to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4843. Mr. ALLARD submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4844. Mr. MENENDEZ (for himself and Mr. KERRY) submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4845. Mr. MENENDEZ (for himself, Mr. LAUTENBERG, and Mr. SANDERS) submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4846. Mr. MENENDEZ (for himself and Mr. KERRY) submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4847. Mr. MENENDEZ (for himself, Mr. LAUTENBERG, and Mr. SANDERS) submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4848. Mr. NELSON of Nebraska submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4849. Mr. BAUCUS submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4850. Mr. BAUCUS submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4851. Mr. BARRASSO submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4852. Mr. BARRASSO submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4853. Mr. BARRASSO submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4854. Mr. BARRASSO submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4855. Mr. BARRASSO submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4856. Mr. BARRASSO submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4857. Mr. DORGAN submitted an amendment intended to be proposed by him to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4858. Mrs. DOLE submitted an amendment intended to be proposed by her to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4859. Mrs. DOLE submitted an amendment intended to be proposed by her to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4860. Mrs. DOLE submitted an amendment intended to be proposed by her to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4861. Mrs. DOLE (for herself and Mr. WARNER) submitted an amendment intended to be proposed by her to the bill S. 3036, supra; which was ordered to lie on the table.

SA 4862. Mrs. DOLE (for herself and Mr. WHITEHOUSE) submitted an amendment intended to be proposed by her to the bill S. 3036, supra; which was ordered to lie on the table.

TEXT OF AMENDMENTS

SA 4825. Mrs. BOXER (for herself, Mr. WARNER, and Mr. LIEBERMAN) proposed an amendment to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the ''Lieberman-Warner Climate Security Act of 2008''.

(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. Purposes.
Sec. 4. Definitions.

TITLE I—IMMEDIATE ACTION

Subtitle A—Tracking Greenhouse Gas Emissions

Sec. 101. Purpose.
Sec. 102. Federal greenhouse gas registry.
Sec. 103. Enforcement.
Sec. 104. No effect on other requirements.

Subtitle B—Early Clean Technology Deployment

Sec. 111. Efficient Buildings Grant Program.
Sec. 112. Super-Efficient Equipment and Appliances Development (SEAD) Program.
Sec. 113. Clean medium- and heavy-duty hybrid fleets program.
Sec. 114. International clean energy deployment.

Subtitle C—Research

Sec. 121. Research on effects of climate change on drinking water utilities.
Sec. 122. Rocky Mountain Centers for Study of Coal Utilization.
Sec. 123. Sun grant center for research on compliance with Clean Air Act.
Sec. 124. Study by Administrator of black carbon emissions.
Sec. 125. Study by Administrator of recycling.
Sec. 126. Retail carbon offsets.

TITLE II—CAPPING GREENHOUSE GAS EMISSIONS

Sec. 201. Emission allowances.
Sec. 202. Compliance obligation.
Sec. 203. Penalty for noncompliance.
Sec. 204. Regulations.
Sec. 205. Report to Congress.

TITLE III—REDUCING EMISSIONS THROUGH OFFSETS AND INTERNATIONAL ALLOWANCES

Subtitle A—Offsets in the United States

Sec. 301. Outreach initiative on revenue enhancement for agricultural producers.
Sec. 302. Establishment of a domestic offset program.
Sec. 303. Eligible offset project types.
Sec. 304. Project initiation and approval.
Sec. 305. Offset verification and issuance of allowances.
Sec. 306. Tracking of reversals for sequestration projects.
Sec. 307. Examinations.
Sec. 308. Timing and the provision of offset allowances.
Sec. 309. Offset registry.
Sec. 310. Environmental considerations.
Sec. 311. Program review.

Subtitle B—Offsets and Emission Allowances From Other Countries

Sec. 321. Offset allowances originating from projects in other countries.
Sec. 322. Emission allowances from other countries.

Subtitle C—Agriculture and Forestry Program in the United States

Sec. 331. Allocation.
Sec. 332. Agriculture and Forestry Program.
Sec. 333. Agricultural and forestry greenhouse gas management research.

TITLE IV—ESTABLISHING A GREENHOUSE GAS EMISSION ALLOWANCE TRADING MARKET

Subtitle A—Trading

Sec. 401. Sale, exchange, and retirement of allowances.
Sec. 402. No restriction on transactions.
Sec. 403. Allowance transfer and tracking system.

Subtitle B—Market Oversight and Enforcement

Sec. 411. Finding.
Sec. 412. Carbon market oversight and regulation.

Subtitle C—Carbon Market Efficiency Board

Sec. 421. Establishment.
Sec. 422. Composition and administration.
Sec. 423. Duties.

Subtitle D—Climate Change Technology Board

Sec. 431. Establishment.
Sec. 432. Purpose.
Sec. 433. Independence.
Sec. 434. Advance notification of distributions of funds.
Sec. 435. Congressional oversight of board expenditures.
Sec. 436. Requirements.
Sec. 437. Reviews and audits by Comptroller General.

Subtitle E—Auction on Consignment

Sec. 441. Regulations.

TITLE V—FEDERAL PROGRAM TO PREVENT ECONOMIC HARDSHIP

Subtitle A—Banking

Sec. 501. Indication of calendar year.
Sec. 502. Effect of time.

Subtitle B—Borrowing

Sec. 511. Regulations.
Sec. 512. Term.
Sec. 513. Repayment with interest.

Subtitle C—Emergency Off-Ramps

Sec. 521. Emergency off-ramps triggered by Board.
Sec. 522. Cost-containment auctions.
Sec. 523. Cost-containment auction price.
Sec. 524. Regular auction reserve price.
Sec. 525. Pool of emission allowances for the cost-containment auctions.
Sec. 526. Limit on the quantity of emission allowances sold at any cost-containment auction.
Sec. 527. Using the proceeds of the annual cost-containment auctions.
Sec. 528. Returning emission allowances not sold at the annual cost-containment auctions.
Sec. 529. Discontinuing the annual cost-containment auctions.

Subtitle D—Transition Assistance for Workers

Sec. 531. Establishment.
Sec. 532. Auctions.
Sec. 533. Deposits.
Sec. 534. Uses.
Sec. 535. Climate Change Worker Assistance Program.
Sec. 536. Workforce training and safety.

Subtitle E—Transition Assistance for Carbon-Intensive Manufacturers

Sec. 541. Allocation.
Sec. 542. Distribution.

Subtitle F—Transition Assistance for Fossil Fuel-Fired Electricity Generators

Sec. 551. Allocation.
Sec. 552. Distribution.

