rate; and

"(II) varying in direct proportion with increasing rates of capture and

sequestration up to $85 per ton for a 90-percent rate.

"(C) INCREASE IN BONUS ALLOWANCE VALUE.—For an eligible project that commences commercial operation by not later than January 1, 2017, and that meets the eligibility criteria under subsection (c), the otherwise-applicable bonus allowance value under this paragraph shall be increased by $10, if the owner or operator of the eligible project submits to the Administrator by not later than January 1, 2012, a notification of the intent to implement carbon capture and sequestration technology at a qualifying electric generating unit in accordance with subsection (c).

"(D) REDUCTION.—

"(i) IN GENERAL.—For a carbon capture and sequestration project sequestering in a geological formation for purposes of enhanced hydrocarbon recovery, the Administrator, by regulation, shall reduce the applicable bonus allowance value under this paragraph to reflect the lower net cost of the project, as compared to sequestra-

tion into geological formations solely for purposes of sequestration.

"(ii) ASSESSMENT OF NET COST.—For the purpose of this subparagraph, an assessment of net cost of a project shall account for the cost of the injection of carbon dioxide, or other method of enhanced hydrocarbon recovery, that would have otherwise been undertaken in the absence of the carbon capture and sequestration project under consideration.

"(E) ADJUSTMENTS.—The Administrator shall annually adjust for monetary inflation the bonus allowance values established under this paragraph.

"(F) MEASUREMENT.—The Administrator shall measure the tranches and capture levels for assigning the bonus allowance values under this subsection based on the treated generating capacity of the qualifying electric generating units and qualifying industrial sources that receive emission allowances under this subsection.

"(G) AVERAGE FAIR MARKET VALUE.—

"(i) IN GENERAL.—The Administrator and the Secretary of Energy may jointly

determine that the average fair market value for emission allowances or the bonus allowances have been too low or too high to achieve efficient and cost-effective commercial deployment of carbon capture and sequestration technology in a given calendar year.

"(ii) ACTION ON DETERMINATION.—On making a determination under clause (i), the Administrator may—

"(I) promulgate regulations to adjust the bonus allowance value under this paragraph; or

"(II) distribute an appropriate quantity of emission allowances allocated under section 771(a)(6) from any future vintage year.

"(e) PHASE II DISTRIBUTION TO ELECTRIC GENERATING UNITS.—

"(1) APPLICATION.—This subsection shall apply only to the distribution of emission allowances for carbon capture and sequestration projects undertaken at qualifying electric generating units and qualifying industrial sources after the treated gener-

ating capacity threshold identified under subsection (d)(1) is reached.

"(2) REGULATIONS.—Not later than 2 years before the date on which the capacity threshold identified in subsection (d)(1) is projected to be reached, the Administrator shall promulgate regulations to govern the distribution of emission allowances to the owners or operators of eligible projects under this subsection.

"(3) REVERSE AUCTIONS.—

"(A) IN GENERAL.—Except as provided in paragraph (4), the regulations promulgated pursuant to paragraph (2) shall provide for the distribution of emission allowances to the owners or operators of eligible projects under this subsection through at least 2 reverse auctions, each of which shall be held not less frequently than once each calendar year.

"(B) REQUIREMENTS.—

"(i) PROJECTS AT INDUSTRIAL SOURCES.—The Administrator shall annually establish a reverse auction for projects at industrial sources, which may not participate in other auctions.

"(ii) OTHER AUCTIONS.—The Administrator may establish a separate auction for each of not more than 5 different project categories, as defined based on—

"(I) coal type;

"(II) capture technology;

"(III) geological formation type;

"(IV) new unit versus retrofit application;

"(V) such other factors as the Administrator may prescribe; or

"(VI) any combination of the factors described in subclauses (I) through (V).

"(iii) EFFICIENT DISTRIBUTION.—The Administrator shall establish procedures for the auction of emission allowances under this subparagraph to ensure that the establishment of separate auctions for different project categories will not unduly impede the efficient and expeditious distribution of emission allowances to eligible projects under this subsection.

"(iv) MINIMUM RATES.—The Administrator may establish appropriate min-

imum rates of capture and sequestration for the treated generating capacity of a project in implementing this subparagraph.

"(C) AUCTION PROCESS.—At each reverse auction under this paragraph—

"(i) the Administrator shall solicit bids from eligible projects;

"(ii) owners or operators of eligible projects participating in the auction shall submit a bid, including the desired level of carbon dioxide sequestration incentive per ton and the estimated quantity of carbon dioxide that the project will permanently sequester during a 10-year period; and

"(iii) the Administrator shall select bids within each auction for the sequestration quantity submitted, beginning with the eligible project for which the bid is submitted for the lowest level of sequestration incentive on a per-ton basis and meeting such other requirements as the Administrator may specify, until the amounts available for the reverse auction are committed.

"(D) FORM OF DISTRIBUTION.—The Administrator shall distribute emission allowances to the owners or operators of eligible projects selected through a reverse auction under this paragraph pursuant to a formula equivalent to the formula contained in subsection (c)(2)(B), except that the bonus allowance value that is bid by the applicable entity shall be substituted for the bonus allowance values described in subsection (c)(2).

"(4) ALTERNATIVE DISTRIBUTION METHOD.—

"(A) IN GENERAL.—If the Administrator determines that a reverse auction will not result in efficient and cost-effective commercial deployment of carbon capture and sequestration technologies, the Administrator, pursuant to regulations under paragraph (2) or (5), shall prescribe a schedule for the provision of bonus allowances to the owners or operators of eligible projects under this subsection, in accordance with the requirements of this paragraph.

"(B) MULTIPLE TRANCHES.—The Administrator shall divide emission allowances available for distribution to the owners or operators

of eligible projects into a series of tranches, each of which—

"(i) shall support the deployment of a specified quantity of cumulative electric generating capacity using carbon capture and sequestration technology; and

"(ii) shall not be greater than 10 gigawatts of treated generating capacity.

"(C) METHOD OF DISTRIBUTION.—The Administrator shall distribute emission allowances within each tranche, on a first-come, first-served basis—

"(i) based on the date of full-scale operation of capture and sequestration technology; and

"(ii) pursuant to a formula that—

"(I) is similar to the formula contained in subsection (c)(2)(C), except that the Administrator may prescribe bonus allowance values different than those described in subsection (c)(2) based on the criteria established under subparagraph (E); and

"(II) establishes the number of emission allowances to be distributed per ton of carbon dioxide sequestered by the project.

"(D) REQUIREMENTS.—For each tranche established pursuant to subparagraph (B), the Administrator shall establish a schedule for distributing emission allowances that—

"(i) is based on a sliding scale that provides higher bonus allowance values for projects achieving higher rates of capture and sequestration for the treated generation capacity at the unit;

"(ii) for each capture and sequestration rate, establishes a bonus allowance value that is lower than that established for the applicable rate for the previous tranche (or, in the case of the first tranche, than that established for the applicable rate under subsection (d)(2)); and

"(iii) may establish different bonus allowance levels for not more than 5 different project categories, as defined based on—

"(I) coal type;

"(II) capture and transportation technology;

"(III) geological formation type;

"(IV) new unit versus retrofit application;

"(V) such other factors as the Administrator may prescribe; or

"(VI) any combination of the factors described in subclauses (I) through (V).

"(E) CRITERIA FOR ESTABLISHING BONUS ALLOWANCE VALUES.—In establishing bonus allowance values under this paragraph, the Administrator shall seek to cover not more than the reasonable incremental capital and operating costs of a project that are attributable to implementation of carbon capture, transportation, and sequestration technologies, taking into account—

"(i) the reduced cost of compliance with section 722;

"(ii) the reduced cost associated with sequestering in a geological formation for purposes of enhanced hydrocarbon recovery, as compared to sequestration into geo-

logical formations solely for purposes of sequestration;

"(iii) the relevant factors defining the project category; and

"(iv) such other factors as the Administrator determines to be appropriate.

"(5) REVISION OF REGULATIONS.—The Administrator shall review and, as appropriate, revise the applicable regulations under this subsection not less frequently than once every 8 years.

"(f) LIMITS FOR CERTAIN ELECTRIC GENERATING UNITS.—

"(1) DEFINITIONS.—In this subsection, the terms 'covered EGU' and 'initially permitted' have the meanings given those terms in section 812.

"(2) COVERED EGUS INITIALLY PERMITTED FROM 2009 THROUGH 2014.—For a covered EGU that is initially permitted during the period beginning on January 1, 2009, and ending on December 31, 2014, the Administrator shall reduce the quantity of emission allowances that the owner or operator of the covered EGU would otherwise be eligible to receive under this section as follows:

"(A) In the case of a covered EGU commencing operation on or before January 1,

2019, if the date in clause (ii)(I) is earlier than the date in clause (ii)(II), by the product obtained by multiplying—

"(i) 20 percent; and

"(ii) the number of years, if any, that have elapsed between—

"(I) the earlier of—

"(aa) January 1, 2020; and

"(bb) the date that is 5 years after the commencement of operation of the covered EGU; and

"(II) the first year that the covered EGU achieves (and thereafter maintains) an emission limitation that is at least a 50-percent reduction in emissions of carbon dioxide produced by the unit, measured on an annual basis, as determined in accordance with section 812(b)(2).

"(B) In the case of a covered EGU commencing operation after January 1, 2019, by the product obtained by multiplying—

"(i) 20 percent; and

"(ii) the number of years, if any, that have elapsed between—

"(I) the commencement of operation of the covered EGU; and

"(II) the first year that the covered EGU achieves (and thereafter maintains) an emission limitation that is at least a 50-percent reduction in emissions of carbon dioxide produced by the unit, measured on an annual basis, as determined in accordance with section 812(b)(2).

"(3) COVERED EGUS INITIALLY PERMITTED FROM 2015 THROUGH 2019.—The owner or operator of a covered EGU that is initially permitted during the period beginning on January 1, 2015, and ending on December 31, 2019, shall be ineligible to receive emission allowances under this section if the covered EGU, on commencement of operations (and thereafter), does not achieve and maintain an emission limitation that is at least a 50-percent reduction in emissions of carbon dioxide produced by the covered EGU, measured on an annual basis, as determined in accordance with section 812(b)(2).

"(g) INDUSTRIAL SOURCES.—

"(1) EMISSION ALLOWANCES.—The Administrator—

"(A) may distribute not more than 15 percent of the emission allowances allocated under section 771(a)(6) for any vintage year to the owners or operators of eligible industrial sources to support the commercial-scale deployment of carbon capture and sequestration technologies at those sources; and

"(B) notwithstanding any other provision of law—

"(i) may distribute to eligible industrial sources not more than 15 percent of the emission allowances allocated under section 771(a)(6) for any vintage year in the second tranche of phase I; but

"(ii) may not distribute those allowances for any vintage year in the first tranche of phase I.

"(2) DISTRIBUTION.—

"(A) IN GENERAL.—The Administrator shall prescribe, by regulation, requirements for the distribution of emission allowances to the owners or operators of industrial sources under this subsection, based on a bonus allowance for-

mula that awards emission allowances to qualifying projects on the basis of tons of carbon dioxide captured and permanently sequestered.

"(B) METHOD.—The Administrator may provide for the distribution of emission allowances pursuant to—

"(i) a reverse auction method similar to the method described in subsection (e)(3), including the use of separate auctions for different project categories; or

"(ii) an incentive schedule similar to the schedule described in subsection (e)(4), which shall ensure that incentives are established so as to satisfy the requirement described in subsection (e)(4)(E).

"(3) REVISION OF REGULATIONS.—The Administrator shall review and, as appropriate, revise the regulations under this subsection not less frequently than once every 8 years.

"(h) CERTIFICATION AND DISTRIBUTION.—

"(1) CERTIFICATION.—

"(A) REQUEST.—

"(i) PHASE I; ALTERNATIVE DISTRIBUTION METHOD.—In the case of a qualifying project that is eligible to receive

allowances under phase I or under subsection (e)(4), the owner or operator of the planned project may request from the Administrator a certification that the project is eligible to receive emission allowances under this section.

"(ii) REVERSE AUCTIONS.—In the case of a qualifying project that wins a reverse auction under subsection (e) or (g), within a reasonably brief period following completion of the auction (as specified by the Administrator), the owner or operator of the qualifying project shall request from the Administrator a certification that the project is eligible to receive emission allowances under this section.

"(iii) ELIGIBLE PROJECTS.—Eligible projects in phase I and phase II may receive certification under this paragraph.

"(iv) ISSUANCE.—The Administrator shall issue a certification described in this subparagraph if the owner or operator demonstrates a commitment to construct and operate a project that satisfies—

"(I) the eligibility criteria of subsection (c); and

"(II) the requirements of this subsection.

"(B) DOCUMENTATION.—The Administrator shall prescribe, by regulation, the documentation necessary for making a determination of project eligibility for the certification under subparagraph (A), including—

"(i) technical information regarding the capture and sequestration technology, coal type, geological formation type (if applicable), and other relevant design features of the project;

"(ii) the annual reductions in carbon dioxide emissions that the capture and sequestration technology is projected to achieve during each of the first 10 years of the project's commercial operation; and

"(iii) a demonstration that the owner or operator is committed to both constructing and operating the planned project on a timeline marked by reasonable capture and sequestration milestones,

through the completion of 1 of the actions specified in subparagraph (C)(iii).

"(C) COMMITMENT.—

"(i) IN GENERAL.—Subject to clause (ii), the completion of any 1 of the qualifying actions specified under clause (iii) shall constitute a commitment to construct and operate a planned carbon capture and sequestration project.

"(ii) CONDITION.—In the case of a qualifying action specified in subclause (I) or (II) of clause (iii), the completion of such an action may be subject to a condition that the Administrator will issue a certification under this paragraph for the distribution of emission allowances to the project.

"(iii) QUALIFYING ACTIONS.—Qualifying actions under this subparagraph shall include—

"(I) the execution of—

"(aa) a commitment by lenders or other appropriate entities to finance the project, which may be subject to customary

closing conditions that are associated with the execution of the commitment; and

"(bb) a commitment by the owner or operator of the project to execute a surety bond in sufficient amounts by not later than 2 years after the date on which the Administrator issues the certification for the project; or

"(II) an authorization by a State regulatory authority to allow recovery, from the retail customers of such electric utility, of the costs of the project by a State-regulated electric utility that plans to construct the project.

"(D) FAILURE TO REQUEST CERTIFICATION.—

"(i) IN GENERAL.—An owner or operator may elect not to request a certification on the eligibility of a planned project under subparagraph (A) prior to the commercial operation of the project.

"(ii) DETERMINATION BY ADMINISTRATOR.—If an owner or operator elects

not to request a certification under clause (i), the Administrator shall make a determination regarding whether the project satisfies the eligibility requirements of subsection (c) at the time that the Administrator makes a determination regarding the annual distribution of emission allowances under paragraph (3)(A).

"(2) RESERVATION OF EMISSION ALLOWANCES.—

"(A) AMOUNT.—

"(i) IN GENERAL.—For each project that receives a certification of eligibility under paragraph (1), the Administrator shall reserve on a first-come, first-served basis a portion of the emission allowances that are allocated for the deployment of carbon capture and sequestration technology under section 771(a)(6).

"(ii) DETERMINATION.—The reservation of emission allowances for a particular eligible project under this paragraph shall be equal to the number of emission allowances that the project is entitled to receive under the applicable distribution method

under this section upon commercial operation of the carbon capture and sequestration technology, as determined by the Administrator based on—

"(I) the applicable bonus allowance value;

"(II) the number of tons of carbon dioxide emissions projected to be captured and sequestered each calendar year under paragraph (1)(B)(i)(II); and

"(III) a discount rate to account for the monetary inflation that may be expected to occur during each of the relevant 10 calendar years, as determined by the Administrator.

"(B) TERMINATION OF RESERVATION.—

"(i) IN GENERAL.—A reservation of emission allowances for a particular project under subparagraph (A) shall terminate if the owner or operator fails to achieve reasonable milestones for commencing construction or commercial operation of the project, as specified under paragraph (1)(B)(i)(III).

"(ii) REDUCED QUANTITY OF CARBON DIOXIDE CAPTURED AND SEQUESTERED.—If the quantity of carbon dioxide captured and sequestered by a project on average over 3 consecutive vintage years is less than the quantity estimated for those vintage years under subparagraph (A), the reservation of emission allowances for the project under subparagraph (A) shall be reduced in future years by the difference between—

"(I) the quantity of carbon dioxide captured and sequestered on average over the applicable 3 consecutive years; and

"(II) the quantity estimated under subparagraph (A) for the applicable years.

"(iii) AVAILABILITY.—The Administrator shall immediately make available to other eligible projects emission allowances for which the Administrator has terminated an emission allowance reservation for a particular project under this subparagraph.

"(3) DISTRIBUTION PROCESS.—

"(A) ANNUAL DISTRIBUTION.—The Administrator shall distribute the emission allowances to eligible projects on an annual basis.

"(B) BASIS.—The annual distribution of emission allowances shall be based on the total tons of carbon dioxide that the project annually captures and sequesters during each of the first 10 years of commercial operation, in accordance with subsection (c)(2).

"(C) TOTAL DISTRIBUTION AMOUNT.—The total amount of emission allowances distributed to an eligible project for each of the first 10 years of commercial operation may be greater than, or less than, the quantity of emissions allowances that the Administrator has reserved for the eligible project under paragraph (2).