Subtitle G—Transition Assistance for Refiners of Petroleum-Based Fuel
Sec. 561. Allocation.
Sec. 562. Distribution.
Subtitle H—Transition Assistance for Natural-Gas Processors
Sec. 571. Allocation.
Sec. 572. Distribution.
Subtitle I—Federal Program for Energy Consumers
Sec. 581. Establishment.
Sec. 582. Auction.
Sec. 583. Deposits.
Sec. 584. Disbursements from the Climate Change Consumer Assistance Fund.
Sec. 585. Sense of Senate on tax initiative to protect consumers.
TITLE VI—PARTNERSHIPS WITH STATES, LOCALITIES, AND INDIAN TRIBES
Subtitle A—Partnerships With State Governments to Prevent Economic Hardship While Promoting Efficiency
Sec. 601. Assisting energy consumers through local distribution companies.
Sec. 602. Assisting State economies that rely heavily on manufacturing and coal.
Subtitle B—Partnerships With States, Localities, and Indian Tribes to Reduce Emissions
Sec. 611. Mass transit.
Sec. 612. Updating State building energy efficiency codes.
Sec. 613. Energy efficiency and conservation block grant program.
Sec. 614. State leaders in reducing emissions.
Subtitle C—Partnerships With States and Indian Tribes to Adapt to Climate Change
Sec. 621. Allocation.
Sec. 622. Coastal impacts.
Sec. 623. Impacts on water resources and agriculture.
Sec. 624. Impacts on Alaska.
Sec. 625. Impacts on Indian tribes.
Subtitle D—Partnerships With States, Localities, and Indian Tribes to Protect Natural Resources
Sec. 631. State Wildlife Adaptation Fund.
Sec. 632. Cost-sharing.
Sec. 633. State comprehensive adaptation strategies.
TITLE VII—RECOGNIZING EARLY ACTION
Sec. 701. Regulations.
Sec. 702. Allocation.
Sec. 703. General distribution.
Sec. 704. Distribution to entities holding State emission allowances.
Sec. 705. Distribution to power plants that repowered pursuant to consent decrees.
Sec. 706. Distribution to carbon capture and sequestration projects.
TITLE VIII—EFFICIENCY AND RENEWABLE ENERGY
Subtitle A—Efficient Buildings
Sec. 801. Allocation.
Sec. 802. Efficient Buildings Allowance Program.
Subtitle B—Efficient Equipment and Appliances
Sec. 811. Allocation.
Sec. 812. Super-Efficient Equipment and Appliances Deployment Program.
Subtitle C—Efficient Manufacturing
Sec. 821. Allocation.
Sec. 822. Efficient manufacturing program.
Subtitle D—Renewable Energy
Sec. 831. Allocation.
Sec. 832. Bonus allowances for renewable energy.
TITLE IX—LOW-CARBON ELECTRICITY AND ADVANCED RESEARCH
Subtitle A—Low- and Zero-Carbon Electricity Technology
Sec. 901. Definitions.
Sec. 902. Low- and Zero-Carbon Electricity Technology Fund.
Sec. 903. Auctions.
Sec. 904. Deposits.
Sec. 905. Use of funds.
Sec. 906. Financial incentives program.
Sec. 907. Requirements.
Sec. 908. Forms of awards.
Sec. 909. Selection criteria.
Subtitle B—Advanced Research
Sec. 911. Auctions.
Sec. 912. Deposits.
Sec. 913. Use of funds.
TITLE X—FUTURE OF COAL
Subtitle A—Kick-Start for Carbon Capture and Sequestration
Sec. 1001. Carbon Capture and Sequestration Technology Fund.
Sec. 1002. Auctions.
Sec. 1003. Deposits.
Sec. 1004. Use of funds.
Sec. 1005. Kick-Start Program.
Subtitle B—Long-Term Carbon Capture and Sequestration Incentives
Sec. 1011. Allocation.
Sec. 1012. Qualifying projects.
Sec. 1013. Distribution.
Sec. 1014. 10-Year limit.
Sec. 1015. Exhaustion of Bonus Allowance Account.
Subtitle C—Legal Framework
Sec. 1021. National drinking water regulations.
Sec. 1022. Assessment of geological storage capacity for carbon dioxide.
Sec. 1023. Study of feasibility relating to construction and operation of pipelines and geological carbon dioxide sequestration activities.
Sec. 1024. Liabilities for closed geological storage sites.
TITLE XI—FUTURE OF TRANSPORTATION
Subtitle A—Kick-Start for Clean Commercial Fleets
Sec. 1101. Purpose.
Sec. 1102. Allocation.
Sec. 1103. Clean medium- and heavy-duty hybrid fleets program.
Subtitle B—Advanced Vehicle Manufacturers
Sec. 1111. Climate Change Transportation Energy Technology Fund.
Sec. 1112. Auctions.
Sec. 1113. Deposits.
Sec. 1114. Use of funds.
Sec. 1115. Manufacturer facility conversion program.
Subtitle C—Cellulosic Biofuel
Sec. 1121. Cellulosic biofuel program.
Subtitle D—Low-Carbon Fuel Standard
Sec. 1131. Findings.
Sec. 1132. Definitions.
Sec. 1133. Establishment.
TITLE XII—FEDERAL PROGRAM TO PROTECT NATURAL RESOURCES
Subtitle A—Auctions
Sec. 1201. Definitions.
Sec. 1202. Auctions.
Subtitle B—Funds
Sec. 1211. Bureau of Land Management Emergency Firefighting Fund.
Sec. 1212. Forest Service Emergency Firefighting Fund.
Subtitle C—National Wildlife Adaptation Strategy
Sec. 1221. Definitions.
Sec. 1222. National strategy.
Sec. 1223. Science Advisory Board.
Sec. 1224. Climate Change and Natural Resource Science Center.
Subtitle D—National Wildlife Adaptation Program
Sec. 1231. National Wildlife Adaptation Fund.
Sec. 1232. Department of the Interior.
Sec. 1233. Forest service.
Sec. 1234. Environmental Protection Agency.
Sec. 1235. Corps of Engineers.
Sec. 1236. Department of Commerce.
Sec. 1237. National Academy of Sciences report.
TITLE XIII—INTERNATIONAL PARTNERSHIPS TO REDUCE EMISSIONS AND ADAPT TO CLIMATE CHANGE
Subtitle A—Promoting Fairness While Reducing Emissions
Sec. 1301. Definitions.
Sec. 1302. Purposes.
Sec. 1303. International negotiations.
Sec. 1304. International Climate Change Commission.
Sec. 1305. Determinations on comparable action.
Sec. 1306. International reserve allowance program.
Sec. 1307. Adjustment of international reserve allowance requirements.
Subtitle B—International Partnerships to Reduce Deforestation and Forest Degradation
Sec. 1311. Findings; purpose.
Sec. 1312. Capacity building program.
Sec. 1313. Forest carbon activities.
Sec. 1314. Establishing and distributing offset allowances.
Sec. 1315. Limitation on double counting.
Sec. 1316. Effect of subtitle.
Subtitle C—International Partnerships to Deploy Clean Energy Technology
Sec. 1321. International Clean Energy Deployment.
Subtitle D—International Partnerships to Adapt to Climate Change and Protect National Security
Sec. 1331. International Climate Change Adaptation and National Security Fund.
Sec. 1332. International Climate Change Adaptation and National Security Program.
Sec. 1333. Monitoring and evaluation of programs.
TITLE XIV—REDUCING THE DEFICIT
Sec. 1401. Deficit Reduction Fund.
Sec. 1402. Auctions.
Sec. 1403. Deposits.
Sec. 1404. Disbursements from Fund.
TITLE XV—CAPPING HYDROFLUOROCARBON EMISSIONS
Sec. 1501. Regulations.
Sec. 1502. National recycling and emission reduction program.
Sec. 1503. Fire suppression agents.
TITLE XVI—PERIODIC REPORTS AND RECOMMENDATIONS
Sec. 1601. National Academy of Sciences reports.
Sec. 1602. Environmental Protection Agency recommendations.
Sec. 1603. Presidential recommendations.
TITLE XVII—MISCELLANEOUS
Subtitle A—Climate Security Act Administrative Fund
Sec. 1701. Establishment.

Sec. 1702. Auctions.
Sec. 1703. Deposits.
Sec. 1704. Disbursements from Fund.
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Subtitle B—Presidential Emergency Declarations and Proclamations

Sec. 1711. Emergency declaration.
Sec. 1712. Presidential proclamation.
Sec. 1713. Congressional rescission or modification.
Sec. 1714. Report to Federal agencies.
Sec. 1715. Termination.
Sec. 1716. Public comment.
Sec. 1717. Prohibition on delegation.

Subtitle C—Administrative Procedure and Judicial Review

Sec. 1721. Regulatory procedures.
Sec. 1722. Enforcement.
Sec. 1723. Powers of Administrator.

Subtitle D—State Authority

Sec. 1731. Retention of State authority.

Subtitle E—Tribal Authority

Sec. 1741. Tribal authority.

Subtitle F—Clean Air Act

Sec. 1751. Integration.

Subtitle G—State–Federal Interaction and Research

Sec. 1761. Study and research.

SEC. 2. FINDINGS.

Congress finds that—

(1) unchecked global climate change poses a significant threat to—

(A) the national security of the United States;

(B) the economy of the United States;

(C) public health in the United States;

(D) the well-being of residents of the United States;

(E) the well-being of residents of other countries; and

(F) the global environment;

(2) pursuant to the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992, the United States is committed to stabilizing greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous interference with the climate system;

(3) according to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, stabilizing greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous interference with the climate system will require a global effort to reduce worldwide anthropogenic greenhouse gas emissions by 50 to 85 percent below 2000 levels by 2050;

(4) prompt, decisive action is critical, because greenhouse gases can persist in the atmosphere for more than a century;

(5) global climate change represents a potentially significant threat multiplier for instability around the world and is likely to exacerbate competition and conflict over agricultural, vegetative, marine, and water resources and displace people, thus increasing hunger and poverty and causing increased pressure on the most vulnerable developing countries;

(6) the strategic, social, political, economic, cultural, and environmental consequences of global climate change are likely to have disproportionate impacts on the most vulnerable developing countries, which have fewer industrial emissions and less economic and financial capacity to respond;

(7) less developed countries rely to a much greater degree on the natural and environmental systems likely to be affected by climate change for sustenance and livelihoods, as well as economic growth and stability;

(8) the consequences of global climate change, including increases in poverty and destabilization of economies and societies, are likely to pose a danger to the security interest and economic interest of the United States;

(9) it is in the national security and economic interest of the United States to recognize, plan for, and mitigate the international strategic, social, political, cultural, environmental and economic effects of a changing climate and to assist those in the most vulnerable developing countries to increase resilience to those effects;

(10) the ingenuity of the people of the United States will allow the United States to become a leader in curbing global climate change;

(11) it is possible and desirable—

(A) to cap greenhouse gas emissions, from the sources that together account for the majority of those emissions in the United States, at or below the current level in 2012;

(B) to lower the cap each year between 2012 and 2050; and

(C) to include in the system—

(i) measures to contain costs;

(ii) measures providing for periodic reviews of the system;

(iii) an aggressive program for deploying advanced technology that is developed and manufactured in the United States;

(iv) programs to assist low- and middle-income energy consumers; and

(v) programs to mitigate the impacts of that degree of global climate change that now is unavoidable;

(12) Congress will need to update the system, including the emission caps, to account for new scientific information and steps taken or not taken by other countries;

(13) the Federal Government currently possesses adequate data to support initial steps in the establishment of a greenhouse gas emission trading market and to support initial allocations of emission allowances based upon historical emissions and other historical activities;

(14) the smooth functioning of a national emission trading market that is based upon a national emissions cap that comes into effect at the beginning of calendar year 2012 necessitates the establishment, not later than January 1, 2011, of a Federal system for determining, recording, and reporting greenhouse gas emissions at an entity-specific level;

(15) prompt and decisive domestic climate change investments represent an unprecedented economic development opportunity for the United States;

(16) an environmental economic development policy should seek to increase the per-capita income and protect the interests of working families;

(17) the measures in this Act are not the only measures that Congress will need to enact over the decades-long program established by this Act in order to avert dangerous climate change and avoid the imposition of hardship on United States residents;

(18) State and local government programs, including incentives, renewable portfolio standards, energy-efficiency requirements, land-use policies, and other such programs typically implemented at the State and local levels are having and will continue to have a substantial and direct beneficial effect on reducing greenhouse gas emissions;

(19) emissions of sulfur dioxide, nitrogen oxides, and mercury in the United States continue to inflict harm on the public health, economy, and natural resources of the United States;

(20) fossil fuel-fired electric power generating facilities emit approximately 67 percent of the total sulfur-dioxide emissions, 23 percent of the total nitrogen-oxide emissions, 40 percent of the total carbon-dioxide emissions, and 40 percent of the total mercury emissions in the United States;

(21) more than half the electricity generated in the United States is generated through the burning of coal;

(22) the reserve of coal in the United States is larger than the reserve of coal in any other country;

(23) while the reductions in emissions of sulfur dioxide, nitrogen oxides, and mercury that will occur in the presence of a declining cap on the greenhouse gas emissions from coal-fired electric power generating facilities are larger than those that would occur in the absence of such a cap, new, stricter Federal limits on emissions of sulfur dioxide, nitrogen oxides, and mercury may still be needed to protect public health; and

(24) many existing fossil fuel-fired electric power generating facilities in the United States were exempted by Congress from emission limitations applicable to new and modified facilities of that type based on an expectation by Congress that, over time, those facilities would be retired or updated with new pollution control equipment, but many of the exempted facilities nevertheless continue to operate and emit pollution at relatively high rates and without new pollution control equipment.

SEC. 3. PURPOSES.

The purposes of this Act are—

(1) to establish the core of a Federal program that will reduce United States greenhouse gas emissions substantially enough to avert the catastrophic impacts of global climate change; and

(2) to accomplish that purpose while—

(A) preserving robust growth in the United States economy;

(B) creating new jobs in the United States;

(C) avoiding the imposition of hardship on United States residents;

(D) reducing the dependence of the United States on petroleum produced in other countries;

(E) imposing no net cost on the Federal Government;

(F) ensuring that the financial resources provided by the program established by this Act for technology deployment are predominantly invested in development, production, and construction of that technology in the United States; and

(G) encouraging complementary State and local government policies and programs that promote energy efficiency and technology deployment or otherwise reduce greenhouse gas emissions.

SEC. 4. DEFINITIONS.

In this Act:

(1) ADDITIONAL; ADDITIONALITY.—The terms ''additional'' and ''additionality'' mean the extent to which reductions in greenhouse gas emissions or increases in sequestration are incremental to business as usual, with no greenhouse gas incentives, for a project entity.

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

(3) ADVANCED TECHNOLOGY VEHICLE.—The term ''advanced technology vehicle'' means an electric vehicle, a fuel cell-powered vehicle, a hybrid or plug-in hybrid electric vehicle, an advanced diesel light duty motor vehicle, or a hydrogen-fueled vehicle that meets—

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

(B) any new emission standard for fine particulate matter prescribed by the Administrator under that Act; and

(C) a standard of at least 125 percent of the average base year combined fuel economy, calculated on an energy-equivalent basis for

vehicles other than advanced diesel light-duty motor vehicles, for vehicles of a substantially similar nature and footprint.

(4) ALLOWANCE.—The term ''allowance'' means—

(A) an emission allowance;

(B) an offset allowance; or

(C) an international allowance.

(5) AQUATIC SYSTEM.—

(A) IN GENERAL.—The term ''aquatic system'' means any environment that is wet for at least part of the year in which plants and animals interact with the chemical and physical features of the environment.

(B) INCLUSIONS.—The term ''aquatic system'' includes an environment described in subparagraph (A) with respect to—

(i) any body of freshwater or salt water, such as a pond or ocean; and

(ii) groundwater.

(6) BASELINE.—The term ''baseline'' means the level of greenhouse gas emissions or a carbon stock scenario that would occur with respect to a project or activity in the absence of an offset project.