"(D) REPORTS.—

"(i) IN GENERAL.—Except as provided in subparagraph (B), the Administrator shall make each annual distribution of emission allowances by not later than 90 days after the date on which the owner or operator of a project submits to the Administrator a report regarding the carbon

dioxide emissions captured and sequestered for a particular year by the project.

"(ii) REQUIREMENT.—A report under subclause (I) shall be verified in accordance with regulations to be promulgated by the Administrator.

"(i) LIMITATIONS.—

"(1) IN GENERAL.—Emission allowances shall be distributed under this section only for tons of carbon dioxide emissions that have already been captured and sequestered.

"(2) PERIOD.—A qualifying project may receive annual emission allowances under this section only for the first 10 years of operation.

"(3) CAPACITY.—

"(A) IN GENERAL.—Approximately 72 gigawatts of total cumulative treated generating capacity may receive emission allowances under this section.

"(B) ALLOWANCE SURPLUS.—On reaching the cumulative capacity described in subparagraph (A), any emission allowances that are allocated for carbon capture and sequestration deployment under section 771(a)(6) and are not yet obligated under this section shall be treated

as emission allowances not designated for distribution for purposes of section 771(b)(2).

"(j) EXHAUSTION OF ACCOUNT AND ANNUAL ROLLOVER OF SURPLUS EMISSION ALLOWANCES.—

"(1) IN GENERAL.—In distributing emission allowances under this section, the Administrator shall ensure that eligible projects receive distributions of emission allowances for the first 10 years of commercial operation.

"(2) DIFFERENT VINTAGE YEARS.—

"(A) DETERMINATION.—If the Administrator determines that the emission allowances allocated under section 771(a)(6) with a vintage year that matches the year of distribution will be exhausted once the estimated full 10-year distributions will be provided to current eligible participants, the Administrator shall provide to new eligible projects emission allowances from vintage years after the year of the distribution.

"(B) DIVERSITY FACTORS.—If the Administrator provides allowances to new eligible projects under subparagraph (A), the Administrator shall promulgate regulations to prioritize new eligible projects that are distinguished from prior recipients of allowances by 1 or more of

the following diversity factors (without regard to order):

"(i) Location in a coal-producing region that provides a majority of coal to the project.

"(ii) Coal type, including waste coal.

"(iii) Capture and transportation technologies.

"(iv) Geological formations.

"(v) New units and retrofit applications.

"(k) ALLOCATION OF ALLOWANCES FOR DEPLOYMENT OF CARBON CAPTURE AND SEQUESTRATION TECHNOLOGY.—

"(1) ANNUAL ALLOCATION.—The Administrator shall allocate emission allowances for the deployment of carbon capture and sequestration technology in accordance with this section in the following quantities:

"(A) For each of vintage years 2014 through 2017, 1.75 percent of the emission allowances established for each year under section 721(a).

"(B) For each of vintage years 2018 and 2019, 4.75 percent of the emission allowances established for each year under section 721(a).

"(C) For each of vintage years 2020 through 2050, 5 percent of the emission allowances established for each year under section 721(a).

"(2) CARRYOVER.—If the Administrator has not distributed all of the allowances allocated pursuant to this subsection for a given vintage year by the end of that year, the Administrator shall—

"(A) auction those emission allowances in accordance with section 778 by not later than March 31 of the year following that vintage year; and

"(B) increase the allocation under this subsection for the vintage year after the vintage year for which emission allowances were undisbursed by the quantity of undisbursed emission allowances, but only to the extent that allowances for that later year are to be auctioned.

"(l) DAVIS-BACON COMPLIANCE.—

"(1) IN GENERAL.—All laborers and mechanics employed on projects funded directly by or assisted

in whole or in part by this section through the use of emission allowances shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code.

"(2) AUTHORITY.—With respect to the labor standards specified in this subsection, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code.

"SEC. 781. OVERSIGHT OF ALLOCATIONS.

"(a) IN GENERAL.—Not later than January 1, 2014, and every 2 years thereafter, the Comptroller General of the United States shall carry out a review of programs administered by the Federal Government that distribute emission allowances or funds from any Federal auction of allowances.

"(b) CONTENTS.—Each such report shall include a comprehensive evaluation of the administration and effectiveness of each program, including—

"(1) the efficiency, transparency, and soundness of the administration of each program;

"(2) the performance of activities receiving assistance under each program;

"(3) the cost-effectiveness of each program in achieving the stated purposes of the program; and

"(4) recommendations, if any, for regulatory or administrative changes to each program to improve its effectiveness.

"(c) FOCUS.—In evaluating program performance, each review under this section review shall address the effectiveness of such programs in—

"(1) creating and preserving jobs;

"(2) ensuring a manageable transition for working families and workers;

"(3) reducing the emissions, or enhancing sequestration, of greenhouse gases;

"(4) developing clean technologies; and

"(5) building resilience to the impacts of climate change.

"SEC. 782. EARLY ACTION RECOGNITION.

"(a) IN GENERAL.—Emission allowances allocated pursuant to section 771(a)(7) shall be distributed by the Administrator in accordance with this section. Not later than 1 year after the date of enactment of this title, the Administrator shall issue regulations allowing—

"(1) any person in the United States to exchange instruments in the nature of offset credits issued before January 1, 2009, by a State, local, or voluntary offset program with respect to which the Administrator has made an affirmative determination under section 740(a)(2), for emission allowances established by the Administrator under section 721(a); and

"(2) the Administrator to provide compensation in the form of emission allowances to entities, including units of local government, that do not meet the criteria of paragraph (1) and meet the criteria of this paragraph for documented early reductions or avoidance of greenhouse gas emissions or greenhouse gases sequestered before January 1, 2009, from projects or process improvements begun before January 1, 2009, where—

"(A) the entity publicly stated greenhouse gas reduction goals and publicly reported against those goals;

"(B) the entity demonstrated entity-wide net greenhouse gas reductions; and

"(C) the entity demonstrates the actual projects or process improvements undertaken to make reductions and documents the reductions

(such as through documentation of engineering projects).

"(b) REGULATIONS.—Regulations issued under subsection (a) shall—

"(1) provide that a person exchanging credits under subsection (a)(1) receive emission allowances established under section 721(a) in an amount for which the monetary value is equivalent to the average monetary value of the credits during the period from January 1, 2006, to January 1, 2009, as adjusted for inflation to reflect current dollar values at the time of the exchange;

"(2) provide that a person receiving compensation for documented early action under subsection (a)(2) shall receive emission allowances established under section 721(a) in an amount that is approximately equivalent in value to the carbon dioxide equivalent per ton value received by entities in exchange for credits under paragraph (1) (as adjusted for inflation to reflect current dollar values at the time of the exchange), as determined by the Administrator;

"(3) provide that only reductions or avoidance of greenhouse gas emissions, or sequestration of greenhouse gases, achieved by activities in the

United States between January 1, 2001, and January 1, 2009, may be compensated under this section, and only credits issued for such activities may be exchanged under this section;

''(4) provide that only credits that have not been retired or otherwise used to meet a voluntary or mandatory commitment, and have not expired, may be exchanged under subsection (a)(1);

''(5) require that, once exchanged, the credit be retired for purposes of use under the program by or for which it was originally issued; and

''(6) establish a deadline by which persons must exchange the credits or request compensation for early action under this section.

''(c) PARTICIPATION.—Participation in an exchange of credits for allowances or compensation for early action authorized by this section shall not preclude any person from participation in an offset credit program established under part D.

''(d) DISTRIBUTION.—Of the emission allowances distributed under this section, a quantity equal to 0.75 percent of vintage year 2012 emission allowances established under section 721(a) shall be distributed pursuant to subsection (a)(1), and a quantity equal to 0.25 percent of vintage year 2012 emission allowances established

under section 721(a) shall be distributed pursuant to subsection (a)(2).

"SEC. 783. ESTABLISHMENT OF DEFICIT REDUCTION FUND.

"(a) DEFICIT REDUCTION FUND.—There is established in the Treasury of the United States a fund, to be known as the 'Deficit Reduction Fund'.

"(b) DISBURSEMENTS.—No disbursement shall be made from the Deficit Reduction Fund except pursuant to an appropriation Act.".

Subtitle C—Additional Greenhouse Gas Standards

SEC. 121. GREENHOUSE GAS STANDARDS.

The Clean Air Act (42 U.S.C. 7401 et seq.), as amended by subtitles A and B of this title, is further amended by adding the following new title after title VII:

"TITLE VIII—ADDITIONAL GREENHOUSE GAS STANDARDS

"SEC. 801. DEFINITIONS.

"For purposes of this title, terms that are defined in title VII, except for the term 'stationary source', shall have the meanings given those terms in title VII.

"PART A—STATIONARY SOURCE STANDARDS

"SEC. 811. STANDARDS OF PERFORMANCE.

"(a) DEFINITION OF UNCAPPED GREENHOUSE GAS EMISSIONS.—In this section, the term 'uncapped green-

house gas emissions' means those greenhouse gas emissions to which section 722 does not apply.

"(b) STANDARDS.—Before January 1, 2020, the Administrator shall not promulgate new source performance standards for greenhouse gases under section 111 that are applicable to any stationary source that—

"(1) emits uncapped greenhouse gas emissions; and

"(2) qualifies as an eligible offset project pursuant to section 733 that is eligible to receive an offset credit pursuant to section 737.".

SEC. 122. HFC REGULATION.

(a) IN GENERAL.—Title VI of the Clean Air Act (42 U.S.C. 7671 et seq.) (relating to stratospheric ozone protection) is amended by adding at the end the following:

"SEC. 619. HYDROFLUOROCARBONS (HFCS).

"(a) TREATMENT AS CLASS II, GROUP II SUBSTANCES.—Except as otherwise provided in this section, hydrofluorocarbons shall be treated as class II substances for purposes of applying the provisions of this title. The Administrator shall establish two groups of class II substances. Class II, group I substances shall include all hydrochlorofluorocarbons (HCFCs) listed pursuant to section 602(b). Class II, group II substances shall include each of the following:

"(1) Hydrofluorocarbon-23 (HFC–23).

"(2) Hydrofluorocarbon-32 (HFC–32).

"(3) Hydrofluorocarbon-41 (HFC–41).

"(4) Hydrofluorocarbon-125 (HFC–125).

"(5) Hydrofluorocarbon-134 (HFC–134).

"(6) Hydrofluorocarbon-134a (HFC–134a).

"(7) Hydrofluorocarbon-143 (HFC–143).

"(8) Hydrofluorocarbon-143a (HFC–143a).

"(9) Hydrofluorocarbon-152 (HFC–152).

"(10) Hydrofluorocarbon-152a (HFC–152a).

"(11) Hydrofluorocarbon-227ea (HFC–227ea).

"(12) Hydrofluorocarbon-236cb (HFC–236cb).

"(13) Hydrofluorocarbon-236ea (HFC–236ea).

"(14) Hydrofluorocarbon-236fa (HFC–236fa).

"(15) Hydrofluorocarbon-245ca (HFC–245ca).

"(16) Hydrofluorocarbon-245fa (HFC–245fa).

"(17) Hydrofluorocarbon-365mfc (HFC–365mfc).

"(18) Hydrofluorocarbon-43-10mee (HFC–43–10mee).

"(19) Hydrofluoroolefin-1234yf (HFO–1234yf).

"(20) Hydrofluoroolefin-1234ze (HFO–1234ze).

Not later than 6 months after the date of enactment of this title, the Administrator shall publish an initial list of class II, group II substances, which shall include the sub-

stances listed in this subsection. The Administrator may add to the list of class II, group II substances any other substance used as a substitute for a class I or II substance if the Administrator determines that 1 metric ton of the substance makes the same or greater contribution to global warming over 100 years as 1 metric ton of carbon dioxide. Within 24 months after the date of enactment of this section, the Administrator shall amend the regulations under this title (including the regulations referred to in sections 603, 608, 609, 610, 611, 612, and 613) to apply to class II, group II substances.

"(b) CONSUMPTION AND PRODUCTION OF CLASS II, GROUP II SUBSTANCES.—

"(1) IN GENERAL.—

"(A) CONSUMPTION PHASE DOWN.—In the case of class II, group II substances, in lieu of applying section 605 and the regulations thereunder, the Administrator shall promulgate regulations phasing down the consumption of class II, group II substances in the United States, and the importation of products containing any class II, group II substance, in accordance with this subsection within 18 months after the date of enactment of this section. Effective January 1, 2012, it shall be unlawful for any person to

1 produce any class II, group II substance, im-
2 port any class II, group II substance, or import
3 any product containing any class II, group II
4 substance without holding one consumption al-
5 lowance or one destruction offset credit for each
6 carbon dioxide equivalent ton of the class II,
7 group II substance. Any person who exports a
8 class II, group II substance for which a con-
9 sumption allowance was retired may receive a
10 refund of that allowance from the Adminis-
11 trator following the export.

12 "(B) PRODUCTION.—If the United States
13 becomes a party or otherwise adheres to a mul-
14 tilateral agreement, including any amendment
15 to the Montreal Protocol on Substances That
16 Deplete the Ozone Layer, that restricts the pro-
17 duction of class II, group II substances, the Ad-
18 ministrator shall promulgate regulations estab-
19 lishing a baseline for the production of class II,
20 group II substances in the United States and
21 phasing down the production of class II, group
22 II substances in the United States, in accord-
23 ance with such multilateral agreement and sub-
24 ject to the same exceptions and other provisions
25 as are applicable to the phase down of con-

sumption of class II, group II substances under this section (except that the Administrator shall not require a person who obtains production allowances from the Administrator to make payment for such allowances if the person is making payment for a corresponding quantity of consumption allowances of the same vintage year). Upon the effective date of such regulations, it shall be unlawful for any person to produce any class II, group II substance without holding one consumption allowance and one production allowance, or one destruction offset credit, for each carbon dioxide equivalent ton of the class II, group II substance.

"(C) INTEGRITY OF LIMITS.—To maintain the integrity of the class II, group II limits, the Administrator may, through rulemaking, limit the percentage of each person's compliance obligation that may be met through the use of destruction offset credits or banked allowances.

"(D) COUNTING OF VIOLATIONS.—Each consumption allowance, production allowance, or destruction offset credit not held as required by this section shall be a separate violation of this section.

"(2) SCHEDULE.—Pursuant to the regulations promulgated pursuant to paragraph (1)(A), the number of class II, group II consumption allowances established by the Administrator for each calendar year beginning in 2012 shall be the following percentage of the baseline, as established by the Administrator pursuant to paragraph (3):

"Calendar Year	Percent of Baseline
2012	90
2013	87.5
2014	85
2015	82.5
2016	80
2017	77.5
2018	75
2019	71
2020	67
2021	63
2022	59
2023	54
2024	50
2025	46
2026	42
2027	38
2028	34
2029	30
2030	25

"Calendar Year	Percent of Baseline
2031	21
2032	17
after 2032	15

"(3) BASELINE.—(A) Within 12 months after the date of enactment of this section, the Administrator shall promulgate regulations to establish the baseline for purposes of paragraph (2). The baseline shall be the sum, expressed in metric tons of carbon dioxide equivalents, of—

"(i) the annual average consumption of all class II substances in calendar years 2004, 2005, and 2006; plus

"(ii) the annual average quantity of all class II substances contained in imported products in calendar years 2004, 2005, and 2006.

"(B) Notwithstanding subparagraph (A), if the Administrator determines that the baseline is higher than 370 million metric tons of carbon dioxide equivalents, then the Administrator shall establish the baseline at 370 million metric tons of carbon dioxide equivalents.

"(C) Notwithstanding subparagraph (A), if the Administrator determines that the baseline is lower than 280 million metric tons of carbon dioxide

equivalents, then the Administrator shall establish the baseline at 280 million metric tons of carbon dioxide equivalents.

"(4) DISTRIBUTION OF ALLOWANCES.—

"(A) IN GENERAL.—Pursuant to the regulations promulgated under paragraph (1)(A), for each calendar year beginning in 2012, the Administrator shall sell consumption allowances in accordance with this paragraph.

"(B) ESTABLISHMENT OF POOLS.—The Administrator shall establish two allowance pools. Eighty percent of the consumption allowances available for a calendar year shall be placed in the producer-importer pool, and 20 percent of the consumption allowances available for a calendar year shall be placed in the secondary pool.

"(C) PRODUCER-IMPORTER POOL.—

"(i) AUCTION.—(I) For each calendar year, the Administrator shall offer for sale at auction the following percentage of the consumption allowances in the producer-importer pool:

"Calendar Year	Percent Available for Auction
2012	10

"Calendar Year	Percent Available for Auction
2013	20
2014	30
2015	40
2016	50
2017	60
2018	70
2019	80
2020 and thereafter	90

"(II) Any person who produced or imported any class II substance during calendar year 2004, 2005, or 2006 may participate in the auction. No other persons may participate in the auction unless permitted to do so pursuant to subclause (III).

"(III) Not later than 3 years after the date of the initial auction and from time to time thereafter, the Administrator shall determine through rulemaking whether any persons who did not produce or import a class II substance during calendar year 2004, 2005, or 2006 will be permitted to participate in future auctions. The Administrator shall base this determination on the duration, consistency, and scale of such

person's purchases of consumption allowances in the secondary pool under subparagraph (D)(ii)(III), as well as economic or technical hardship and other factors deemed relevant by the Administrator.