(7) BIOLOGICAL SEQUESTRATION; BIOLOGICALLY SEQUESTERED.—The terms ''biological sequestration'' and ''biologically sequestered'' mean—

(A) the capture, separation, isolation, or removal of greenhouse gases from the atmosphere by terrestrial biological means, such as by growing plants; and

(B) the storage of those greenhouse gases in plants or related soils.

(8) BOARD.—The term ''Board'' means the Carbon Market Efficiency Board established by section 421.

(9) CARBON CONTENT.—The term ''carbon content'' means the quantity of carbon, per unit of weight or energy value, contained in a fuel.

(10) CARBON DIOXIDE EQUIVALENT.—The term ''carbon dioxide equivalent'' means, for each HFC or non-HFC greenhouse gas, the quantity of the gas that the Administrator determines makes the same contribution to global warming as 1 metric ton of carbon dioxide.

(11) CLIMATE REGISTRY.—The term ''Climate Registry'' means the greenhouse gas emission registry jointly established and managed by more than 40 States and Indian tribes to collect greenhouse gas emission data from entities to support various greenhouse gas emission reporting and reduction policies for the member States and Indian tribes.

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

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

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

(13) CONVENTION.—The term ''Convention'' means the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992, and entered into force on March 21, 1994.

(14) COST-CONTAINMENT AUCTION.—The term ''cost-containment auction'' means an auction of emission allowances conducted by the Administrator pursuant to section 522.

(15) COST-CONTAINMENT AUCTION PRICE.—The term ''cost-containment auction price'' means the single price at which emission allowances are offered for sale during a cost-containment auction in a particular year.

(16) COVERED ENTITY.—The term ''covered entity'' means—

(A) any entity that, during a 1-year period, uses more than 5,000 metric tons of coal in the United States;

(B) any entity that is a natural gas processing plant in the United States (other than in the State of Alaska);

(C) any entity that produces natural gas in the State of Alaska or the Federal waters of the Alaska Outer Continental Shelf;

(D) any entity that holds title to natural gas, including liquefied natural gas, at the time the natural gas is imported into the United States;

(E) any entity that manufactures in the United States petroleum-based liquid or gaseous fuel, petroleum coke, or coal-based liquid or gaseous fuel, the combustion of which will, assuming no sequestration, emit a non-HFC greenhouse gas;

(F) any entity that holds title, at the time of importation into the United States, to petroleum-based liquid or gaseous fuel, petroleum coke, or coal-based liquid or gaseous fuel, the combustion of which will, assuming no sequestration, emit a non-HFC greenhouse gas;

(G) any entity that, during a 1-year period, manufactures more than 10,000 carbon dioxide equivalents of non–HFC greenhouse gas in the United States;

(H) any entity that, during any 1-year period, holds title, at the time of importation into the United States, to more than 10,000 carbon dioxide equivalents of non–HFC greenhouse gas; or

(I) any entity that manufactures any hydrochlorofluorocarbon in the United States.

(17) DESTRUCTION.—The term ''destruction'' means the extent to which the conversion of a greenhouse gas to another gas, by thermal, chemical, or other means, reduces global warming potential.

(18) ECOLOGICAL PROCESS.—The term ''ecological process'' means a biological, chemical, or physical interaction between and among the biotic and abiotic components of an ecosystem, including—

(A) nutrient cycling;

(B) pollination;

(C) a predator-prey relationship;

(D) soil formation;

(E) gene flow;

(F) larval dispersal and settlement;

(G) changes in hydrology;

(H) decomposition; and

(I) a disturbance regime, such as fire or flooding.

(19) EMISSION ALLOWANCE.—The term ''emission allowance'' means an allowance established by the Administrator pursuant to section 201(a).

(20) ENGINEERING INTEGRATION COSTS.—The term ''engineering integration costs'' includes the cost of engineering tasks performed in the United States relating to—

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

(B) designing new tooling and equipment for production facilities that produce in the United States qualifying components or advanced technology vehicles.

(21) FAIR MARKET VALUE.—The term ''fair market value'' means the average market price, in a particular calendar year, of an emission allowance.

(22) FISH AND WILDLIFE.—The term ''fish and wildlife'' means—

(A) any species of wild fauna, including fish and other aquatic species; and

(B) any fauna in a captive breeding program the object of which is to reintroduce individuals of a depleted indigenous species into a previously occupied range.

(23) GEOLOGICAL SEQUESTRATION; GEOLOGICALLY SEQUESTERED.—The terms ''geological sequestration'' and ''geologically sequestered'' mean the permanent isolation of greenhouse gases, without reversal, in geological formations.

(24) HABITAT.—The term ''habitat'' means the physical, chemical, and biological properties that are used by wildlife (including aquatic and terrestrial plant communities) for growth, reproduction, survival, food, water, cover, and space, on a tract of land, in a body of water, or in an area or region.

(25) HFC.—The term ''HFC'' means a hydrofluorocarbon.

(26) 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).

(27) INTERNATIONAL FOREST CARBON ACTIVITIES.—The term ''international forest carbon activities'' means national or subnational activities in countries other than the United States that—

(A) are directed at—

(i) reducing greenhouse gas emissions from deforestation and forest degradation; and

(ii) increasing sequestration of carbon through—

(I) restoration of forests;

(II) restoration of degraded land that has not been forested prior to restoration;

(III) afforestation, using native species, where practicable; and

(IV) improved forest management; and

(B) meet the eligibility requirements and quality criteria promulgated under sections 1313(a) and 1314(b).

(28) LEAKAGE.—The term ''leakage'' means—

(A) a significant unaccounted increase in greenhouse gas emissions by a facility or entity caused by an offset project, as determined by the Administrator; or

(B) a significant unaccounted decrease in sequestration that is caused by an offset project, as determined by the Administrator.

(29) LOCAL DISTRIBUTION COMPANY.—The term ''local distribution company'' means an entity, whether public or private—

(A) that has a legal, regulatory, or contractual obligation to deliver electricity or natural gas to retail consumers; and

(B) whose rates and costs are, except in the case of a registered electric cooperative, regulated by a State agency, regulatory commission, municipality, or public utility district, or by an Indian tribe pursuant to tribal law.

(30) MANUFACTURE.—

(A) IN GENERAL.—The term ''manufacture'' means to make an item, substance, or material, for sale or distribution, through the application of technology and industrial processes.

(B) EXCLUSION.—The term ''manufacture'' does not include the creation of a greenhouse gas through anaerobic decomposition.

(31) NAFTA COUNTRY.—The term ''NAFTA country'' means a country that is a party to the North American Free Trade Agreement.

(32) NATURAL GAS PROCESSING PLANT.—

(A) IN GENERAL.—The term ''natural gas processing plant'' means a facility that is designed—

(i) to separate natural-gas liquids from natural gas; or

(ii) to fractionate mixed natural-gas liquids into natural-gas products.

(B) EXCLUSION.—The term ''natural gas processing plant'' does not include a well-head or pipeline facility that removes natural-gas liquid condensate for operational or safety purposes.

(33) NON-HFC GREENHOUSE GAS.—The term ''non-HFC greenhouse gas'' means any of—

(A) carbon dioxide;

(B) methane;

(C) nitrous oxide;

(D) sulfur hexafluoride; or

(E) a perfluorocarbon.

(34) OFFSET ALLOWANCE.—The term ''offset allowance'' means an allowance allocated by the Administrator pursuant to subtitle A or subtitle B of title III, or subtitle B of title XIII.

(35) OFFSET PROJECT.—The term ''offset project'' means a project that reduces emissions or increases terrestrial sequestration of greenhouse gases from sources or sinks that would otherwise not have been covered under the limitation on the emission of greenhouse gases under this Act.

(36) PLANT.—The term ''plant'' means any species of wild flora.

(37) PROJECT DEVELOPER.—The term ''project developer'' means an individual or entity implementing an offset project.

(38) QUALIFYING COMPONENT.—The term ''qualifying component'' means a component that the Secretary of Energy determines to be—

(A) specially designed for advanced technology vehicles;

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

(C) manufactured in the United States.

(39) REGIONAL GREENHOUSE GAS INITIATIVE.—The term ''Regional Greenhouse Gas Initiative'' means the cooperative effort by, as of the date of enactment of this Act, the States of Connecticut, Delaware, Maine, Maryland, New Hampshire, New Jersey, New York, and Vermont, to reduce carbon dioxide emissions.

(40) REGISTRY.—The term ''Registry'' means the Federal greenhouse gas registry established under section 102(a).

(41) REGULAR AUCTION.—The term ''regular auction'' means an auction of emission allowances conducted by the Administrator under this Act that is not a cost-containment auction.

(42) REGULAR AUCTION RESERVE PRICE.—The term ''regular auction reserve price'' means the price below which an emission allowance may not be sold through a regular auction.

(43) RETAIL RATE FOR DISTRIBUTION SERVICE.—

(A) IN GENERAL.—The term ''retail rate for distribution service'' means the rate that a local distribution company charges for the use of the system of the local distribution company.

(B) EXCLUSION.—The term ''retail rate for distribution service'' does not include any energy component of the rate.

(44) RETIRE AN ALLOWANCE.—The term ''retire an allowance'' means to disqualify an allowance for any subsequent use, regardless of whether the use is a sale, exchange, or submission of the allowance in satisfaction of a compliance obligation.

(45) REVERSAL.—The term ''reversal'' means an intentional or unintentional loss of sequestered carbon dioxide to the atmosphere in significant quantities, as determined by the Administrator, in order to accomplish the purposes of the Act in an effective and efficient manner.

(46) RURAL ELECTRIC COOPERATIVE.—The term ''rural electric cooperative'' means a cooperatively owned association that—

(A) was in existence as of October 18, 2007; and

(B) is eligible to receive loans under section 4 of the Rural Electrification Act of 1936 (7 U.S.C. 904).

(47) SEQUESTERED AND SEQUESTRATION.—The terms ''sequestered'' and ''sequestration'' mean biological or geological sequestration.

(48) STATE.—The term ''State'' means—

(A) a State;

(B) the District of Columbia;

(C) the Commonwealth of Puerto Rico; and

(D) any other territory or possession of the United States.

(49) STATE REGULATORY AUTHORITY.—The term ''State regulatory authority'' means any State agency that has ratemaking authority with respect to the retail rate for electricity or natural-gas distribution service.

(50) TERRESTRIAL ECOSYSTEM.—The term ''terrestrial ecosystem'' means a land-occurring community of organisms, together with their environment.

(51) TRIBAL REGULATORY AUTHORITY.—The term ''tribal regulatory authority'' means any Indian tribe that has been granted statutory authority in accordance with section 301(d) of the Clean Air Act (42 U.S.C. 7601(d)).

TITLE I—IMMEDIATE ACTION

Subtitle A—Tracking Greenhouse Gas Emissions

SEC. 101. PURPOSE.

The purpose of this title is to establish a Federal greenhouse gas registry that—

(1) is national in scope;

(2) is complete, consistent, transparent, accurate, precise, and reliable; and

(3) provides the data necessary to implement the emission limitations and emission trading market established pursuant to this Act.

SEC. 102. FEDERAL GREENHOUSE GAS REGISTRY.

(a) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations establishing a Federal greenhouse gas registry that—

(1) achieves the purposes described in section 101; and

(2) requires emission reporting to begin for calendar year 2011.

(b) CLIMATE REGISTRY.—The notice of final agency action promulgating regulations under subsection (a) shall explain each consequential inconsistency between those regulations and the provisions of the Climate Registry.

(c) REQUIREMENTS.—The regulations promulgated pursuant to subsection (a) shall—

(1) ensure the completeness, consistency, transparency, accuracy, precision, and reliability of data on greenhouse gas emissions in the United States and on the production and manufacture in the United States, and importation into the United States, of fuels and other products the uses of which result in the emission of greenhouse gas;

(2) exceed or conform to 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, in particular, the Climate Registry, taking into account the latest scientific research;

(3) require that, wherever feasible, submitted data are monitored using monitoring systems for fuel flow or emissions, such as continuous emission monitoring systems or systems of equivalent precision, reliability, accessibility, and timeliness;

(4) require that, if an entity is already using a continuous emission monitoring system to monitor mass emissions of a greenhouse gas under a provision of law in effect as of the date of enactment of this Act that is consistent with this Act, that system be used to monitor submitted data;

(5) include methods for avoiding the double-counting of greenhouse gas emissions;

(6) include protocols to prevent entities from avoiding reporting requirements;

(7) include protocols for verification of submitted data;

(8) establish a means for electronic reporting;

(9) ensure verification and auditing of submitted data;

(10) establish consistent policies for calculating carbon content and greenhouse gas emissions for each type of fossil fuel reported;

(11) provide for public dissemination on the Internet of all verified data that are not—

(A) vital to the national security of the United States, as determined by the President; or

(B) 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 information relating to greenhouse gas emissions shall not be considered to be confidential business information);

(12) prescribe methods by which the Administrator shall, in cases in which satisfactory data are not submitted to the Administrator for any period of time—

(A) replace the missing data with a conservative estimate of the highest emission levels that may have occurred during the period for which data are missing, in order to ensure emissions are not under-reported and to create a strong incentive for meeting data monitoring and reporting requirements; and

(B) take appropriate enforcement action; and

(13) ensure that no offset allowance distributed to the government of a foreign country pursuant to subtitle B of title XIII is transferred both into the greenhouse gas emission trading market established by this Act and into another such market.

SEC. 103. ENFORCEMENT.

(a) CIVIL ACTIONS.—The Administrator may bring a civil action in a United States district court against any entity that fails to comply with any requirement promulgated pursuant to section 102.

(b) PENALTY.—Any person that has violated or is violating regulations promulgated pursuant to section 102 shall be subject to a civil penalty of not more than $25,000 per day for each violation.

(c) PENALTY ADJUSTMENT.—For the fiscal year in which this Act is enacted and each fiscal year thereafter, the Administrator shall, by regulation, adjust the penalty specified in subsection (b) 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. 104. NO EFFECT ON OTHER REQUIREMENTS.

Nothing in this subtitle affects any requirement in effect as of the date of enactment of this Act relating to the reporting of—

(1) fossil-fuel production, refining, importation, exportation, or consumption data;

(2) greenhouse gas emission data; or

(3) other relevant data.

Subtitle B—Early Clean Technology Deployment

SEC. 111. EFFICIENT BUILDINGS GRANT PROGRAM.

(a) IN GENERAL.—The Administrator shall establish and carry out a program, to be known as the ''Efficient Buildings Grant Program'', under which the Administrator shall provide grants to owners of buildings in the United States for use in—

(1) constructing new, highly-efficient buildings in the United States; and

(2) increasing the efficiency of existing buildings in the United States.

(b) REQUIREMENTS.—The Administrator shall provide grants under this section to owners of buildings in the United States based on the extent to which building projects proposed to be carried out using

funds from the grants would result in verifiable, additional, and enforceable reductions in direct and indirect greenhouse gas emissions—

(1) in new or renovated buildings that demonstrate exemplary performance by achieving a minimum score of 75 on the benchmarking tool of the Energy Star program established by section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a), or an equivalent score on an established energy performance benchmarking metric as determined under the regulations promulgated pursuant to subsection (d); and

(2) in retrofitted existing buildings that demonstrate substantial improvement in the score or rating on that benchmarking tool by a minimum of 30 points, or an equivalent improvement using an established performance benchmarking metric as determined under the regulations promulgated pursuant to subsection (d).