"(IV) The Administrator shall set a minimum bid per consumption allowance of the following:

"(aa) For vintage year 2012, $1.00.

"(bb) For vintage year 2013, $1.20.

"(cc) For vintage year 2014, $1.40.

"(dd) For vintage year 2015, $1.60.

"(ee) For vintage year 2016, $1.80.

"(ff) For vintage year 2017, $2.00.

"(gg) For vintage year 2018 and thereafter, $2.00 adjusted for inflation after vintage year 2017 based upon the producer price index as pub-

lished by the Department of Commerce.

"(ii) NON-AUCTION SALE.—(I) For each calendar year, as soon as practicable after auction, the Administrator shall offer for sale the remaining consumption allowances in the producer-importer pool at the following prices:

"(aa) A fee of $1.00 per vintage year 2012 allowance.

"(bb) A fee of $1.20 per vintage year 2013 allowance.

"(cc) A fee of $1.40 per vintage year 2014 allowance.

"(dd) For each vintage year 2015 allowance, a fee equal to the average of $1.10 and the auction clearing price for vintage year 2014 allowances.

"(ee) For each vintage year 2016 allowance, a fee equal to the average of $1.30 and the auction clearing price for vintage year 2015 allowances.

"(ff) For each vintage year 2017 allowance, a fee equal to the average of $1.40 and the auction clearing price for vintage year 2016 allowances.

"(gg) For each allowance of vintage year 2018 and subsequent vintage years, a fee equal to the auction clearing price for that vintage year.

"(II) The Administrator shall offer to sell the remaining consumption allowances in the producer-importer pool to producers of class II, group II substances and importers of class II, group II substances in proportion to their relative allocation share.

"(III) Such allocation share for such sale shall be determined by the Administrator using such producer's or importer's annual average data on class II substances from calendar years 2004, 2005, and 2006, on a carbon dioxide equivalent basis, and—

"(aa) shall be based on a producer's production, plus importation,

plus acquisitions and purchases from persons who produced class II substances in the United States during calendar year 2004, 2005, or 2006, less exportation, less transfers and sales to persons who produced class II substances in the United States during calendar year 2004, 2005, or 2006; and

"(bb) for an importer of class II substances that did not produce in the United States any class II substance during calendar years 2004, 2005, and 2006, shall be based on the importer's importation less exportation.

For purposes of item (aa), the Administrator shall account for 100 percent of class II, group II substances and 60 percent of class II, group I substances. For purposes of item (bb), the Administrator shall account for 100 percent of class II, group II substances and 100 percent of class II, group I substances.

"(IV) Any consumption allowances made available for nonauction sale to a

specific producer or importer of class II, group II substances but not purchased by the specific producer or importer shall be made available for sale to any producer or importer of class II substances during calendar year 2004, 2005, or 2006. If demand for such consumption allowances exceeds supply of such consumption allowances, the Administrator shall develop and utilize criteria for the sale of such consumption allowances that may include pro rata shares, historic production and importation, economic or technical hardship, or other factors deemed relevant by the Administrator. If the supply of such consumption allowances exceeds demand, the Administrator may offer such consumption allowances for sale in the secondary pool as set forth in subparagraph (D).

"(D) SECONDARY POOL.—(i) For each calendar year, as soon as practicable after the auction required in subparagraph (C), the Administrator shall offer for sale the consumption allowances in the secondary pool at the prices listed in subparagraph (C)(ii).

"(ii) The Administrator shall accept applications for purchase of secondary pool consumption allowances from—

"(I) importers of products containing class II, group II substances;

"(II) persons who purchased any class II, group II substance directly from a producer or importer of class II, group II substances for use in a product containing a class II, group II substance, a manufacturing process, or a reclamation process;

"(III) persons who did not produce or import a class II substance during calendar year 2004, 2005, or 2006, but who the Administrator determines have subsequently taken significant steps to produce or import a substantial quantity of any class II, group II substance; and

"(IV) persons who produced or imported any class II substance during calendar year 2004, 2005, or 2006.

"(iii) If the supply of consumption allowances in the secondary pool equals or exceeds the demand for consumption allowances in the secondary pool as presented in the applications

for purchase, the Administrator shall sell the consumption allowances in the secondary pool to the applicants in the amounts requested in the applications for purchase. Any consumption allowances in the secondary pool not purchased in a calendar year may be rolled over and added to the quantity available in the secondary pool in the following year.

''(iv) If the demand for consumption allowances in the secondary pool as presented in the applications for purchase exceeds the supply of consumption allowances in the secondary pool, the Administrator shall sell the consumption allowances as follows:

''(I) The Administrator shall first sell the consumption allowances in the secondary pool to any importers of products containing class II, group II substances in the amounts requested in their applications for purchase. If the demand for such consumption allowances exceeds supply of such consumption allowances, the Administrator shall develop and utilize criteria for the sale of such consumption allowances among importers of products containing

class II, group II substances that may include pro rata shares, historic importation, economic or technical hardship, or other factors deemed relevant by the Administrator.

"(II) The Administrator shall next sell any remaining consumption allowances to persons identified in subclauses (II) and (III) of clause (ii) in the amounts requested in their applications for purchase. If the demand for such consumption allowances exceeds remaining supply of such consumption allowances, the Administrator shall develop and utilize criteria for the sale of such consumption allowances among subclauses (II) and (III) applicants that may include pro rata shares, historic use, economic or technical hardship, or other factors deemed relevant by the Administrator.

"(III) The Administrator shall then sell any remaining consumption allowances to persons who produced or imported any class II substance during calendar year 2004, 2005, or 2006 in the amounts re-

quested in their applications for purchase. If demand for such consumption allowances exceeds remaining supply of such consumption allowances, the Administrator shall develop and utilize criteria for the sale of such consumption allowances that may include pro rata shares, historic production and importation, economic or technical hardship, or other factors deemed relevant by the Administrator.

"(IV) Each person who purchases consumption allowances in a non-auction sale under this subparagraph shall be required to disclose the person or entity sponsoring or benefitting from the purchases if such person or entity is, in whole or in part, other than the purchaser or the purchaser's employer.

"(E) DISCRETION TO WITHHOLD ALLOWANCES.—Nothing in this paragraph prevents the Administrator from exercising discretion to withhold and retire consumption allowances that would otherwise be available for auction or nonauction sale. Not later than 18 months after the date of enactment of this section, the Ad-

ministrator shall promulgate regulations establishing criteria for withholding and retiring consumption allowances.

"(5) BANKING.—A consumption allowance or destruction offset credit may be used to meet the compliance obligation requirements of paragraph (1) in—

"(A) the vintage year for the allowance or destruction offset credit; or

"(B) any calendar year subsequent to the vintage year for the allowance or destruction offset credit.

"(6) AUCTIONS.—

"(A) INITIAL REGULATIONS.—Not later than 18 months after the date of enactment of this section, the Administrator shall promulgate regulations governing the auction of allowances under this section. Such regulations shall include the following requirements:

"(i) FREQUENCY; FIRST AUCTION.—Auctions shall be held one time per year at regular intervals, with the first auction to be held no later than October 31, 2011.

"(ii) AUCTION FORMAT.—Auctions shall follow a single-round, sealed-bid, uniform price format.

"(iii) FINANCIAL ASSURANCE.—The Administrator may establish financial assurance requirements to ensure that auction participants can and will perform on their bids.

"(iv) DISCLOSURE OF BENEFICIAL OWNERSHIP.—Each bidder in the auction shall be required to disclose the person or entity sponsoring or benefitting from the bidder's participation in the auction if such person or entity is, in whole or in part, other than the bidder.

"(v) PUBLICATION OF INFORMATION.—After the auction, the Administrator shall, in a timely fashion, publish the number of bidders, number of winning bidders, the quantity of allowances sold, and the auction clearing price.

"(vi) BIDDING LIMITS IN 2012.—In the vintage year 2012 auction, no auction participant may, directly or in concert with another participant, bid for or purchase

more allowances offered for sale at the auction than the greater of—

"(I) the number of allowances which, when added to the number of allowances available for purchase by the participant in the producer-importer pool non-auction sale, would equal the participant's annual average consumption of class II, group II substances in calendar years 2004, 2005, and 2006; or

"(II) the number of allowances equal to the product of—

"(aa) 1.20 multiplied by the participant's allocation share of the producer-importer pool non-auction sale as determined under paragraph (4)(C)(ii); and

"(bb) the number of vintage year 2012 allowances offered at auction.

"(vii) BIDDING LIMITS IN 2013.—In the vintage year 2013 auction, no auction participant may, directly or in concert with another participant, bid for or purchase

more allowances offered for sale at the auction than the product of—

"(I) 1.15 multiplied by the ratio of the total number of vintage year 2012 allowances purchased by the participant from the auction and from the producer-importer pool non-auction sale to the total number of vintage year 2012 allowances in the producer-importer pool; and

"(II) the number of vintage year 2013 allowances offered at auction.

"(viii) BIDDING LIMITS IN SUBSEQUENT YEARS.—In the auctions for vintage year 2014 and subsequent vintage years, no auction participant may, directly or in concert with another participant, bid for or purchase more allowances offered for sale at the auction than the product of—

"(I) 1.15 multiplied by the ratio of the highest number of allowances required to be held by the participant in any of the three prior vintage years to meet its compliance obligation

under paragraph (1) to the total number of allowances in the producer-importer pool for such vintage year; and

"(II) the number of allowances offered at auction for that vintage year.

"(ix) OTHER REQUIREMENTS.—The Administrator may include in the regulations such other requirements or provisions as the Administrator considers necessary to promote effective, efficient, transparent, and fair administration of auctions under this section.

"(B) REVISION OF REGULATIONS.—The Administrator may, at any time, revise the initial regulations promulgated under subparagraph (A) based on the Administrator's experience in administering allowance auctions by promulgating new regulations. Such revised regulations need not meet the requirements identified in subparagraph (A) if the Administrator determines that an alternative auction design would be more effective, taking into account factors including costs of administration, transparency, fairness, and risks of collusion or ma-

nipulation. In determining whether and how to revise the initial regulations under this paragraph, the Administrator shall not consider maximization of revenues to the Federal Government.

"(C) DELEGATION OR CONTRACT.—Pursuant to regulations under this section, the Administrator may, by delegation or contract, provide for the conduct of auctions under the Administrator's supervision by other departments or agencies of the Federal Government or by nongovernmental agencies, groups, or organizations.

"(7) PAYMENTS FOR ALLOWANCES.—

"(A) INITIAL REGULATIONS.—Not later than 18 months after the date of enactment of this section, the Administrator shall promulgate regulations governing the payment for allowances purchased in auction and non-auction sales under this section. Such regulations shall include the requirement that, in the event that full payment for purchased allowances is not made on the date of purchase, equal payments shall be made one time per calendar quarter

with all payments for allowances of a vintage year made by the end of that vintage year.

"(B) REVISION OF REGULATIONS.—The Administrator may, at any time, revise the initial regulations promulgated under subparagraph (A) based on the Administrator's experience in administering collection of payments by promulgating new regulations. Such revised regulations need not meet the requirements identified in subparagraph (A) if the Administrator determines that an alternative payment structure or frequency would be more effective, taking into account factors including cost of administration, transparency, and fairness. In determining whether and how to revise the initial regulations under this paragraph, the Administrator shall not consider maximization of revenues to the Federal Government.

"(C) PENALTIES FOR NON-PAYMENT.—Failure to pay for purchased allowances in accordance with the regulations promulgated pursuant to this paragraph shall be a violation of the requirements of subsection (b). Section 113(c)(3) shall apply in the case of any person who knowingly fails to pay for purchased allow-

ances in accordance with the regulations promulgated pursuant to this paragraph.

"(8) IMPORTED PRODUCTS.—If the United States becomes a party or otherwise adheres to a multilateral agreement, including any amendment to the Montreal Protocol on Substances That Deplete the Ozone Layer, which restricts the production or consumption of class II, group II substances—

"(A) as of the date on which such agreement or amendment enters into force, it shall no longer be unlawful for any person to import from a party to such agreement or amendment any product containing any class II, group II substance whose production or consumption is regulated by such agreement or amendment without holding one consumption allowance or one destruction offset credit for each carbon dioxide equivalent ton of the class II, group II substance;

"(B) the Administrator shall promulgate regulations within 12 months of the date the United States becomes a party or otherwise adheres to such agreement or amendment, or the date on which such agreement or amendment enters into force, whichever is later, to establish

a new baseline for purposes of paragraph (2), which new baseline shall be the original baseline less the carbon dioxide equivalent of the annual average quantity of any class II substances regulated by such agreement or amendment contained in products imported from parties to such agreement or amendment in calendar years 2004, 2005, and 2006;

"(C) as of the date on which such agreement or amendment enters into force, no person importing any product containing any class II, group II substance may, directly or in concert with another person, purchase any consumption allowances for sale by the Administrator for the importation of products from a party to such agreement or amendment that contain any class II, group II substance restricted by such agreement or amendment; and

"(D) the Administrator may adjust the two allowance pools established in paragraph (4) such that up to 90 percent of the consumption allowances available for a calendar year are placed in the producer-importer pool with the remaining consumption allowances placed in the secondary pool.

"(9) OFFSETS.—

"(A) CHLOROFLUOROCARBON DESTRUCTION.—Within 18 months after the date of enactment of this section, the Administrator shall promulgate regulations to provide for the issuance of offset credits for the destruction, in the calendar year 2012 or later, of chlorofluorocarbons in the United States. The Administrator shall establish and distribute to the destroying entity a quantity of destruction offset credits equal to 0.8 times the number of metric tons of carbon dioxide equivalents of reduction achieved through the destruction. No destruction offset credits shall be established for the destruction of a class II, group II substance.

"(B) DEFINITION.—For purposes of this paragraph, the term 'destruction' means the conversion of a substance by thermal, chemical, or other means to another substance with little or no carbon dioxide equivalent value and no ozone depletion potential.

"(C) REGULATIONS.—The regulations promulgated under this paragraph shall include standards and protocols for project eligibility,

1 certification of destroyers, monitoring, tracking,
2 destruction efficiency, quantification of project
3 and baseline emissions and carbon dioxide
4 equivalent value, and verification. The Adminis-
5 trator shall ensure that destruction offset cred-
6 its represent real and verifiable destruction of
7 chlorofluorocarbons or other class I or class II,
8 group I, substances authorized under subpara-
9 graph (D).

10 ''(D) OTHER SUBSTANCES.—The Adminis-
11 trator may promulgate regulations to add to the
12 list of class I and class II, group I, substances
13 that may be destroyed for destruction offset
14 credits, taking into account a candidate sub-
15 stance's carbon dioxide equivalent value, ozone
16 depletion potential, prevalence in banks in the
17 United States, and emission rates, as well as
18 the need for additional cost containment under
19 the class II, group II limits and the integrity of
20 the class II, group II limits. The Administrator
21 shall not add a class I or class II, group I sub-
22 stance to the list if the consumption of the sub-
23 stance has not been completely phased-out
24 internationally (except for essential use exemp-

tions or other similar exemptions) pursuant to the Montreal Protocol.

"(E) EXTENSION OF OFFSETS.—(i) At any time after the Administrator promulgates regulations pursuant to subparagraph (A), the Administrator may, pursuant to the requirements of part D of title VII and based on the carbon dioxide equivalent value of the substance destroyed, add the types of destruction projects authorized to receive destruction offset credits under this paragraph to the list of types of projects eligible for offset credits under section 733. If such projects are added to the list under section 733, the issuance of offset credits for such projects under part D of title VII shall be governed by the requirements of such part D, while the issuance of offset credits for such projects under this paragraph shall be governed by the requirements of this paragraph. Nothing in this paragraph shall affect the issuance of offset credits under section 740.

"(ii) The Administrator shall not make the addition under clause (i) unless the Administrator finds that insufficient destruction is occurring or is projected to occur under this para-

graph and that the addition would increase destruction.

"(iii) In no event shall more than one destruction offset credit be issued under title VII and this section for the destruction of the same quantity of a substance.

"(10) LEGAL STATUS OF ALLOWANCES AND CREDITS.—None of the following constitutes a property right:

"(A) A production or consumption allowance.

"(B) A destruction offset credit.

"(c) DEADLINES FOR COMPLIANCE.—Notwithstanding the deadlines specified for class II substances in sections 608, 609, 610, 612, and 613 that occur prior to January 1, 2009, the deadline for promulgating regulations under those sections for class II, group II substances shall be January 1, 2012.

"(d) EXCEPTIONS FOR ESSENTIAL USES.—Notwithstanding any phase down of production and consumption required by this section, to the extent consistent with any applicable multilateral agreement to which the United States is a party or otherwise adheres, the Administrator shall consider providing exceptions for essential uses under

1 paragraph (1) and may provide exceptions for essential
2 uses under paragraph (2), as follows:

3 "(1) MEDICAL DEVICES.—If the Administrator
4 makes the determination under this subsection that
5 a medical device is eligible for an exception, after no-
6 tice and opportunity for public comment, and in con-
7 sultation with the Commissioner of Food and Drugs,
8 the Administrator shall provide an exception for the
9 production and consumption of class II, group II
10 substances solely for use in medical devices, such as
11 metered dose inhalers.

12 "(2) AVIATION AND SPACE VEHICLE SAFETY.—
13 The Administrator, after notice and opportunity for
14 public comment, may authorize the production and
15 consumption of limited quantities of class II, group
16 II substances solely for the purposes of aviation or
17 space vehicle safety if either the Administrator of
18 the Federal Aviation Administration or the Adminis-
19 trator of the National Aeronautics and Space Ad-
20 ministration, in consultation with the Administrator,
21 determines that no safe and effective substitute has
22 been developed and that such authorization is nec-
23 essary for aviation or space flight safety purposes.

24 "(e) DEVELOPING COUNTRIES.—Notwithstanding
25 any phase down of production required by this section, the

1 Administrator, after notice and opportunity for public
2 comment, may authorize the production of limited quan-
3 tities of class II, group II substances in excess of the
4 amounts otherwise allowable under this section solely for
5 export to, and use in, developing countries. Any produc-
6 tion authorized under this subsection shall be solely for
7 purposes of satisfying the basic domestic needs of such
8 countries as provided in applicable international agree-
9 ments, if any, to which the United States is a party or
10 otherwise adheres.

11 "(f) NATIONAL SECURITY; FIRE SUPPRESSION,
12 ETC.—The provisions of subsection (f) and paragraphs (1)
13 and (2) of subsection (g) of section 604 shall apply to any
14 consumption and production phase down of class II, group
15 II substances in the same manner and to the same extent,
16 consistent with any applicable international agreement to
17 which the United States is a party or otherwise adheres,
18 as such provisions apply to the substances specified in
19 such subsection.

20 "(g) ACCELERATED SCHEDULE.—In lieu of section
21 606, the provisions of paragraphs (1), (2), and (3) of this
22 subsection shall apply in the case of class II, group II sub-
23 stances.

24 "(1) IN GENERAL.—The Administrator shall
25 promulgate initial regulations not later than 18

months after the date of enactment of this section, and revised regulations any time thereafter, which establish a schedule for phasing down the consumption (and, if the condition in subsection (b)(1)(B) is met, the production) of class II, group II substances that is more stringent than the schedule set forth in this section if, based on the availability of substitutes, the Administrator determines that such more stringent schedule is practicable, taking into account technological achievability, safety, and other factors the Administrator deems relevant, or if the Montreal Protocol, or any applicable international agreement to which the United States is a party or otherwise adheres, is modified or established to include a schedule or other requirements to control or reduce production, consumption, or use of any class II, group II substance more rapidly than the applicable schedule under this section.

''(2) PETITION.—Any person may submit a petition to promulgate regulations under this subsection in the same manner and subject to the same procedures as are provided in section 606(b).

''(3) INCONSISTENCY.—If the Administrator determines that the provisions of this section regarding banking, allowance rollover, or destruction offset

1 credits create a significant potential for inconsist-
2 ency with the requirements of any applicable inter-
3 national agreement to which the United States is a
4 party or otherwise adheres, the Administrator may
5 promulgate regulations restricting the availability of
6 banking, allowance rollover, or destruction offset
7 credits to the extent necessary to avoid such incon-
8 sistency.

9 ''(h) EXCHANGE.—Section 607 shall not apply in the
10 case of class II, group II substances. Production and con-
11 sumption allowances for class II, group II substances may
12 be freely exchanged or sold but may not be converted into
13 allowances for class II, group I substances.

14 ''(i) LABELING.—(1) In applying section 611 to prod-
15 ucts containing or manufactured with class II, group II
16 substances, in lieu of the words 'destroying ozone in the
17 upper atmosphere' on labels required under section 611
18 there shall be substituted the words 'contributing to global
19 warming'.

20 ''(2) The Administrator may, through rulemaking,
21 exempt from the requirements of section 611 products
22 containing or manufactured with class II, group II sub-
23 stances determined to have little or no carbon dioxide
24 equivalent value compared to other substances used in
25 similar products.

"(j) NONESSENTIAL PRODUCTS.—For the purposes of section 610, class II, group II substances shall be regulated under section 610(b), except that in applying section 610(b) the word 'hydrofluorocarbon' shall be substituted for the word 'chlorofluorocarbon' and the term 'class II, group II' shall be substituted for the term 'class I'. Class II, group II substances shall not be subject to the provisions of section 610(d).

"(k) INTERNATIONAL TRANSFERS.—In the case of class II, group II substances, in lieu of section 616, this subsection shall apply. To the extent consistent with any applicable international agreement to which the United States is a party or otherwise adheres, including any amendment to the Montreal Protocol, the United States may engage in transfers with other parties to such agreement or amendment under the following conditions:

"(1) The United States may transfer production allowances to another party to such agreement or amendment if, at the time of the transfer, the Administrator establishes revised production limits for the United States accounting for the transfer in accordance with regulations promulgated pursuant to this subsection.

"(2) The United States may acquire production allowances from another party to such agreement or

amendment if, at the time of the transfer, the Administrator finds that the other party has revised its domestic production limits in the same manner as provided with respect to transfers by the United States in the regulations promulgated pursuant to this subsection.

"(l) RELATIONSHIP TO OTHER LAWS.—

"(1) STATE LAWS.—For purposes of section 116, the requirements of this section for class II, group II substances shall be treated as requirements for the control and abatement of air pollution.

"(2) MULTILATERAL AGREEMENTS.—Section 614 shall apply to the provisions of this section concerning class II, group II substances, except that for the words 'Montreal Protocol' there shall be substituted the words 'Montreal Protocol, or any applicable multilateral agreement to which the United States is a party or otherwise adheres that restricts the production or consumption of class II, group II substances,' and for the words 'Article 4 of the Montreal Protocol' there shall be substituted 'any provision of such multilateral agreement regarding trade with non-parties'.

"(3) FEDERAL FACILITIES.—For purposes of section 118, the requirements of this section for

class II, group II substances and corresponding State, interstate, and local requirements, administrative authority, and process and sanctions shall be treated as requirements for the control and abatement of air pollution within the meaning of section 118.

"(m) CARBON DIOXIDE EQUIVALENT VALUE.—(1) In lieu of section 602(e), the provisions of this subsection shall apply in the case of class II, group II substances. Simultaneously with establishing the list of class II, group II substances, and simultaneously with any addition to that list, the Administrator shall publish the carbon dioxide equivalent value of each listed class II, group II substance, based on a determination of the number of metric tons of carbon dioxide that makes the same contribution to global warming over 100 years as 1 metric ton of each class II, group II substance.

"(2) Not later than February 1, 2017, and not less than every 5 years thereafter, the Administrator shall—

"(A) review, and if appropriate, revise the carbon dioxide equivalent values established for class II, group II substances based on a determination of the number of metric tons of carbon dioxide that makes the same contributions to global warming over 100

years as 1 metric ton of each class II, group II substance; and

"(B) publish in the Federal Register the results of that review and any revisions.

"(3) A revised determination published in the Federal Register under paragraph (2)(B) shall take effect for production of class II, group II substances, consumption of class II, group II substances, and importation of products containing class II, group II substances starting on January 1 of the first calendar year starting at least 9 months after the date on which the revised determination was published.

"(4) The Administrator may decrease the frequency of review and revision under paragraph (2) if the Administrator determines that such decrease is appropriate in order to synchronize such review and revisions with any similar review process carried out pursuant to the United Nations Framework Convention on Climate Change, an agreement negotiated under that convention, The Vienna Convention for the Protection of the Ozone Layer, or an agreement negotiated under that convention, except that in no event shall the Administrator carry out such review and revision any less frequently than every 10 years.

"(n) REPORTING REQUIREMENTS.—In lieu of subsections (b) and (c) of section 603, paragraphs (1) and

(2) of this subsection shall apply in the case of class II, group II substances:

"(1) IN GENERAL.—On a quarterly basis, or such other basis (not less than annually) as determined by the Administrator, each person who produced, imported, or exported a class II, group II substance, or who imported a product containing a class II, group II substance, shall file a report with the Administrator setting forth the carbon dioxide equivalent amount of the substance that such person produced, imported, or exported, as well as the amount that was contained in products imported by that person, during the preceding reporting period. Each such report shall be signed and attested by a responsible officer. If all other reporting is complete, no such report shall be required from a person after April 1 of the calendar year after such person permanently ceases production, importation, and exportation of the substance, as well as importation of products containing the substance, and so notifies the Administrator in writing. If the United States becomes a party or otherwise adheres to a multilateral agreement, including any amendment to the Montreal Protocol on Substances That Deplete the Ozone Layer, that restricts the production or con-

sumption of class II, group II substances, then, if all other reporting is complete, no such report shall be required from a person with respect to importation from parties to such agreement or amendment of products containing any class II, group II substance restricted by such agreement or amendment, after April 1 of the calendar year following the year during which such agreement or amendment enters into force.

"(2) BASELINE REPORTS FOR CLASS II, GROUP II SUBSTANCES.—

"(A) IN GENERAL.—Unless such information has been previously reported to the Administrator, on the date on which the first report under paragraph (1) of this subsection is required to be filed, each person who produced, imported, or exported a class II, group II substance, or who imported a product containing a class II substance, (other than a substance added to the list of class II, group II substances after the publication of the initial list of such substances under this section), shall file a report with the Administrator setting forth the amount of such substance that such person produced, imported, exported, or that was con-

tained in products imported by that person, during each of calendar years 2004, 2005, and 2006.

"(B) PRODUCERS.—In reporting under subparagraph (A), each person who produced in the United States a class II substance during calendar year 2004, 2005, or 2006 shall—

"(i) report all acquisitions or purchases of class II substances during each of calendar years 2004, 2005, and 2006 from all other persons who produced in the United States a class II substance during calendar year 2004, 2005, or 2006, and supply evidence of such acquisitions and purchases as deemed necessary by the Administrator; and

"(ii) report all transfers or sales of class II substances during each of calendar years 2004, 2005, and 2006 to all other persons who produced in the United States a class II substance during calendar year 2004, 2005, or 2006, and supply evidence of such transfers and sales as deemed necessary by the Administrator.

"(C) ADDED SUBSTANCES.—In the case of a substance added to the list of class II, group II substances after publication of the initial list of such substances under this section, each person who produced, imported, exported, or imported products containing such substance in calendar year 2004, 2005, or 2006 shall file a report with the Administrator within 180 days after the date on which such substance is added to the list, setting forth the amount of the substance that such person produced, imported, and exported, as well as the amount that was contained in products imported by that person, in calendar years 2004, 2005, and 2006.

"(o) STRATOSPHERIC OZONE AND CLIMATE PROTECTION FUND.—

"(1) IN GENERAL.—There is established in the Treasury of the United States a Stratospheric Ozone and Climate Protection Fund.

"(2) DEPOSITS.—The Administrator shall deposit all proceeds from the auction and non-auction sale of allowances under this section into the Stratospheric Ozone and Climate Protection Fund.

"(3) USE.—Amounts deposited into the Stratospheric Ozone and Climate Protection Fund shall be

available, subject to appropriations, exclusively for the following purposes:

"(A) RECOVERY, RECYCLING, AND RECLAMATION.—The Administrator may utilize funds to establish a program to incentivize the recovery, recycling, and reclamation of any Class II substances in order to reduce emissions of such substances.

"(B) MULTILATERAL FUND.—If the United States becomes a party or otherwise adheres to a multilateral agreement, including any amendment to the Montreal Protocol on Substances That Deplete the Ozone Layer, which restricts the production or consumption of class II, group II substances, the Administrator may utilize funds to meet any related contribution obligation of the United States to the Multilateral Fund for the Implementation of the Montreal Protocol or similar multilateral fund established under such multilateral agreement.

"(C) LOW GLOBAL WARMING PRODUCT TRANSITION ASSISTANCE PROGRAM.—

"(i) IN GENERAL.—The Administrator, in consultation with the Secretary of Energy, may utilize funds in fiscal years

2012 through 2022 to establish a program to provide financial assistance to manufacturers of products containing class II, group II substances to facilitate the transition to products that contain or utilize alternative substances with no or low carbon dioxide equivalent value and no ozone depletion potential.

"(ii) DEFINITION.—In this subparagraph, the term 'products' means refrigerators, freezers, dehumidifiers, air conditioners, foam insulation, technical aerosols, fire protection systems, and semiconductors.

"(iii) FINANCIAL ASSISTANCE.—The Administrator may provide financial assistance to manufacturers pursuant to clause (i) for—

"(I) the design and configuration of new products that use alternative substances with no or low carbon dioxide equivalent value and no ozone depletion potential; and

"(II) the redesign and retooling of facilities for the manufacture of

products in the United States that use alternative substances with no or low carbon dioxide equivalent value and no ozone depletion potential.

"(iv) REPORTS.—For any fiscal year during which the Administrator provides financial assistance pursuant to this subparagraph, the Administrator shall submit a report to the Congress within 3 months of the end of such fiscal year detailing the amounts, recipients, specific purposes, and results of the financial assistance provided.".

(b) TABLE OF CONTENTS.—The table of contents of title VI of the Clean Air Act (42 U.S.C. 7671 et seq.) is amended by adding the following new item at the end thereof:

"Sec. 619. Hydrofluorocarbons (HFCs).".

(c) FIRE SUPPRESSION AGENTS.—Section 605(a) of the Clean Air Act (42 U.S.C. 7671(a)) is amended—

(1) by striking "or" at the end of paragraph (2);

(2) by striking the period at the end of paragraph (3) and inserting "; or"; and

(3) by adding the following new paragraph after paragraph (3):

"(4) is listed as acceptable for use as a fire suppression agent for nonresidential applications in accordance with section 612(c).".

(d) MOTOR VEHICLE AIR CONDITIONERS.—

(1) Section 609(e) of the Clean Air Act (42 U.S.C. 7671h(e)) is amended by inserting ", group I" after each reference to "class II" in the text and heading.

(2) Section 609 of the Clean Air Act (42 U.S.C. 7671h) is amended by adding the following new subsection after subsection (e):

"(f) CLASS II, GROUP II SUBSTANCES.—

"(1) REPAIR.—The Administrator may promulgate regulations establishing requirements for repair of motor vehicle air conditioners prior to adding a class II, group II substance.

"(2) SMALL CONTAINERS.—(A) The Administrator may promulgate regulations establishing servicing practices and procedures for recovery of class II, group II substances from containers which contain less than 20 pounds of such class II, group II substances.

"(B) Not later than 18 months after enactment of this subsection, the Administrator shall either promulgate regulations requiring that containers

which contain less than 20 pounds of a class II, group II substance be equipped with a device or technology that limits refrigerant emissions and leaks from the container and limits refrigerant emissions and leaks during the transfer of refrigerant from the container to the motor vehicle air conditioner or issue a determination that such requirements are not necessary or appropriate.

"(C) Not later than 18 months after enactment of this subsection, the Administrator shall promulgate regulations establishing requirements for consumer education materials on best practices associated with the use of containers which contain less than 20 pounds of a class II, group II substance and prohibiting the sale or distribution, or offer for sale or distribution, of any class II, group II substance in any container which contains less than 20 pounds of such class II, group II substance, unless consumer education materials consistent with such requirements are displayed and available at point-of-sale locations, provided to the consumer, or included in or on the packaging of the container which contain less than 20 pounds of a class II, group II substance.

"(D) The Administrator may, through rulemaking, extend the requirements established under this paragraph to containers which contain 30 pounds or less of a class II, group II substance if the Administrator determines that such action would produce significant environmental benefits.

"(3) RESTRICTION OF SALES.—Effective January 1, 2014, no person may sell or distribute or offer to sell or distribute or otherwise introduce into interstate commerce any motor vehicle air conditioner refrigerant in any size container unless the substance has been found acceptable for use in a motor vehicle air conditioner under section 612.".

(e) SAFE ALTERNATIVES POLICY.—Section 612(e) of the Clean Air Act (42 U.S.C. 7671k(e)) is amended by inserting "or class II" after each reference to "class I".

SEC. 123. BLACK CARBON.

(a) STUDY OF BLACK CARBON EMISSIONS.—

(1) DEFINITION OF BLACK CARBON.—In this subsection, the term "black carbon" means any light-absorbing graphitic (or elemental) particle produced by incomplete combustion.

(2) STUDY.—The Administrator, in consultation with the Secretary of Energy, the Secretary of State, and the heads of the National Oceanic and

Atmospheric Administration, the National Aeronautics and Space Administration, the United States Agency for International Development, the National Institutes of Health, the Centers for Disease Control and Prevention, National Institute of Standards and Technology, and other relevant Federal departments and agencies and representatives of appropriate industry and environmental groups, shall conduct a 4-phase study of black carbon emissions, the phases of which shall be the following:

(A) PHASE I—UNIVERSAL DEFINITION.—The Administrator shall conduct phase I of the study under this subsection to carry out measures to establish for the scientific community standard definitions of the terms—

(i) black carbon; and

(ii) organic carbon.