(c) PRIORITY.—In providing grants under this section, the Administrator shall give priority to projects that—

(1) are completed by building owners with a proven track record of building efficiency performance; or

(2) result in measurable greenhouse gas reduction benefits not encompassed within the metrics of the Energy Star program referred to in subsection (b)(1).

(d) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations to implement this section.

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

(f) TERMINATION OF AUTHORITY.—The program established under this section, and all authority provided under this section, shall terminate on the date on which the Efficient Buildings Allowance Program is established under section 802.

SEC. 112. SUPER-EFFICIENT EQUIPMENT AND APPLIANCES DEVELOPMENT (SEAD) PROGRAM.

(a) IN GENERAL.—The Administrator shall establish and carry out a program, to be known as the ''Super-Efficient Equipment and Appliances Development Program'' or ''SEAD Program'', under which the Administrator shall provide grants to retailers and distributors in the United States for use in increasing sales of high-efficiency building equipment, high-efficiency consumer electronics, and high-efficiency household appliances through marketing strategies such as consumer rebates, with the goals of—

(1) minimizing lifecycle costs for consumers; and

(2) maximizing public benefit.

(b) AMOUNT OF INDIVIDUAL GRANTS.—The amount of each grant for each type of product shall be determined by the Administrator, in consultation with the Secretary of Energy, State and utility efficiency program administrators, and national laboratories.

(c) REPORTING.—Each retailer and distributor participating in the program under this section shall be required to report to the Administrator, on a confidential basis for the purpose of program design—

(1) the number of products of the retailer or distributer sold within each product type; and

(2) wholesale purchase-price data relating to those sales.

(d) COST-EFFECTIVENESS REQUIREMENT.—

(1) DEFINITIONS.—In this subsection:

(A) COST-EFFECTIVENESS.—The term ''cost-effectiveness'' means a value equal to the product obtained by multiplying—

(i) the net number of highly-efficient pieces of equipment, electronics, and appliances sold by a retailer or distributor in a calendar year; by

(ii) the savings during the projected useful life, not to exceed 10 years, obtained by using the pieces of equipment, electronics, and appliances (including the impact of any documented measures to retire low-performing devices at the time of purchase of highly-efficient substitutes).

(B) SAVINGS.—The term ''savings'' means the megawatt-hours of electricity, or million British thermal units of other fuels, that are saved by the use of a product, as compared to the projected energy consumption that would result from the use of another product, based on the efficiency performance of displaced new product sales.

(2) REQUIREMENT.—Cost-effectiveness shall be a top priority of the Administrator in providing grants under this section.

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

(f) TERMINATION OF AUTHORITY.—The program established under this section, and all authority provided under this section, shall terminate on the date on which the Super-Efficient Equipment and Appliances Deployment Program is established under section 812.

SEC. 113. CLEAN MEDIUM- AND HEAVY-DUTY HYBRID FLEETS PROGRAM.

(a) IN GENERAL.—The Administrator shall by regulation establish and carry out a program under which the Administrator shall provide grants to entities in the United States, for the purchase of advanced medium- and heavy-duty hybrid commercial vehicles, based on demonstrated increases in fuel efficiency of those commercial vehicles.

(b) REQUIREMENTS.—The regulations promulgated pursuant to subsection (a) shall provide that—

(1) only a purchaser of a commercial vehicle weighing at least 8,500 pounds shall be eligible for receipt of emission allowances under the program;

(2) the purchaser of a qualifying vehicle shall have certainty, at the time of purchase of a qualifying vehicle, of—

(A) the amount of the grant to be provided; and

(B) the time at which grant funds shall be available;

(3) the amount of a grant provided under this section shall increase in direct proportion to the fuel efficiency of a commercial vehicle to be purchased using funds from the grant;

(4) the amounts made available to provide grants under this section shall be allocated by the Administrator for at least 3 classes of vehicle weight, to ensure—

(A) adequate availability of grant funds for different categories of commercial vehicles; and

(B) that the amount of a grant provided for the purchase of a heavier, more expensive vehicle is proportional to the amount of a grant provided for the purchase of a lighter, less expensive vehicle; and

(5) the amount provided per grant shall decrease over time to encourage early purchases of qualifying commercial vehicles.

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

(d) TERMINATION OF AUTHORITY.—The program established under this section, and all authority provided under this section, shall terminate on the date on which the clean medium- and heavy-duty hybrid fleets program is established under section 1103.

SEC. 114. INTERNATIONAL CLEAN ENERGY DEPLOYMENT.

(a) PURPOSE.—The purpose of this section is to promote and leverage private financing for the development and international deployment of technologies that will contribute to sustainable economic growth and the stabilization of greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous anthropogenic interference with the climate system.

(b) DEFINITIONS.—In this section:

(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term ''appropriate committees of Congress'' means—

(A) in the Senate—

(i) the Committee on Foreign Relations;

(ii) the Committee on Finance;

(iii) the Committee on Energy and Natural Resources;

(iv) the Committee on Environment and Public Works; and

(v) the Committee on Appropriations; and

(B) in the House of Representatives—

(i) the Committee on Foreign Affairs;

(ii) the Committee on Ways and Means;

(iii) the Committee on Energy and Commerce;

(iv) the Committee on Natural Resources; and

(v) the Committee on Appropriations.

(2) BOARD.—The term ''Board'' means the International Clean Energy Deployment Board established under subsection (c)(1).

(3) ELIGIBLE COUNTRY.—The term ''eligible country'' means a foreign country that, as determined by the President—

(A) is not a member of the Organization for Economic Cooperation and Development; and

(B)(i) has made a binding commitment, pursuant to an international agreement to which the United States is a party, to carry out actions to produce measurable, reportable, and verifiable greenhouse gas emission mitigations; or

(ii) as certified by the Board to the appropriate committees of Congress, has in force binding national policies and measures that are capable of producing measurable, reportable, and verifiable greenhouse gas emission mitigations.

(4) QUALIFIED ENTITY.—The term ''qualified entity'' means—

(A) the national government of an eligible country;

(B) a regional or local governmental unit of an eligible country; and

(C) a nongovernmental organization or a private entity located or operating in an eligible country.

(c) INTERNATIONAL CLEAN ENERGY DEPLOYMENT BOARD.—

(1) ESTABLISHMENT.—Not later than 90 days after the date of enactment of this Act, the President shall establish a board, to be known as the '' International Clean Development Technology Board''.

(2) COMPOSITION.—The Board shall be composed of—

(A) the Secretary of State, who shall serve as Chairperson of the Board;

(B) the Secretary of the Treasury;

(C) the Secretary of Energy;

(D) the Secretary of Commerce;

(E) the Administrator;

(F) the Administrator of the United States Agency for International Development;

(G) the United States Trade Representative; and

(H) such other officials as the President determines to be appropriate.

(3) DUTIES.—The Board shall administer the Fund in a manner that ensures that amounts made available to carry out the program—

(A) are used in a manner that best promotes the participation of, and investments by, the private sector;

(B) are allocated in a manner consistent with commitments by the United States

under international climate change agreements; and

(C) are expended to achieve the greatest greenhouse gas emission mitigation with the lowest practicable cost, consistent with subparagraphs (A) and (B).

(4) ASSISTANCE.—The Board shall provide assistance under this section to qualified entities to support the purposes of this section.