(B) PHASE II—SOURCES AND TECHNOLOGIES.—The Administrator shall conduct phase II of the study under this subsection to summarize the available scientific and technical information concerning—

(i) the identification of the major sources of black carbon emissions in the United States and throughout the world;

(ii) an estimate of—

(I) the quantity of current and projected future black carbon emissions from those sources; and

(II) the net climate effects of the emissions;

(iii) the most recent scientific data relevant to the public health- and climate-related impacts of black carbon emissions and associated emissions of organic carbon, nitrogen oxides, and sulfur oxides from the sources identified under clause (i);

(iv) the most effective control strategies for additional domestic and international reductions in black carbon emissions, taking into consideration lifecycle analysis, cost-effectiveness, and the net climate impact of technologies, operations, and strategies, such as—

(I) diesel particulate filters on existing diesel on- and off-road engines; and

(II) particulate emission reduction measures for marine vessels;

(v) carbon dioxide equivalency factors, global/regional modeling, or other metrics to compare the global warming and other climate effects of black carbon emissions with carbon dioxide and other greenhouse gas emissions; and

(vi) the health benefits associated with additional black carbon emission reductions.

(C) PHASE III—INTERNATIONAL FUNDING.—The Administrator shall conduct phase III of the study under this subsection—

(i) to summarize the amount, type, and direction of all actual and potential financial, technical, and related assistance provided by the United States to foreign countries to reduce, mitigate, or otherwise abate—

(I) black carbon emissions; and

(II) any health, environmental, and economic impacts associated with those emissions; and

(ii) to identify opportunities, including action under existing authority, to achieve significant black carbon emission reduc-

tions in foreign countries through the provision of technical assistance or other approaches.

(D) PHASE IV—RESEARCH AND DEVELOPMENT OPPORTUNITIES.—The Administrator shall conduct phase IV of the study under this subsection for the purpose of providing to Congress recommendations regarding—

(i) areas of focus for additional research for cost-effective technologies, operations, and strategies with the highest potential to reduce black carbon emissions and protect public health in the United States and internationally; and

(ii) actions that the Federal Government could take to encourage or require additional black carbon emission reductions.

(3) REPORTS.—The Administrator shall submit to Congress—

(A) by not later than 180 days after the date of enactment of this Act, a report describing the results of phases I and II of the study under subparagraphs (A) and (B) of paragraph (2);

(B) by not later than 270 days after the date of enactment of this Act, a report describing the results of phase III of the study under paragraph (2)(C); and

(C) by not later than 1 year after the date of enactment of this Act, a report describing the recommendations developed for phase IV of the study under paragraph (2)(D).

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

(b) BLACK CARBON MITIGATION.—Title VIII of the Clean Air Act (as amended by section 113 of division A) is amended by adding at the end the following:

"PART E—BLACK CARBON

"SEC. 851. BLACK CARBON.

''(a) DOMESTIC BLACK CARBON MITIGATION.—

''(1) IN GENERAL.—Taking into consideration the public health and environmental impacts of black carbon emissions, including the effects on global and regional warming, the Arctic, and other snow and ice-covered surfaces, the Administrator shall—

''(A) not later than 2 years after the date of enactment of this part, propose—

"(i) regulations applicable to emissions of black carbon under the existing authorities of this Act; or

"(ii) a finding that existing regulations promulgated pursuant to this Act adequately regulate black carbon emissions, which finding may be based on a finding that existing regulations, in the judgment of the Administrator—

"(I) address those sources that both contribute significantly to the total emissions of black carbon and provide the greatest potential for significant and cost-effective reductions in emissions of black carbon, under the existing authorities; and

"(II) reflect the greatest degree of emission reduction achievable through application of technology that will be available for such sources, giving appropriate consideration to cost, energy, and safety factors associated with the application of such technology; and

"(B) not later than 3 years after the date of enactment of this part, promulgate final regulations under the existing authorities of this Act or finalize the proposed finding.

"(2) APPLICABILITY OF REGULATIONS.—Regulations promulgated under paragraph (1) shall not apply to specific types, classes, categories, or other suitable groupings of emission sources that the Administrator finds are subject to adequate regulation.

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

SEC. 124. STATES.

Section 116 of the Clean Air Act (42 U.S.C. 7416) is amended by adding the following at the end thereof: "For the purposes of this section, the phrases 'standard or limitation respecting emissions of air pollutants' and 'requirements respecting control or abatement of air pollution' shall include any provision to: limit greenhouse gas emissions, require surrender to the State or a political subdivision thereof of emission allowances or offset credits established or issued under this Act, and require the use of such allowances or credits as a means of demonstrating compliance with requirements established by a State or political subdivision thereof.".

SEC. 125. STATE PROGRAMS.

Title VIII of the Clean Air Act (as amended by section 123(b)) is amended by adding at the end the following:

"PART F—MISCELLANEOUS

"SEC. 861. STATE PROGRAMS.

"(a) IN GENERAL.—Notwithstanding section 116, if a Federal auction is conducted, by the deadline of March 31, 2011, as established in section 778, no State or political subdivision thereof shall implement or enforce a comprehensive greenhouse gas emission limitation program that covers any capped emissions emitted during the years 2012 through 2017.

"(b) DEADLINE.—Notwithstanding section 116, in the event the March 31, 2011 auction is delayed, no State or political subdivision thereof shall enforce a comprehensive greenhouse gas emission limitation program that covers any capped emissions emitted during the period that is at least 9 months from the first auction as set out in section 778, through 2017.

"(c) DEFINITION OF COMPREHENSIVE GREENHOUSE GAS EMISSION LIMITATION PROGRAM.—For purposes of this section, the term 'comprehensive greenhouse gas emission limitation program' means a system of greenhouse gas regulation under which a State or political subdivision issues a limited number of tradable instruments

in the nature of emission allowances and requires that sources within its jurisdiction surrender such tradeable instruments for each unit of greenhouse gases emitted during a compliance period. For purposes of this section, a 'comprehensive greenhouse gas emission limitation program' does not include a target or limit on greenhouse gas emissions adopted by a State or political subdivision that is implemented other than through the issuance and surrender of a limited number of tradable instruments in the nature of emission allowances, nor does it include any other standard, limit, regulation, or program to reduce greenhouse gas emissions that is not implemented through the issuance and surrender of a limited number of tradeable instruments in the nature of emission allowances. For purposes of this section, the term 'comprehensive greenhouse gas emission limitation program' does not include, among other things, fleet-wide motor vehicle emission requirements that allow greater emissions with increased vehicle production, or requirements that fuels, or other products, meet an average pollution emission rate or lifecycle greenhouse gas standard.

"SEC. 862. GRANTS FOR SUPPORT OF AIR POLLUTION CONTROL PROGRAMS.

''The Administrator is authorized to make grants to air pollution control agencies pursuant to section 105 for

purposes of assisting in the implementation of programs to address global warming established under the Clean Energy Jobs and American Power Act.''.

SEC. 126. ENFORCEMENT.

(a) REMAND.—Section 307(b) of the Clean Air Act (42 U.S.C. 7607(b)) is amended by adding the following new paragraph at the end thereof:

''(3) If the court determines that any action of the Administrator is arbitrary, capricious, or otherwise unlawful, the court may remand such action, without vacatur, if vacatur would impair or delay protection of the environment or public health or otherwise undermine the timely achievement of the purposes of this Act.

''(4) If the court determines that any action of the Administrator is arbitrary, capricious, or otherwise unlawful, and remands the matter to the Administrator, the Administrator shall complete final action on remand within an expeditious time period not longer than the time originally allowed for the action or 1 year, whichever is less, unless the court on motion determines that a shorter or longer period is necessary, appropriate, and consistent with the purposes of this Act. The court of appeals shall have

jurisdiction to enforce a deadline for action on remand under this paragraph.''.

(b) PETITION FOR RECONSIDERATION.—Section 307(d)(7)(B) of the Clean Air Act (42 U.S.C. 7607(d)(7)(B)) is amended as follows:

(1) By inserting after the second sentence ''If a petition for reconsideration is filed, the Administrator shall take final action on such petition, including promulgation of final action either revising or determining not to revise the action for which reconsideration is sought, within 150 days after the petition is received by the Administrator or the petition shall be deemed denied for the purpose of judicial review.''.

(2) By amending the third sentence to read as follows: ''Such person may seek judicial review of such denial, or of any other final action, by the Administrator, in response to a petition for reconsideration, in the United States court of appeals for the appropriate circuit (as provided in subsection (b)).''.

(c) PETITION FOR REVIEW.—Section 307(b)(1) of the Clean Air Act (42 U.S.C. 7607(b)(1)) is amended by inserting after the second sentence the following: ''Any person may file a petition for review of action by the Administrator as provided in this subsection.''.

SEC. 127. CONFORMING AMENDMENTS.

(a) FEDERAL ENFORCEMENT.—Section 113 of the Clean Air Act (42 U.S.C. 7413) is amended as follows:

(1) In subsection (a)(3), by striking ''or title VI,'' and inserting ''title VI, title VII, or title VIII''.

(2) In subsection (b), by striking ''or a major stationary source'' and inserting ''a major stationary source, or a covered EGU under title VIII'' in the material preceding paragraph (1).

(3) In paragraph (2) of subsection (b), by striking ''or title VI'' and inserting ''title VI, title VII, or title VIII''.

(4) In subsection (c)—

(A) in the first sentence of paragraph (1), by striking ''or title VI (relating to stratospheric ozone control),'' and inserting ''title VI, title VII, or title VIII,''; and

(B) in the first sentence of paragraph (3), by striking ''or VI'' and inserting ''VI, VII, or VIII''.

(5) In subsection (d)(1)(B), by striking ''or VI'' and inserting ''VI, VII, or VIII''.

(6) In subsection (f), in the first sentence, by striking ''or VI'' and inserting ''VI, VII, or VIII''.

(b) RETENTION OF STATE AUTHORITY.—Section 116 of the Clean Air Act (42 U.S.C. 7416) is amended as follows:

(1) By striking ''and 233'' and inserting ''233''.

(2) By striking ''of moving sources)'' and inserting ''of moving sources), and 861 (preempting certain State greenhouse gas programs for a limited time)''.

(c) INSPECTIONS, MONITORING, AND ENTRY.—Section 114(a) of the Clean Air Act (42 U.S.C. 7414(a)) is amended by striking ''section 112,'' and all that follows through ''(ii)'' and inserting the following: ''section 112, or any regulation of greenhouse gas emissions under title VII or VIII, (ii)''.

(d) ENFORCEMENT.—Subsection (f) of section 304 of the Clean Air Act (42 U.S.C. 7604(f)) is amended as follows:

(1) By striking ''; or'' at the end of paragraph (3) thereof and inserting a comma.

(2) By striking the period at the end of paragraph (4) thereof and inserting '', or''.

(3) By adding the following after paragraph (4) thereof:

''(5) any requirement of title VII or VIII.''.

(e) ADMINISTRATIVE PROCEEDINGS AND JUDICIAL REVIEW.—Section 307 of the Clean Air Act (42 U.S.C. 7607) is amended as follows:

(1) In subsection (a), by striking ", or section 306" and inserting "section 306, or title VII or VIII".

(2) In subsection (b)(1)—

(A) by striking ",," and inserting "," in each place such punctuation appears; and

(B) by striking "section 120," in the first sentence and inserting "section 120, any final action under title VII or VIII,".

(3) In subsection (d)(1) by amending subparagraph (S) to read as follows:

"(S) the promulgation or revision of any regulation under title VII or VIII,".

(f) TECHNICAL AMENDMENT.—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 901 through 903, respectively; and

(2) is redesignated as title IX and moved to appear at the end of that Act.

SEC. 128. DAVIS-BACON COMPLIANCE.

(a) IN GENERAL.—Notwithstanding any other provision of law and in a manner consistent with other provisions in this Act, to receive emission allowances or funding under this Act, or the amendments made by this Act, the recipient shall provide reasonable assurances that all laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to this Act, or the amendments made by this Act, or by any entity established in accordance with this Act, or the amendments made by this Act, including the Carbon Storage Research Corporation, will be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the ''Davis-Bacon Act''). With respect to the labor standards specified in this section, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code.

(b) EXEMPTION.—Neither subsection (a) nor the requirements of subchapter IV of chapter 31 of title 40,

United States Code, shall apply to retrofitting of the following:

(1) Single family homes (both attached and detached) under section 164 of division A.

(2) Owner-occupied residential units in larger buildings that have their own dedicated space-conditioning systems under section 164 of division A.

(3) Residential buildings (as defined in section 164(a) of division A) if designed for residential use by less than 4 families.

(4) Nonresidential buildings (as defined in section 164(a) of division A) if the net interior space of such nonresidential building is less than 6,500 square feet.

Subtitle D—Carbon Market Assurance

SEC. 131. CARBON MARKET ASSURANCE.

It is the sense of the Senate that there shall be a single, integrated carbon market oversight program—

(1) to provide for effective and comprehensive market oversight and enforcement;

(2) to lower systemic risk and protect consumers;

(3) to ensure market liquidity and allowance availability;

(4) to enhance the price discovery function of such markets, ensuring that the price for emission allowances and offset credits reflects the marginal cost of abatement;

(5) to prevent excessive speculation that contributes to price volatility, including the establishment of robust aggregate position limits and margin requirements;

(6) to ensure that market mechanisms and associated oversight support the environmental integrity of the program established under title VII of the Clean Air Act (as added by section 101 of this division);

(7) to establish provisions for market transparency that provide authority, resources, and information needed to prevent fraud and manipulation in such markets;

(8) to establish standards for trading as, and operation of, trading facilities;

(9) to ensure a well-functioning, well-regulated market, including a futures market, designed to manage risk and facilitate investment in emission reductions;

(10) to establish clear, professional standards for dealers, traders, and other market participants;

(11) to provide for appropriate criminal and civil penalties; and

(12) to prevent any excessive leverage by market participants that creates risk to the economy.

Subtitle E—Ensuring Real Reductions in Industrial Emissions

SEC. 141. ENSURING REAL REDUCTIONS IN INDUSTRIAL EMISSIONS.

Title VII of the Clean Air Act (as amended by section 322 of division A) is amended by adding at the end the following:

"PART F—ENSURING REAL REDUCTIONS IN INDUSTRIAL EMISSIONS

"SEC. 761. PURPOSES.

''The purposes of this part are—

''(1) to promote a strong global effort to significantly reduce greenhouse gas emissions, and, through this global effort, stabilize greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous anthropogenic interference with the climate system;

''(2) to prevent an increase in greenhouse gas emissions in countries other than the United States as a result of direct and indirect compliance costs incurred under this title;

"(3) to provide a rebate to the owners and operators of entities in domestic eligible industrial sectors for their greenhouse gas emission costs incurred under this title, but not for costs associated with other related or unrelated market dynamics;

"(4) to design such rebates in a way that will prevent carbon leakage while also rewarding innovation and facility-level investments in energy efficiency performance improvements; and

"(5) to eliminate or reduce distribution of emission allowances under this part when such distribution is no longer necessary to prevent carbon leakage from eligible industrial sectors.

"SEC. 762. DEFINITIONS.

"In this part:

"(1) CARBON LEAKAGE.—The term 'carbon leakage' means any substantial increase (as determined by the Administrator) in greenhouse gas emissions by industrial entities located in other countries if such increase is caused by an incremental cost of production increase in the United States resulting from the implementation of this title.

"(2) ELIGIBLE INDUSTRIAL SECTOR.—The term 'eligible industrial sector' means an industrial

sector determined by the Administrator under section 763(b) to be eligible to receive emission allowance rebates under this part.

"(3) INDUSTRIAL SECTOR.—The term 'industrial sector' means any sector that is in the manufacturing sector (as defined in NAICS codes 31, 32, and 33) or that beneficiates or otherwise processes (including agglomeration) metal ores, including iron and copper ores, soda ash, or phosphate. The extraction of metal ores, soda ash, or phosphate shall not be considered to be an industrial sector.

"(4) NAICS.—The term 'NAICS' means the North American Industrial Classification System of 2002.

"(5) OUTPUT.—The term 'output' means the total tonnage or other standard unit of production (as determined by the Administrator) produced by an entity in an industrial sector. The output of the cement sector is hydraulic cement, and not clinker.

"SEC. 763. ELIGIBLE INDUSTRIAL SECTORS.

"(a) LIST.—

"(1) INITIAL LIST.—Not later than June 30, 2011, the Administrator shall publish in the Federal Register a list of eligible industrial sectors pursuant to subsection (b). Such list shall include the amount

of the emission allowance rebate per unit of production that shall be provided to entities in each eligible industrial sector in the following two calendar years pursuant to section 764.

"(2) SUBSEQUENT LISTS.—Not later than February 1, 2013, and every 4 years thereafter, the Administrator shall publish in the Federal Register an updated version of the list published under paragraph (1).

"(b) ELIGIBLE INDUSTRIAL SECTORS.—

"(1) IN GENERAL.—Not later than June 30, 2011, the Administrator shall promulgate a rule designating, based on the criteria under paragraph (2), the industrial sectors eligible for emission allowance rebates under this part.

"(2) PRESUMPTIVELY ELIGIBLE INDUSTRIAL SECTORS.—

"(A) ELIGIBILITY CRITERIA.—

"(i) IN GENERAL.—An owner or operator of an entity shall be eligible to receive emission allowance rebates under this part if such entity is in an industrial sector that is included in a six-digit classification of the NAICS that meets the criteria in both

clauses (ii) and (iii), or the criteria in clause (iv).

"(ii) ENERGY OR GREENHOUSE GAS INTENSITY.—As determined by the Administrator, the industrial sector had—

"(I) an energy intensity of at least 5 percent, calculated by dividing the cost of purchased electricity and fuel costs of the sector by the value of the shipments of the sector, based on data described in subparagraph (D); or

"(II) a greenhouse gas intensity of at least 5 percent, calculated by dividing—

"(aa) the number 20 multiplied by the number of tons of carbon dioxide equivalent greenhouse gas emissions (including direct emissions from fuel combustion, process emissions, and indirect emissions from the generation of electricity used to produce the output of the sector)

of the sector based on data described in subparagraph (D); by

"(bb) the value of the shipments of the sector, based on data described in subparagraph (D).

"(iii) TRADE INTENSITY.—As determined by the Administrator, the industrial sector had a trade intensity of at least 15 percent, calculated by dividing the value of the total imports and exports of such sector by the value of the shipments plus the value of imports of such sector, based on data described in subparagraph (D).

"(iv) VERY HIGH ENERGY OR GREENHOUSE GAS INTENSITY.—As determined by the Administrator, the industrial sector had an energy or greenhouse gas intensity, as calculated under clause (ii)(I) or (II), of at least 20 percent.

"(B) METAL AND PHOSPHATE PRODUCTION CLASSIFIED UNDER MORE THAN ONE NAICS CODE.—For purposes of this section, the Administrator shall—

"(i) aggregate data for the beneficiation or other processing (including agglomeration) of metal ores, including iron and copper ores, soda ash, or phosphate with subsequent steps in the process of metal and phosphate manufacturing, regardless of the NAICS code under which such activity is classified; and

"(ii) aggregate data for the manufacturing of steel with the manufacturing of steel pipe and tube made from purchased steel in a nonintegrated process.

"(C) EXCLUSION.—The petroleum refining sector shall not be an eligible industrial sector.

"(D) DATA SOURCES.—

"(i) ELECTRICITY AND FUEL COSTS, VALUE OF SHIPMENTS.—The Administrator shall determine electricity and fuel costs and the value of shipments under this subsection from data from the United States Census Annual Survey of Manufacturers. The Administrator shall take the average of data from as many of the years of 2004, 2005, and 2006 for which such data are available. If such data are un-

available, the Administrator shall make a determination based upon 2002 or 2006 data from the most detailed industrial classification level of Energy Information Agency's Manufacturing Energy Consumption Survey (using 2006 data if it is available) and the 2002 or 2007 Economic Census of the United States (using 2007 data if it is available). If data from the Manufacturing Energy Consumption Survey or Economic Census are unavailable for any sector at the six-digit classification level in the NAICS, then the Administrator may extrapolate the information necessary to determine the eligibility of a sector under this paragraph from available Manufacturing Energy Consumption Survey or Economic Census data pertaining to a broader industrial category classified in the NAICS. If data relating to the beneficiation or other processing (including agglomeration) of metal ores, including iron and copper ores, soda ash, or phosphate are not available from the specified data sources, the Administrator shall use

the best available Federal or State government data and may use, to the extent necessary, representative data submitted by entities that perform such beneficiation or other processing (including agglomeration), in making a determination. Fuel cost data shall not include the cost of fuel used as feedstock by an industrial sector.

"(ii) IMPORTS AND EXPORTS.—The Administrator shall base the value of imports and exports under this subsection on United States International Trade Commission data. The Administrator shall take the average of data from as many of the years of 2004, 2005, and 2006 for which such data are available. If data from the United States International Trade Commission are unavailable for any sector at the six-digit classification level in the NAICS, then the Administrator may extrapolate the information necessary to determine the eligibility of a sector under this paragraph from available United States International Trade Commission

data pertaining to a broader industrial category classified in the NAICS.

"(iii) PERCENTAGES.—The Administrator shall round the energy intensity, greenhouse gas intensity, and trade intensity percentages under subparagraph (A) to the nearest whole number.

"(iv) GREENHOUSE GAS EMISSION CALCULATIONS.—When calculating the tons of carbon dioxide equivalent greenhouse gas emissions for each sector under subparagraph (A)(ii)(II)(aa), the Administrator—

"(I) shall use the best available data from as many of the years 2004, 2005, and 2006 for which such data is available; and

"(II) may, to the extent necessary with respect to a sector, use economic and engineering models and the best available information on technology performance levels for such sector.

"(3) ADMINISTRATIVE DETERMINATION OF ADDITIONAL ELIGIBLE INDUSTRIAL SECTORS.—

"(A) UPDATED TRADE INTENSITY DATA.—The Administrator shall designate as eligible to receive emission allowance rebates under this part an industrial sector that—

"(i) met the energy or greenhouse gas intensity criteria in paragraph (2)(A)(ii) as of the date of promulgation of the rule under paragraph (1); and

"(ii) meets the trade intensity criteria in paragraph (2)(A)(iii), using data from any year after 2006.

"(B) INDIVIDUAL SHOWING PETITION.—

"(i) PETITION.—In addition to designation under paragraph (2) or subparagraph (A) of this paragraph, the owner or operator of an entity in an industrial sector may petition the Administrator to designate as eligible industrial sectors under this part an entity or a group of entities that—

"(I) represent a subsector of a six-digit section of the NAICS code; and

"(II) meet the eligibility criteria in both clauses (ii) and (iii) of para-

graph (2)(A), or the eligibility criteria in clause (iv) of paragraph (2)(A).

"(ii) DATA.—In making a determination under this subparagraph, the Administrator shall consider data submitted by the petitioner that is specific to the entity, data solicited by the Administrator from other entities in the subsector, if such other entities exist, and data specified in paragraph (2)(D).

"(iii) BASIS OF SUBSECTOR DETERMINATION.—The Administrator shall determine an entity or group of entities to be a subsector of a six-digit section of the NAICS code based only upon the products manufactured and not the industrial process by which the products are manufactured, except that the Administrator may determine an entity or group of entities that manufacture a product from primarily virgin material to be a separate subsector from another entity or group of entities that manufacture the same product primarily from recycled material.

"(iv) USE OF MOST RECENT DATA.—In determining whether to designate a sector or subsector as an eligible industrial sector under this subparagraph, the Administrator shall use the most recent data available from the sources described in paragraph (2)(D), rather than the data from the years specified in paragraph (2)(D), to determine the trade intensity of such sector or subsector, but only for determining such trade intensity.

"(v) FINAL ACTION.—The Administrator shall take final action on such petition no later than 6 months after the petition is received by the Administrator.

"SEC. 764. DISTRIBUTION OF EMISSION ALLOWANCE REBATES.

"(a) DISTRIBUTION SCHEDULE.—

"(1) IN GENERAL.—For each vintage year, the Administrator shall distribute pursuant to this section emission allowances made available under section 771(a)(5), no later than October 31 of the preceding calendar year. The Administrator shall make such annual distributions to the owners and operators of each entity in an eligible industrial sector in

the amount of emission allowances calculated under subsection (b), except that—

"(A) for vintage years 2012 and 2013, the distribution for a covered entity shall be pursuant to the entity's indirect carbon factor as calculated under subsection (b)(3);

"(B) for vintage year 2026 and thereafter, the distribution shall be pursuant to the amount calculated under subsection (b) multiplied by, for a sector—

"(i) 90 percent for vintage year 2026;

"(ii) 80 percent for vintage year 2027;

"(iii) 70 percent for vintage year 2028;

"(iv) 60 percent for vintage year 2029;

"(v) 50 percent for vintage year 2030;

"(vi) 40 percent for vintage year 2031;

"(vii) 30 percent for vintage year 2032;

"(viii) 20 percent for vintage year 2033;

"(ix) 10 percent for vintage year 2034; and

"(x) 0 percent for vintage year 2035 and thereafter.

"(2) NEWLY ELIGIBLE SECTORS.—In addition to receiving a distribution of emission allowances under this section in the first distribution occurring after an industrial sector is designated as eligible under section 763(b)(3), the owner or operator of an entity in that eligible industrial sector may receive a prorated share of any emission allowances made available for distribution under this section that were not distributed for the year in which the petition for eligibility was granted under section 763(b)(3)(A).

"(3) CESSATION OF QUALIFYING ACTIVITIES.—If, as determined by the Administrator, a facility is no longer in an eligible industrial sector designated under section 763—

"(A) the Administrator shall not distribute emission allowances to the owner or operator of such facility under this section; and

"(B) the owner or operator of such facility shall return to the Administrator all allowances that have been distributed to it for future vin-

tage years and a pro-rated amount of allowances distributed to the facility under this section for the vintage year in which the facility ceases to be in an eligible industrial sector designated under section 763.

"(b) CALCULATION OF DIRECT AND INDIRECT CARBON FACTORS.—

"(1) IN GENERAL.—

"(A) COVERED ENTITIES.—Except as provided in subsection (a), for covered entities that are in eligible industrial sectors, the amount of emission allowance rebates shall be based on the sum of the covered entity's direct and indirect carbon factors.

"(B) OTHER ELIGIBLE ENTITIES.—For entities that are in eligible industrial sectors but are not covered entities, the amount of emission allowance rebates shall be based on the entity's indirect carbon factor.

"(C) NEW ENTITIES.—Not later than 2 years after the date of enactment of this title, the Administrator shall issue regulations governing the distribution of emission allowance rebates for the first and second years of operation

of a new entity in an eligible industrial sector. These regulations shall provide for—

"(i) the distribution of emission allowance rebates to such entities based on comparable entities in the same sector; and

"(ii) an adjustment in the third and fourth years of operation to reconcile the total amount of emission allowance rebates received during the first and second years of operation to the amount the entity would have received during the first and second years of operation had the appropriate data been available.

"(2) DIRECT CARBON FACTOR.—The direct carbon factor for a covered entity for a vintage year is the product of—

"(A) the average annual output of the covered entity for the 2 years preceding the year of the distribution; and

"(B) the most recent calculation of the average direct greenhouse gas emissions (expressed in tons of carbon dioxide equivalent) per unit of output for all covered entities in the sector, as determined by the Administrator under paragraph (4).

"(3) INDIRECT CARBON FACTOR.—

"(A) IN GENERAL.—The indirect carbon factor for an entity for a vintage year is the product obtained by multiplying the average annual output of the entity for the 2 years preceding the year of the distribution by both the electricity emissions intensity factor determined pursuant to subparagraph (B) and the electricity efficiency factor determined pursuant to subparagraph (C) for the year concerned.

"(B) ELECTRICITY EMISSIONS INTENSITY FACTOR.—

"(i) IN GENERAL.—Each person selling electricity to the owner or operator of an entity in any sector designated as an eligible industrial sector under section 763(b) shall provide the owner or operator of the entity and the Administrator, on an annual basis, the electricity emissions intensity factor for the entity. The electricity emissions intensity factor for the entity, expressed in tons of carbon dioxide equivalents per kilowatt hour, is determined by dividing—

"(I) the annual sum of the hourly product of—

"(aa) the electricity purchased by the entity from that person in each hour (expressed in kilowatt hours); multiplied by

"(bb) the marginal or weighted average tons of carbon dioxide equivalent per kilowatt hour that are reflected in the electricity charges to the entity, as determined by the entity's retail rate arrangements; by

"(II) the total kilowatt hours of electricity purchased by the entity from that person during that year.

"(ii) USE OF OTHER DATA TO DETERMINE FACTOR.—Where it is not possible to determine the precise electricity emissions intensity factor for an entity using the methodology in clause (i), the person selling electricity shall use the monthly average data reported by the Energy Information Administration or collected and reported by the Administrator for the utility

1 serving the entity to determine the elec-
2 tricity emissions intensity factor.

3 "(C) ELECTRICITY EFFICIENCY FACTOR.—
4 The electricity efficiency factor is the average
5 amount of electricity (in kilowatt hours) used
6 per unit of output for all entities in the relevant
7 sector, as determined by the Administrator
8 based on the best available data, including data
9 provided under paragraph (6).

10 "(D) INDIRECT CARBON FACTOR REDUC-
11 TION.—If an electricity provider received a free
12 allocation of emission allowances pursuant to
13 section 771(a)(1), the Administrator shall ad-
14 just the indirect carbon factor to avoid rebates
15 to the eligible entity for costs that the Admini-
16 strator determines were not incurred by the eli-
17 gible entity because the allowances were freely
18 allocated to the eligible entity's electricity pro-
19 vider and used for the benefit of industrial con-
20 sumers.

21 "(4) GREENHOUSE GAS INTENSITY CALCULA-
22 TIONS.—The Administrator shall calculate the aver-
23 age direct greenhouse gas emissions (expressed in
24 tons of carbon dioxide equivalent) per unit of output
25 and the electricity efficiency factor for all covered

entities in each eligible industrial sector every 4 years, using an average of the four most recent years of the best available data. For purposes of the lists required to be published no later than February 1, 2013, the Administrator shall use the best available data for the maximum number of years, up to 4 years, for which data are available.

"(5) ENSURING EFFICIENCY IMPROVEMENTS.—When making greenhouse gas calculations, the Administrator shall—

"(A) limit the average direct greenhouse gas emissions per unit of output, calculated under paragraph (4), for any eligible industrial sector to an amount that is not greater than it was in any previous calculation under this subsection;

"(B) limit the electricity emissions intensity factor, calculated under paragraph (3)(B) and resulting from a change in electricity supply, for any entity to an amount that is not greater than it was during any previous year; and

"(C) limit the electricity efficiency factor, calculated under paragraph (3)(C), for any eligible industrial sector to an amount that is not

greater than it was in any previous calculation under this subsection.

"(6) DATA SOURCES.—For the purposes of this subsection—

"(A) the Administrator shall use data from the greenhouse gas registry established under section 713, where it is available; and

"(B) each owner or operator of an entity in an eligible industrial sector and each department, agency, and instrumentality of the United States shall provide the Administrator with such information as the Administrator finds necessary to determine the direct carbon factor and the indirect carbon factor for each entity subject to this section.

"(c) TOTAL MAXIMUM DISTRIBUTION.—Notwithstanding subsections (a) and (b), the Administrator shall not distribute more allowances for any vintage year pursuant to this section than are allocated for use under this part pursuant to section 765 for that vintage year. For any vintage year for which the total emission allowance rebates calculated pursuant to this section exceed the number of allowances allocated pursuant to section 765, the Administrator shall reduce each entity's distribution on a pro rata basis so that the total distribution under

this section equals the number of allowances allocated under section 765.

"(d) IRON AND STEEL SECTOR.—For purposes of this section, the Administrator shall consider as in different industrial sectors—

"(1) entities using integrated iron and steelmaking technologies (including coke ovens, blast furnaces, and other iron-making technologies); and

"(2) entities using electric arc furnace technologies.

"(e) METAL, SODA ASH, OR PHOSPHATE PRODUCTION CLASSIFIED UNDER MORE THAN ONE NAICS CODE.—For purposes of this section, the Administrator shall not aggregate data for the beneficiation or other processing (including agglomeration) of metal ores, soda ash, or phosphate with subsequent steps in the process of metal, soda ash, or phosphate manufacturing. The Administrator shall consider the beneficiation or other processing (including agglomeration) of metal ores, soda ash, or phosphate to be in separate industrial sectors from the metal, soda ash, or phosphate manufacturing sectors. Industrial sectors that beneficiate or otherwise process (including agglomeration) metal ores, soda ash, or phosphate shall not receive emission allowance rebates under this sec-

tion related to the activity of extracting metal ores, soda ash, or phosphate.

''(f) COMBINED HEAT AND POWER.—For purposes of this section, and to achieve the purpose set forth in section 761(4),(the Administrator may consider entities to be in different industrial sectors or otherwise take into account the differences among entities in the same industrial sector, based upon the extent to which such entities use combined heat and power technologies.

''SEC. 765. INTERNATIONAL TRADE.

''It is the sense of the Senate that this Act will contain a trade title that will include a border measure that is consistent with our international obligations and designed to work in conjunction with provisions that allocate allowances to energy-intensive and trade-exposed industries.''.

TITLE II—PROGRAM ALLOCATIONS

SEC. 201. INVESTMENT IN CLEAN VEHICLE TECHNOLOGY.

(a) ESTABLISHMENT OF FUND.—There is established in the Treasury a separate account, which shall be known as the ''Clean Vehicle Technology Fund''.

(b) AUCTION PROCEEDS.—The Administrator shall deposit the proceeds of the auction conducted pursuant

to section 771(b)(3) of the Clean Air Act in the Clean Vehicle Technology Fund.

(c) AVAILABILITY OF AMOUNTS.—Of the amounts deposited in the Clean Vehicle Technology Fund—

(1) 80 percent shall be available to the Secretary of Energy to support—

(A) the development and demonstration of a national transportation low-emissions energy plan; and

(B) the use of plug-in electric drive vehicles, including medium- and heavy-duty motor vehicles (including transit vehicles) and other advanced technology vehicles (as defined in sections 131 and 136 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17011, 17013)) that are developed and produced in the United States; and

(2) 20 percent of the amounts shall be available to the Administrator for use in providing grants authorized under subtitle G of title VII of the Energy Policy Act of 2005 (42 U.S.C. 16131 et seq.).