(5) FORM OF ASSISTANCE.—In accordance with international the Federal and international intellectual property law, assistance under this subsection shall be provided—

(A) as direct assistance in the form of grants, congressional loans, cooperative agreements, contracts, insurance, or loan guarantees to or with qualified entities;

(B) as indirect assistance to qualified entities through—

(i) funding for international clean technology funds supported by multilateral institutions;

(ii) support from development and export promotion assistance programs of the Federal Government; or

(iii) support from international technology programs of the Department of Energy; or

(C) in such other forms as the Board determines to be appropriate.

(6) USE OF ASSISTANCE.—Assistance provided under this subsection shall be used for 1 or more of the following purposes:

(A) Funding for capacity building programs, including—

(i) developing and implementing methodologies and programs for measuring and quantifying greenhouse gas emissions and verifying emission reductions;

(ii) assessing technology and policy options for greenhouse gas emission mitigations; and

(iii) providing other forms of technical assistance to facilitate the qualification for, and receipt of, program funding under this section.

(B) Funding for technology programs to mitigate greenhouse gas emissions through Federal or State engagement in cooperative research and development activities with eligible countries, including on the subject of—

(i) transportation technologies;

(ii) coal, including low-rank coal;

(iii) energy efficiency programs;

(iv) renewable energy sources; and

(v) industrial and building activities.

(7) SELECTION OF PROJECTS.—

(A) IN GENERAL.—The Board shall be responsible for selecting qualified entities to receive assistance under this subsection.

(B) NOTIFICATION.—The Board shall not provide assistance under this subsection until the date that is 30 days after the date on which the Board submits to the appropriate committees of Congress a notice of the proposed assistance, including—

(i) in the case of a capacity building program—

(I) a description of the capacity building program to be funded using the assistance;

(II) the terms and conditions of the provision of assistance; and

(III) a description of how the capacity building program will contribute to achieving the purposes of this section; or

(ii) in the case of a technology program—

(I) a description of the technology program to be funded using the assistance;

(II) the terms and conditions of the provision of assistance;

(III) an estimate of the additional quantity of greenhouse gas emission reductions expected due to the use of the assistance; and

(IV) a description of how the technology program will contribute to achieving the purposes of this section.

(d) REPORTS.—

(1) INITIAL REPORT.—Not later than 270 days after the date of enactment of this Act, the President shall submit to the appropriate committees of Congress a report describing the criteria to be used to determine whether a country is an eligible country.

(2) SUBSEQUENT REPORTS.—Not later than 1 year after the date of enactment of this Act, and annually thereafter, the President shall submit to the appropriate committees of Congress a report describing the assistance provided under this section by the Board during the preceding calendar year, including—

(A) the aggregate amount of assistance provided for capacity building initiatives and technology deployment initiatives; and

(B) a description of each initiative funded using the assistance, including—

(i) the amount of assistance provided;

(ii) the terms and conditions of provision of the assistance; and

(iii) the anticipated reductions in greenhouse gas emissions to be achieved as a result of technology deployment initiatives.

(e) EFFECT OF SECTION.—Nothing in this section alters or affects any authority of the Secretary of State under—

(1) title V of the Foreign Relations Authorization Act, Fiscal Year 1979 (22 U.S.C. 2656a et seq.); or

(2) section 622(c) of the Foreign Assistance Act of 1961 (22 U.S.C. 2382(c)).

(f) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $2,000,000,000 for the period of fiscal years 2009 through 2011.

(g) TERMINATION OF AUTHORITY.—The program established under this section, and all authority provided under this section, shall terminate on the date on which the International Clean Energy Technology Program is established under section 1321.

Subtitle C—Research

SEC. 121. RESEARCH ON EFFECTS OF CLIMATE CHANGE ON DRINKING WATER UTILITIES.

(a) IN GENERAL.—The Administrator, in cooperation with the Secretary of Commerce, the Secretary of Energy, and the Secretary of the Interior, shall establish and carry out a program of directed and applied research, to be conducted through a nonprofit water research foundation and sponsored by drinking water utilities, to assist suppliers of drinking water in adapting to the effects of climate change.

(b) RESEARCH AREAS.—The research conducted under subsection (a) shall include research relating to—

(1) the impacts of climate change on, and solutions to problems involving, water quality, 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) relating to the mitigation of increased 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) the impacts of climate change on, and solutions to problems involving, water quantity, 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 the regional level;

(C) to identify and explore options for increasing conjunctive use of aboveground and underground storage of water; and

(D) to optimize the operation of existing and new reservoirs in diminished and erratic periods of precipitation and runoff;

(4) infrastructure impacts and solutions for water 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; and

(iii) reduced flows in water and wastewater pipelines; and

(B) relating to methods of increasing the resilience of existing infrastructure and development of new design standards for future infrastructure;

(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) relating to new sources of water through 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) efficiency and the minimization of greenhouse gas emissions, including research—

(A) relating to optimizing the efficiency of water supply and improving water efficiency in energy production; and

(B) to identify and develop renewable, carbon-neutral options for the water supply 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) relating to 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, due to the fact that increased conservation practices might 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 demand management, including research—

(A) to improve efficiency in water collection, production, transmission, treatment, distribution, and disposal to provide more sustainability; and

(B) relating to means of assisting 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 saved water;

(ii) demand management tools;

(iii) economic incentives; and

(iv) water-saving technologies; and

(B) relating to 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) relating to improved strategies and approaches for communicating with customers, decisionmakers, and other stakeholders about the implications of climate change regarding water supply; and

(B) to develop effective communication approaches to achieve—

(i) public acceptance of alternative water supplies and new policies and practices, including conservation and demand management; and

(ii) public recognition and acceptance of increased costs.

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

SEC. 122. ROCKY MOUNTAIN CENTERS FOR STUDY OF COAL UTILIZATION.

(a) DESIGNATION.—The University of Wyoming and Montana State University shall be known and designated as the ''Rocky Mountain Centers of the Study of Coal Utilization''.

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

SEC. 123. SUN GRANT CENTER FOR RESEARCH ON COMPLIANCE WITH CLEAN AIR ACT.

(a) DESIGNATION.—Each sun grant center designated under section 7526 of the Food, Conservation, and Energy Act of 2008 is designated as a research institution of the Environmental Protection Agency for the purpose of conducting studies regarding the effects of biofuels and biomass on national and regional compliance with the Clean Air Act (42 U.S.C. 7401 et seq).

(b) FUNDING.—The Administrator shall provide to the sun grant centers such funds as the Administrator determines to be necessary to carry out the studies described in subsection (a).

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

SEC. 124. STUDY BY ADMINISTRATOR OF BLACK CARBON EMISSIONS.

(a) STUDY.—The Administrator shall conduct a study of black carbon emissions, including—

(1) an identification of—

(A) the latest scientific data relevant to the climate-related impacts of black carbon emissions from diesel engines and other sources;

(B)(i) the major sources of black carbon emissions in the United States and worldwide; and

(ii) an estimate of black carbon emissions from those sources;

(C) the diesel and other direct emission control technologies, operations, or strategies to remove or reduce emissions of black carbon, including estimates of the costs and effectiveness of the measures; and

(D) the entire lifecycle and net climate impacts of installation of diesel particulate filters on existing heavy-duty diesel engines; and

(2) recommendations of the Administrator regarding—

(A) areas of focus for additional research for technologies, operations, and strategies with the highest potential to reduce emissions of black carbon; and

(B) actions the Federal Government could carry out to encourage or require additional black carbon emission reductions.

(b) REPORT.—Not later than 180 days after the date of enactment of this Act, the Administrator shall submit to Congress a report describing the results of the study.