(d) PILOT PROGRAM.—

(1) IN GENERAL.—Of the amounts deposited in accordance with (c)(1), the Secretary of Energy shall use not more than 5 percent to develop a na-

tional transportation low-emissions energy plan that shall—

(A) project the near- and long-term need for and location of electric drive vehicle refueling infrastructure at strategic locations across all major national highways, roads, and corridors;

(B) identify infrastructure and standardization needs for electricity providers, infrastructure providers, vehicle manufacturers, and electricity purchasers;

(C) establish an aspirational goal of achieving strategic deployment of electric vehicle infrastructure by 2020;

(D) be developed by the Secretary with the involvement of all relevant stakeholders; and

(E) prioritize the development of—

(i) standardized public charge access ports with wireless or smart card billing capability; and

(ii) level I and level II charge port systems (that charge an electric vehicle over a period of 8 to 14 hours and 4 to 8 hours, respectively) that will meet the en-

ergy requirements of the majority of plug-in hybrid and battery electric vehicles;

(F) examine the feasibility of level III charge port systems that can charge an electric vehicle over a period of 10 to 20 minutes; and

(G) focus on infrastructure that provides consumers with the lowest cost while providing convenient charge system access.

(2) ELECTRIC DRIVE DEMONSTRATION PROJECTS.—

(A) IN GENERAL.—The Secretary shall establish pilot projects to demonstrate electric drive vehicles and infrastructure.

(B) REQUIREMENTS.—The Secretary shall—

(i) establish the pilot projects described in subparagraph (A) after publication of the plan developed under paragraph (1);

(ii) use the plan to determine which regions of the United States are most ready to demonstrate electric vehicle infrastructure;

(iii) carry out the pilot projects under this paragraph in different regions of the United States; and

(iv) ensure that—

(I) at least 1 pilot project is carried out in a rural region of the United States; and

(II) at least 1 pilot project is focused on freight issues.

(3) FINANCIAL RESOURCES.—In carrying out the pilot projects under paragraph (2), the Secretary shall coordinate the use of appropriate financial incentives, grant programs, and other Federal financial resources to ensure that electric infrastructure delivery entities are able to participate in the pilot projects.

(4) LEEP COORDINATOR.—The Secretary may designate 1 full-time position within the Department of Transportation, to be known as the ''LEEP coordinator'', with responsibility to oversee—

(A) the development of the plan under paragraph (1); and

(B) the implementation of the pilot projects under paragraph (2).

SEC. 202. STATE AND LOCAL INVESTMENT IN ENERGY EFFICIENCY AND RENEWABLE ENERGY.

(a) DEFINITIONS.—For purposes of this section:

(1) ALLOWANCE.—The term ''allowance'' means an emission allowance established under section 721 of the Clean Air Act.

(2) INDIAN TRIBE.—The term ''Indian tribe'' has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).

(3) VINTAGE YEAR.—The term ''vintage year'' has the meaning given the term in section 700 of the Clean Air Act.

(b) DISTRIBUTION AMONG INDIAN TRIBES, STATES, LOCAL GOVERNMENTS, METROPOLITAN PLANNING ORGANIZATIONS AND RENEWABLE ELECTRICITY GENERATIONS.—The Administrator shall, in accordance with this section, distribute allowances allocated pursuant to section 771(a)(8) of the Clean Air Act for the following vintage year. The Administrator, after consultation with the Secretary of the Interior, shall distribute not less than 1 percent of such allowances to Indian tribes. The Administrator, after consultation with the Secretary of Energy and the with the assistance of the Secretary of Transportation, shall distribute the remaining allowances among the States, local governments, metropolitan planning orga-

nizations, and renewable electricity generations under this section each year in accordance with the following formula:

(1) 62.5 percent of the allowances shall be provided to the States, of which—

(A) 30 percent shall be divided equally among the States;

(B) 30 percent shall be distributed on a pro rata basis among the States based on the population of each State, as contained in the most recent reliable census data available from the Bureau of the Census for all States at the time at which the Administrator calculates the formula for distribution;

(C) 30 percent shall be distributed on a pro rata basis among the States on the basis of the energy consumption of each State, as contained in the most recent State Energy Data Report available from the Energy Information Administration (or such alternative reliable source as the Administrator may designate); and

(D) 10 percentage shall be provided to the States based on an energy-efficiency formula

1 developed by the Administrator, which formula
2 shall be—
3 (i) based on—
4 (I) weather-adjusted criteria; and
5 (II) performance-based metrics
6 that measure each State's success at
7 decreasing energy consumption or in-
8 creasing energy efficiency—
9 (aa) on a per capita basis in
10 the residential sector; and
11 (bb) on an energy consump-
12 tion per square-foot basis in the
13 commercial sector; and
14 (ii) updated every 3 years.
15 (2) 25 percent of the allowances shall be pro-
16 vided to local governments for energy conservation
17 and efficiency grants.
18 (3) 10 percent of the allowances shall be re-
19 served by the Secretary of Transportation for grants
20 to States and metropolitan planning organizations
21 for greenhouse gas reduction programs in the trans-
22 portation sector.
23 (4) 2.5 percent of the allowances shall be pro-
24 vided to renewable energy generating companies with
25 a capacity of 20 megawatts or greater exclusively for

the generation of renewable energy. The Administrator, in consultation with the Secretary of Energy, shall award allocations to renewable energy generation companies based on the number of megawatt-hours the company generates and the technology used. The Administrator shall promulgate such regulations as are appropriate to carry out this paragraph.

(c) USES.—The allowances distributed to each State, local government, and metropolitan planning organization pursuant to this section shall be used exclusively in accordance with the following requirements:

(1) ALLOCATION TO STATES.—Allowances allocated to the States under subsection (b)(1) shall be for the following purposes and be used in accordance with the following conditions:

(A) PURPOSES.—

(i) ENERGY EFFICIENCY PROGRAMS.—Not less than 35 percent shall be used exclusively for—

(I) implementation and enforcement of building codes;

(II) implementation of the energy-efficient manufactured homes program;

(III) implementation of building energy performance labeling; and

(IV) low-income community energy efficiency programs.

(ii) RENEWABLE ENERGY PROGRAMS.—Renewable energy programs for capital grants, production incentives, loans, loan guarantees, forgivable loans, direct provision of allowances, and interest rate buy-downs for—

(I) re-equipping, expanding, or establishing a manufacturing facility that receives certification from the Secretary of Energy pursuant to section 48C of the Internal Revenue Code of 1986 for the production of—

(aa) property designed to be used to produce energy from renewable energy sources; and

(bb) electricity storage systems;

(II) deployment of technologies to generate electricity from renewable energy sources; and

(III) deployment of facilities or equipment, such as solar panels, to generate electricity or thermal energy from renewable energy resources in and on buildings in an urban environment.

(iii) IMPROVEMENT IN ELECTRICITY TRANSMISSION.—Improvement in electricity transmission for 1 or more of the following purposes:

(I) State implementation of electricity transmission planning and siting activities that facilitate renewable energy development, including facilitation of landowner negotiations for transmission of right-of-way leasing or other contractual arrangements.

(II) Grants to nonprofit organizations that facilitate negotiations for transmission right-of-way leasing or other contractual agreements between landowners and developers.

(III) State or regional studies of renewable energy zones and resources

with insufficient transmission capacity, including geographical identification of potential renewable energy sites, environmental reviews, and land use or coastal zone constraints.

(IV) Grants to support landowner associations' and other nonprofit organizations' participation in State and Federal siting processes, including such associations' studies of renewable energy feasibility and benefits and associated data collection.

(V) Grants to landowners or landowner associations or nonprofit organizations for mitigation of impacts on property or ecosystems due to transmission projects that are part of an interconnection-wide plan focused on facilitating renewable energy development.

(VI) Training for State regulatory authority staff and local workforces relating to renewable energy generation resources and storage,

smart grid, or new transmission technologies.

(VII) Grants to transmission providers for transmission improvements (including smart grid investments) that benefit consumers.

(VIII) Grants to transmission providers for security upgrades to the transmission system and authorized uses under title XIII of the Energy Independence and Security Act of 2007 (42 U.S.C. 17381 et seq.).

(IX) Grants to develop energy storage, reliability, or distributed renewable generation projects.

(iv) END-USE CONSUMERS.—Cost-effective energy efficiency programs for end-use consumers of electricity, natural gas, home heating oil, or propane, including, where appropriate, programs or mechanisms administered by local governments and entities other than the State.

(v) RETROFITS AND HOUSING INVESTMENTS.—Energy retrofits and green investments in subsidized housing based on

standards to ensure that investments are cost-effective, taking into account reductions in future use of energy and other utilities, and the extent to which such retrofits and investments address repair and replacement needs that may otherwise need to be addressed with other forms of assistance. As a condition of such funding, the recipient shall commit to an additional period of affordability of not fewer than 15 years, covering all units for which such grants and loans are used.

(vi) THERMAL ENERGY EFFICIENCY.—Not less than 2 percent shall be used for thermal energy efficiency projects that provide district thermal energy through a network of pipes from 1 or more central plants to at least 2 or more buildings, combined heat and power that produces electricity and thermal energy with a minimum 60 percent overall efficiency on a lower-heating value basis, or recoverable waste energy (including mechanical, thermal, or electrical energy) that, if not for recovery, would be wasted and may be re-

covered or generated through modification of an existing facility or addition of a new facility. Allocations may be used for planning, engineering, and feasibility studies as well as project construction and development. Such projects shall—

(I) reduce or avoid greenhouse gas emissions; and

(II)(aa) produce thermal energy from renewable energy resources or natural cooling sources;

(bb) capture and productively use thermal energy from an electric generation facility;

(cc) integrate new electricity generation into an existing district energy system;

(dd) capture and productively uses surplus thermal energy from an industrial or municipal process (such as wastewater treatment); or

(ee) distribute and transfer to buildings the thermal energy from the energy sources described in items (aa) through (dd).

(vii) SMART GRID DEVELOPMENT.—Enabling the development of a Smart Grid (as described in section 1301 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17381)) for State, local government, and other public buildings and facilities, including integration of renewable energy resources and distributed generation, demand response, demand-side management, and systems analysis.

(B) CONDITIONS.—

(i) IN GENERAL.—The States shall prioritize expansion of existing energy efficiency programs approved and overseen by the State or the appropriate State regulatory authority.

(ii) SUPPLEMENTATION.—The States shall demonstrate that such allowances have been used to supplement, and not to supplant, existing and otherwise available State, local, and ratepayer funding for such purpose.

(2) ENERGY CONSERVATION AND EFFICIENCY.—Allowances allocated to local governments under subsection (b)(2) shall be used exclusively for

energy conservation and efficiency purposes specified under section 543 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17153).

(3) STATE AND MPO GRANTS.—Allocation to the Secretary of Transportation for grants to States and metropolitan planning organizations under subsection (b)(3) shall be used exclusively for the Transportation Greenhouse Gas Reduction program in accordance with sections 831 and 832 of the Clean Air Act.

(d) REPORTING.—Each Indian tribe, State, local government, metropolitan planning organization, and renewable electricity generating company directly receiving allowances or allowance value under this section shall submit to the Administrator a report that contains a list of entities receiving allowances or allowance value under this section.

(e) ENFORCEMENT.—If the Administrator determines that an Indian tribe, State, local government, metropolitan planning organization, or renewable electricity generation company is not in compliance with this section, the Administrator may withhold up to twice the number of allowances or allowance value that the Indian tribe, State, local government, metropolitan planning organization, or renewable electricity generation company failed to

use in accordance with the requirements of this section, that such Indian tribe, State, local government, metropolitan planning organization, or renewable electricity generation companies would otherwise be eligible to receive under this section in later years. Allowances withheld pursuant to this subsection shall be distributed among the remaining Indian tribes, States, local governments, metropolitan planning organizations, and renewable electricity generation companies in accordance with subsection (b).

SEC. 203. ENERGY EFFICIENCY IN BUILDING CODES.

The Administrator shall distribute emission allowances allocated for the following vintage year pursuant to section 771(a)(9) of the Clean Air Act among the States in accordance with the formula described in section 202 of this division exclusively for the purpose of section 163 of division A.

SEC. 204. BUILDING RETROFIT PROGRAM.

The Administrator shall distribute emission allowances allocated for the following vintage year pursuant to section 771(a)(10) of the Clean Air Act among the States in accordance with the formula described in section 202 of this division exclusively for the purpose of section 164 of division A.

SEC. 205. ENERGY INNOVATION HUBS.

(a) PURPOSE.—The Secretary shall carry out a program in accordance with this section to establish Energy Innovation Hubs to enhance the economic, environmental, and energy security of the United States by promoting commercial application of clean, indigenous energy alternatives to oil and other fossil fuels, reducing greenhouse gas emissions, and ensuring that the United States maintains a technological lead in the development and commercial application of state-of-the-art energy technologies.

(b) DISTRIBUTION OF ALLOWANCES TO ENERGY INNOVATION HUBS.—The Secretary shall, in accordance with the requirements of this section, distribute to eligible consortia allowances allocated for the following vintage year under section 772(a)(11) of the Clean Air Act.

SEC. 206. ARPA–E RESEARCH.

(a) DEFINITIONS.—For purposes of this section:

(1) ALLOWANCE.—The term ''allowance'' means an emission allowance established under section 721 of the Clean Air Act.

(2) DIRECTOR.—The term ''Director'' means Director of the Advanced Research Projects Agency–Energy.

(b) DISTRIBUTION OF ALLOWANCES.—The Director, in accordance with this section, shall distribute allowances allocated for the following vintage year under section

771(a)(12) of the Clean Air Act. Such allowances shall be distributed on a competitive basis to institutions of higher education, companies, research foundations, trade and industry research collaborations, or consortia of such entities, or other appropriate research and development entities to achieve the goals of the Advanced Research Projects Agency-Energy (as described in section 5012(c) of the America COMPETES Act (42 U.S.C. 16538(c))) through targeted acceleration of—

(1) novel early-stage energy research with possible technology applications;

(2) development of techniques, processes, and technologies, and related testing and evaluation;

(3) development of manufacturing processes for technologies; and

(4) demonstration and coordination with nongovernmental entities for commercial applications of technologies and research applications.

(c) SUPPLEMENT NOT SUPPLANT.—Assistance provided under this section shall be used to supplement, and not to supplant, any other Federal resources available to carry out activities described in this section.

SEC. 207. INTERNATIONAL CLEAN ENERGY DEPLOYMENT PROGRAM.

The Secretary of State shall distribute emission allowances allocated for the following vintage year pursuant to section 771(a)(13) of the Clean Air Act exclusively for the purpose of section 323 of division A.

SEC. 208. INTERNATIONAL CLIMATE CHANGE ADAPTATION AND GLOBAL SECURITY.

The Secretary of State shall distribute emission allowances allocated for the following vintage year pursuant to section 771(a)(14) of the Clean Air Act exclusively for the purpose of section 324 of division A.

SEC. 209. ENERGY EFFICIENCY AND RENEWABLE ENERGY WORKER TRAINING.

(a) ESTABLISHMENT OF FUND.—There is established in the Treasury a separate account, to be known as the ''Energy Efficiency and Renewable Energy Worker Training Fund''.

(b) AUCTION PROCEEDS.—The Administrator shall deposit the proceeds of the auction conducted pursuant to section 771(b)(5) of the Clean Air Act in the Energy Efficiency and Renewable Energy Worker Training Fund.

(c) AVAILABILITY OF AMOUNTS.—The Secretary of Energy shall use the amounts deposited in the Energy Efficiency and Renewable Energy Worker Training Fund under subsection (b) to carry out section 171(e)(8) of the

Workforce Investment Act of 1998 (29 U.S.C. 2916(e)(8)) without further appropriation or fiscal year limitation.

SEC. 210. WORKER TRANSITION.

(a) ESTABLISHMENT OF FUND.—There is established in the Treasury a separate account, to be known as the ''Worker Transition Fund''.

(b) AUCTION PROCEEDS.—The Administrator shall deposit the proceeds of the auction conducted pursuant to section 771(b)(6) of the Clean Air Act in the Worker Transition Fund.

(c) AVAILABILITY OF AMOUNTS.—The amounts deposited in the Worker Transition Fund shall be used to carry out part 2 of subtitle A of title III of division A.

SEC. 211. STATE PROGRAMS FOR GREENHOUSE GAS REDUCTION AND CLIMATE ADAPTATION.

(a) DEFINITIONS.—In this section:

(1) ALASKA NATIVE VILLAGE.—The term ''Alaska Native village'' means a federally recognized Indian tribe located in the State of Alaska and listed in the Bureau of Indian Affairs publication entitled ''Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs'' (74 Fed. Reg. 40218 (Aug. 11, 2009)).

(2) ALLOWANCE.—The term ''allowance'' means an emission allowance established under section 721 of the Clean Air Act.

(3) INDIAN TRIBE.—The term ''Indian tribe'' has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).

(4) SCCR ACCOUNT.—The term ''SCCR Account'' means a State Climate Change Response Account established under subsection (d)(5).

(5) VINTAGE YEAR.—The term ''vintage year'' has the meaning given that term in section 700 of the Clean Air Act.

(b) REGULATIONS; COORDINATION.—

(1) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator, or the heads of such Federal agencies as the President may designate, shall promulgate regulations to implement this section.

(2) COORDINATION.—If the President designates more than 1 Federal agency to implement this section, the President shall require such agencies to establish a memorandum of understanding providing for coordination of rulemaking and other

implementing activities, in accordance with this section.

(c) STATE CLIMATE CHANGE RESPONSE AND TRANSPORTATION FUND.—

(1) ESTABLISHMENT OF FUND.—There is established in the Treasury a separate account, to be known as the ''State Climate Change Response and Transportation Fund''.

(2) AUCTION PROCEEDS DEPOSITED TO FUND.—The Administrator shall deposit the proceeds of the auction conducted pursuant to section 771(b)(7) of the Clean Air Act in the State Climate Change Response and Transportation Fund.

(3) AVAILABILITY OF AMOUNTS.—All amounts deposited in the State Climate Change Response and Transportation Fund shall be available, without further appropriation or fiscal year limitation, to carry out this section.

(d) DISTRIBUTION OF ALLOWANCE PROCEEDS.—

(1) IN GENERAL.—The Administrator shall distribute, in accordance with this section, proceeds of the auction of allowances allocated for the following vintage year that have been deposited in the State Climate Change Response and Transportation Fund pursuant to subsection (c)(2).

(2) RESERVATION AND ALLOCATION.—The Administrator shall—

(A) reserve 10 percent of the proceeds of such allowances described in paragraph (1) for distribution among coastal and Great Lakes States in accordance with subsection (f);

(B) after consultation with the Secretary of the Interior, reserve at least 1 percent of the proceeds of those allowances for distribution to Indian tribes in accordance with subsection (e); and

(C) distribute the remaining proceeds of those allowances to fund State and local government programs for greenhouse gas reduction and climate adaptation, with such remaining proceeds divided equally between—

(i) funding of transportation grant programs under subsection (g); and

(ii) funding of other programs administered by the States, with the proceeds to be deposited in and administered through the State Climate Change Response Accounts established pursuant to paragraph (5).

(3) FORMULA FOR DISTRIBUTION.—The Administrator shall distribute the proceeds to be allocated pursuant to paragraph (2)(C)(ii) ratably among the States based on the product obtained by multiplying—

(A) the population of a State; and

(B) the allocation factor for the State determined under paragraph (4).

(4) STATE ALLOCATION FACTORS.—

(A) IN GENERAL.—Except as provided in subparagraph (B), the allocation factor for a State shall be the quotient obtained by dividing—

(i) the per capita income of all individuals in the United States; by

(ii) the per capita income of all individuals in the State.

(B) LIMITATION.—

(i) MAXIMUM.—If the allocation factor for a State as calculated under subparagraph (A) would exceed 1.2, the allocation factor for such State shall be 1.2.

(ii) MINIMUM.—If the allocation factor for a State as calculated under subparagraph (A) would be less than 0.8, the

allocation factor for such State shall be 0.8.

(C) PER CAPITA INCOME.—For purposes of this paragraph, per capita income shall be—

(i) determined at 2-year intervals; and

(ii) subject to subparagraph (D), equal to the average of the annual per capita incomes for the most recent period of 3 consecutive years for which satisfactory data are available from the Department of Commerce at the time such determination is made.

(D) REVENUE DIRECTLY RESULTING FROM A PRESIDENTIALLY DECLARED MAJOR DISASTER.—

(i) IN GENERAL.—For purposes of this paragraph, per capita income from 1 or more of the sources described in clause (ii) shall be reduced or excluded if the Secretary of Commerce—

(I) (in consultation with the Administrator and the heads of the departments or agencies involved) determines that the income accrues to persons as the result of a major disaster

1 designated by the President under the
2 Robert T. Stafford Disaster Relief
3 and Emergency Assistance Act (42
4 U.S.C. 5121 et seq.); and
5 (II) finds that the inclusion of 1
6 or more of the income sources, in
7 whole or in part, results in a transi-
8 tory, rather than a sustainable, in-
9 crease in a State's per capita income
10 level relative to the national average.
11 (ii) SOURCES OF INCOME.—The
12 sources of income referred to in clause (i)
13 are the following:
14 (I) Property and casualty insur-
15 ance (including homeowners and rent-
16 ers insurance).
17 (II) The National Flood Insur-
18 ance Program of the Federal Emer-
19 gency Management Agency.
20 (III) The Individual and Family
21 Grants Program of the Federal Emer-
22 gency Management Agency.
23 (IV) The Disaster Housing Pro-
24 gram of the Federal Emergency Man-
25 agement Agency.

(V) The Community Development Block Grant Program of the Department of Housing and Urban Development.

(VI) The Disaster Unemployment Assistance Program of the Department of Labor.

(VII) Any other source determined appropriate by the Administrator.

(5) STATE CLIMATE CHANGE RESPONSE ACCOUNTS.—Each State shall establish a State Climate Change Response Account, to be administered pursuant to State law, to receive and distribute the amounts provided under paragraph (2)(C)(ii). State regulations and implementing procedures relating to such accounts shall require compliance with the provisions of this section and all other applicable provisions of Federal law.

(e) DISTRIBUTION TO INDIAN TRIBES.—

(1) IN GENERAL.—The Administrator, or the heads of such Federal agencies as the President may designate, shall promulgate regulations establishing a program to distribute allowance proceeds to Indian tribes, in accordance with the requirements of this

section, of which not less than 18 percent shall be allocated to Alaska Native Villages for each year.

(2) USE OF PROCEEDS.—Allowance proceeds distributed to Indian tribes shall be used exclusively—

(A) in accordance with subsection (h); and

(B) in compliance with any approved tribal climate change response plan.

(f) DISTRIBUTION TO COASTAL AND GREAT LAKES STATES.—The Administrator, or the heads of such other Federal agencies as the President may designate, shall distribute proceeds of emission allowances for coastal State economic protection each fiscal year, in accordance with section 384 of division A.

(g) DISTRIBUTION OF TRANSPORTATION GRANTS.—

(1) DISTRIBUTION OF TRANSPORTATION GRANTS.—

(A) IN GENERAL.—The Secretary of Transportation, in consultation with the Administrator, shall distribute the amounts allocated for transportation grants each fiscal year in accordance with subsection (d)(2)(C)(i) as grants to public transportation agencies (including designated recipients (as defined in section 5307(a) and section 5340 of title 49, United

States Code)) and recipients and sub-recipients (as defined in section 5311(a) of title 49, United States Code).

(B) FORMULA.—In providing grants under this subsection, the Secretary shall distribute—

(i) 80 percent of the funds in accordance with the formula and conditions governing grants under section 5307 of title 49, United States Code;

(ii) 10 percent of the funds in accordance with the formula and conditions governing grants under section 5311 of title 49, United States Code; and

(iii) 10 percent of the funds in accordance with the formula and conditions governing grants under section 5340 of title 49, United States Code.

(h) USES OF ALLOWANCE PROCEEDS DEPOSITED TO SCCR ACCOUNTS.—

(1) IN GENERAL.—States shall use allowance proceeds deposited to SCCR Accounts under subsection (d)(2)(C)(ii) exclusively for the development and implementation of projects, programs, or measures as described in this section to address climate change by reducing emissions of greenhouse gases or

by building resilience to the impacts of climate change, including impacts such as—

(A) extreme weather events, such as flooding and tropical cyclones;

(B) more frequent heavy precipitation events;

(C) water scarcity and adverse impacts on water quality;

(D) stronger and longer heat waves;

(E) more frequent and severe droughts;

(F) rises in sea level;

(G) ecosystem disruption;

(H) increased wildfire risk;

(I) increased air pollution;

(J) effects on public health;

(K) impaired transportation systems and infrastructure; and

(L) reduced productivity of agricultural or ranching operations.

(2) REQUIREMENTS.—The allowance proceeds received by each SCCR Account for each fiscal year shall be used by the State exclusively to fund the following categories of activities, in compliance with the provisions of approved State climate change response plans:

(A) Grants to fund water system mitigation and adaptation partnerships in accordance with section 381 of division A.

(B) Flood control, protection, prevention and response programs and projects in accordance with section 382 of division A.

(C) Programs or projects implemented by State agencies as owners or operators of water systems to address any ongoing or forecasted climate-related impact on water quality, water supply or reliability, for 1 or more of the purposes listed in section 381(d) of division A.

(D) Programs or projects to reduce greenhouse gas emissions through recycling or for increasing recycling rates in accordance with section 154 of division A.

(E) Programs and projects addressing adverse impacts of climate change affecting agriculture or ranching activities.

(F) Programs or projects addressing air pollution or air quality impacts caused or exacerbated by climate change.

(G) Programs or projects to reduce greenhouse gas emissions that result in a decrease in emissions of other air pollutants.

(3) DISTRIBUTION FOR LOCAL GOVERNMENTS.—Not less than 12.5 percent of the proceeds deposited to SCCR Accounts shall be distributed by each State to units of local government within such State, to be used exclusively to support the categories of climate change response efforts listed in paragraph (2).

(4) VULNERABLE POPULATIONS.—In deploying allowance proceeds under this section, States and units of local government shall ensure that programs and projects are funded responding to impacts affecting socially and economically vulnerable populations, including—

(A) persons of low-income (as defined in title I of the Housing and Community Development Act of 1974, (42 U.S.C. 5301 et seq.));

(B) members of socially disadvantaged groups (as defined in section 2501(e)(2) of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C. 2279(e)(2)));

(C) individuals over 65 years of age and under 5 years of age; and

(D) individuals with disabilities.

(5) INTENT OF CONGRESS.—It is the intent of the Congress that allowances distributed to carry

out this section should be used to supplement, and not replace, existing sources of funding used to address and build resilience to the impacts of climate change.

(i) STATE AND TRIBAL CLIMATE CHANGE RESPONSE PLANS.—

(1) IN GENERAL.—The regulations promulgated pursuant to subsection (b) shall include requirements for submission and approval of State and tribal climate change response plans under this section. Beginning with vintage year 2012, distribution of allowance proceeds to a State pursuant to this section shall be contingent on approval of a State climate change response plan for such State that meets the requirements of such regulations.

(2) REQUIREMENTS.—Regulations promulgated under this section shall require, at minimum, that State climate change response plans—

(A) assess and prioritize the vulnerability of a State to a broad range of impacts of climate change, based on the best available science;

(B) identify and prioritize specific cost-effective projects, programs, and measures to mitigate and build resilience to current and pre-

dicted impacts of climate change, including projects, programs, and measures within each of the categories of activities listed in subsection (h)(2);

(C) include an assessment of potential for carbon reduction through changes to land management policies (including enhancement or protection of forest carbon sinks);

(D) ensure that the State fully considers and undertakes, to the maximum extent practicable, initiatives that—

(i) protect or enhance natural ecosystem functions, including protection, maintenance, or restoration of natural infrastructure such as wetlands, reefs, and barrier islands to buffer communities from floodwaters or storms, watershed protection to maintain water quality and groundwater recharge, or floodplain restoration to improve natural flood control capacity;

(ii) where appropriate, use nonstructural approaches, including practices that use, enhance, or mimic the natural hydrologic cycle processes of infiltration, evapotranspiration, and use; or

(iii) where appropriate, protect forested land via scientifically based ecological restoration practices, including by reducing fuel loads, restoring forest diversity, and conducting research on pest mitigation;

(E) give consideration to impacts affecting socially and economically vulnerable populations, including—

(i) persons of low-income (as defined in title I of the Housing and Community Development Act of 1974 (42 U.S.C. sec. 5301 et seq.));

(ii) members of socially disadvantaged groups (as defined in section 2501(e)(2) of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C. 2279(e)(2)));

(iii) persons over 65 years of age and under 5 years of age; and

(iv) persons with disabilities;

(F) use pre-disaster mitigation, emergency response, and public insurance programs to mitigate the impacts of climate change;

(G) be consistent with Federal conservation and environmental laws and, to the max-

imum extent practicable, avoid environmental degradation; and

(H) be revised and resubmitted for approval not less frequently than every 5 years.

(3) TRIBAL CLIMATE CHANGE RESPONSE PLANS.—Requirements for tribal climate change response plans should include the requirements listed in subparagraphs (A) through (H) of paragraph (2), as appropriate, but may vary from those of State climate change response plans to the extent necessary to account for the special circumstances of Indian tribes.

(4) COORDINATION WITH PRIOR PLANNING EFFORTS.—In implementing this subsection, the Administrator, or the heads of such Federal agencies as the President may designate, shall—

(A) draw upon lessons learned and best practices from pre-existing State and tribal climate change response planning efforts;

(B) seek to avoid duplication of such efforts; and

(C) ensure that the plans developed under this section are developed in coordination with State natural resources adaptation plans developed under section 369 of division A.

(j) REPORTING.—Not later than 1 year after each date of receipt of allowance proceeds under this section, and biennially thereafter until the value of any allowance proceeds received under this section has been fully expended, each State or Indian tribe receiving allowance proceeds under this section shall submit to the Administrator, or the heads of such Federal agencies as the President may designate, a report that—

(1) provides a full accounting for the use by the State or Indian tribe of allowance proceeds distributed under this section, including a description of the projects, programs, or measures supported using such proceeds;

(2) includes a report prepared by an independent third party, in accordance with such regulations as are promulgated by the Administrator or the heads of such other Federal agencies as the President may designate, evaluating the performance of the projects, programs, or measures supported under this section; and

(3) identifies any use by the State or Indian tribe of allowance proceeds distributed under this section for the reduction of flood and storm damage and the effects of climate change on water and flood protection infrastructure.

(k) AUDITING.—The Administrator, or the heads of such Federal agencies as the President may designate, shall have authority to conduct such audits or other review of States implementation of and compliance with this section as such Federal officials may in their discretion determine to be necessary or appropriate.

(l) ENFORCEMENT.—If the Administrator, or the heads of such Federal agencies as the President may designate, determine that a State or Indian tribe is not in compliance with this section, the Administrator or such other agency head may withhold a quantity of the allowance proceeds equal to up to twice the quantity of allowance proceeds that the State or Indian tribe failed to use in accordance with the requirements of this section, that such State or Indian tribe would otherwise be eligible to receive under this section in 1 or more later years. Allowance proceeds withheld pursuant to this subsection shall be distributed among the remaining States or Indian tribes ratably in accordance with—

(1) the formula under subsection (d), in the case of allowances withheld from a State; or

(2) in accordance with subsection (e), in the case of allowance proceeds withheld from an Indian tribe.

SEC. 212. CLIMATE CHANGE HEALTH PROTECTION AND PROMOTION FUND.

(a) ESTABLISHMENT OF FUND.—There is established in the Treasury a separate account, to be known as the ''Climate Change Health Protection and Promotion Fund''.

(b) AUCTION PROCEEDS.—The Administrator shall deposit the proceeds of the auction pursuant to section 771(b)(8) of the Clean Air Act in the Climate Change Health Protection and Promotion Fund.

(c) AVAILABILITY OF AMOUNTS.—All amounts deposited in the Climate Change Health Protection and Promotion Fund shall be available to the Secretary of Health and Human Services to carry out subpart B of subtitle C of title III of division A, without further appropriation or fiscal year limitation.

(d) DISTRIBUTION OF FUNDS BY HHS.—In carrying out subpart B of subtitle C of title III of division A, the Secretary of Health and Human Services may make funds deposited in the Climate Change Health Protection and Promotion Fund available to—

(1) other departments, agencies, and offices of the Federal Government;

(2) foreign, State, tribal, and local governments; and

(3) such other entities as the Secretary determines to be appropriate.

(e) SUPPLEMENT, NOT REPLACE.—It is the intent of Congress that funds made available to carry out subpart B of subtitle C of title III of division A should be used to supplement, and not replace, existing sources of funding for public health.

SEC. 213. CLIMATE CHANGE SAFEGUARDS FOR NATURAL RESOURCES CONSERVATION.

(a) ESTABLISHMENT OF FUND.—There is established in the Treasury a separate account, to be known as the ''Natural Resources Climate Change Adaptation Account''.

(b) AUCTION PROCEEDS.—The Administrator shall deposit the proceeds of the auction conducted pursuant to section 771(b)(9) of the Clean Air Act in the Natural Resources Climate Change Adaptation Account.

(c) AVAILABILITY OF AMOUNTS.—All amounts deposited in the Natural Resources Climate Change Adaptation Account shall be available without further appropriation or fiscal year limitation solely for the purposes of section 370 of division A.

SEC. 214. NUCLEAR WORKER TRAINING.

(a) ESTABLISHMENT OF FUND.—There is established in the Treasury a separate account, to be known as the ''Nuclear Worker Training Fund''.

(b) AUCTION PROCEEDS.—The Administrator shall deposit the proceeds of the auction conducted pursuant to section 771(b)(10) of the Clean Air Act in the Nuclear Worker Training Fund.

(c) AVAILABILITY OF AMOUNTS.—All amounts deposited in the Nuclear Worker Training Fund shall be available without further appropriation or fiscal year limitation solely for the purpose of carrying out section 132 of division A.

SEC. 215. SUPPLEMENTAL AGRICULTURE, RENEWABLE ENERGY, AND FORESTRY.

(a) ESTABLISHMENT OF FUND.—There is established in the Treasury a separate account, to be known as the ''Supplemental Agriculture, Renewable Energy, and Forestry Fund''.

(b) AUCTION PROCEEDS.—The Administrator shall deposit the proceeds of the auction conducted pursuant to section 771(b)(11) of the Clean Air Act in the Supplemental Agriculture, Renewable Energy, and Forestry Fund.

(c) AVAILABILITY OF AMOUNTS.—All amounts deposited in the Supplemental Agriculture, Renewable Energy,

1 and Forestry Fund shall be available without further ap-
2 propriation or fiscal year limitation solely for the purpose
3 of carrying out section 155 of division A.

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