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

SEC. 125. STUDY BY ADMINISTRATOR OF RECYCLING.

(a) STUDY.—The Administrator shall conduct a study of the lifecycle greenhouse gas emission reductions and other benefits and issues associated with—

(1) recycling scrap metal, including end-of-life vehicles, recovered paper and other fiber, scrap electronics, scrap glass, scrap plastics, scrap tires and other rubber, and scrap textiles;

(2) using recycled materials in manufactured products;

(3) designing and manufacturing products that increase recyclable output;

(4) eliminating or reducing the use of substances and materials in products that decrease recyclable output; and

(5) establishing a standardized system for lifecycle greenhouse gas emission reduction measurement and certification for the manufactured products and scrap recycling sectors, including the potential options for the structure and operation of such a system.

(b) REPORT.—Not later than 180 days after the date of enactment of this Act, the Administrator shall submit to Congress a report describing the results of the study.

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

SEC. 126. RETAIL CARBON OFFSETS.

(a) DEFINITION OF RETAIL CARBON OFFSET.—In this section, the term ''retail carbon offset'' means any carbon credit or carbon offset that cannot be used in satisfaction of any mandatory compliance obligation under a regulatory system for reducing greenhouse gas emissions.

(b) QUALIFYING LEVELS AND REQUIREMENTS.—Not later than January 1, 2009, the Administrator shall establish new qualifying levels and requirements for Energy Star certification for retail carbon offsets, effective beginning January 1, 2010.

TITLE II—CAPPING GREENHOUSE GAS EMISSIONS

SEC. 201. EMISSION ALLOWANCES.

(a) ESTABLISHMENT.—Not later than 60 days after the date of enactment of this Act, the Administrator shall establish a quantity of emission allowances for each of calendar years 2012 through 2050, as follows:

Calendar Year	Quantity of emission allowances (in millions)
2012	5,775
2013	5,669
2014	5,562
2015	5,456
2016	5,349
2017	5,243
2018	5,137
2019	5,030
2020	4,924
2021	4,817
2022	4,711
2023	4,605
2024	4,498
2025	4,392
2026	4,286
2027	4,179
2028	4,073
2029	3,966
2030	3,860
2031	3,754
2032	3,647
2033	3,541
2034	3,435
2035	3,328
2036	3,222
2037	3,115
2038	3,009
2039	2,903
2040	2,796
2041	2,690
2042	2,584
2043	2,477
2044	2,371
2045	2,264
2046	2,158
2047	2,052
2048	1,945
2049	1,839
2050	1,732.

(b) IDENTIFICATION NUMBERS.—The Administrator shall assign to each emission allowance established under subsection (a) a unique identification number that includes the calendar year for which that emission allowance was established.

(c) LEGAL STATUS.—

(1) IN GENERAL.—An emission allowance shall not be a property right.

(2) TERMINATION OR LIMITATION.—Nothing in this Act or any other provision of law shall limit the authority of the Administrator to terminate or limit an emission allowance.

(3) OTHER PROVISIONS UNAFFECTED.—Nothing in this Act relating to emission allowances shall affect the application of, or compliance with, any other provision of law to or by a covered entity.

SEC. 202. COMPLIANCE OBLIGATION.

(a) IN GENERAL.—Not later than 90 days after the end of each of calendar years 2012 through 2050, the owner or operator of a covered entity shall submit to the Administrator an emission allowance or an offset allowance for each carbon dioxide equivalent of—

(1) non-HFC greenhouse gas that was emitted by that covered entity in the United States during the preceding calendar year through the use of coal;

(2) non-HFC greenhouse gas that will be emitted through the use of petroleum-based liquid or gaseous fuel, petroleum coke, or coal-based liquid or gaseous fuel that was, during the preceding calendar year, manufactured by that covered entity in the United States or imported into the United States by that covered entity;

(3) non-HFC greenhouse gas, that was, during the preceding calendar year, manufactured by that covered entity in the United States or imported into the United States by

that covered entity, in each case in which the non-HFC greenhouse gas is not itself a petroleum- or coal-based gaseous fuel or natural gas;

(4) each HFC that was, during the preceding calendar year, emitted as a byproduct of hydrochlorofluorocarbon manufacture in the United States by that covered entity; and

(5) non-HFC greenhouse gas that will be emitted—

(A) through the use of natural gas that was, during the preceding calendar year, processed in the United States by that covered entity, imported into the United States by that covered entity, or produced in the State of Alaska or the Federal waters of the outer Continental Shelf off the coast of that State by that covered entity and not reinjected into the field; or

(B) through the use of natural gas liquids that were, during the preceding year, processed in the United States by that covered entity or imported into the United States by that covered entity.

(b) ASSUMPTION.—

(1) IN GENERAL.—Subject to paragraph (2), for the purpose of calculating any submission requirement under subsection (a), the Administrator shall assume that no sequestration, destruction, or retention of greenhouse gas has occurred or will occur.

(2) EXCEPTION.—Notwithstanding paragraph (1), neither paragraph (2) nor paragraph (5) of subsection (a) requires a covered entity to submit emission allowances or offset allowances for petroleum- or coal-based liquid or gaseous fuel imported into the United States, or for natural gas or natural gas liquids imported into the United States, if the fuel or liquid the substance was imported solely for use as a feedstock, and to the extent that no greenhouse gas is emitted through the use of that fuel or substance as a feedstock.

(c) EXCLUDING PETROLEUM-BASED LIQUID FUEL IMPORTED FROM A CAPPED NAFTA COUNTRY.—The regulations promulgated pursuant to section 204 shall provide for the exclusion from the compliance obligation under subsection (a)(2) of petroleum-based liquid fuel imported into the United States from a NAFTA country in any case in which the Administrator has determined, after public notice and an opportunity for public comment, that—

(1) the NAFTA country has enacted national greenhouse gas emissions reduction requirements that are not less stringent than those established for the United States by this Act; and

(2) the petroleum-based liquid fuel imported into the United States from the NAFTA country was produced or manufactured at or by an entity that was, at the time of the production or manufacture, directly subject to regulatory requirements, pursuant to the enacted greenhouse gas emission reduction requirements of the NAFTA country, to submit allowances covering any greenhouse gas emitted through the use of the liquid fuel.

(d) RETIREMENT OF ALLOWANCES UPON RECEIPT.—Immediately upon receiving an allowance under subsection (a), the Administrator shall retire the allowance.

(e) DESTRUCTION CREDIT.—

(1) IN GENERAL.—Not later than 90 days after the end of each of calendar years 2012 through 2050, the Administrator shall establish and distribute to any entity in the United States that the Administrator determines destroyed greenhouse gas in the United States during the calendar year a quantity of emission allowances equal to the quantity of carbon dioxide equivalents of non-HFC greenhouse gas that the Administrator determines the entity destroyed in the United States during that calendar year.

(2) DESTRUCTION OF METHANE THROUGH COMBUSTION.—Paragraph (1) shall not apply to the destruction of methane through combustion.

(f) SEQUESTRATION CREDIT.—Not later than 90 days after the end of each of calendar years 2012 through 2050, the Administrator shall establish and distribute to each covered entity subject to any of paragraphs (2) through (5) of subsection (a) that the Administrator determines captured and geologically sequestered carbon dioxide during the calendar year a quantity of emission allowances equal to the quantity of metric tons of carbon dioxide that the entity captured and geologically sequestered in the United States during that calendar year.

(g) NONEMISSIVE USE CREDIT.—

(1) IN GENERAL.—Subject to paragraph (2), not later than 90 days after the end of each of calendar years 2012 through 2050, the Administrator shall establish and distribute to each entity in the United States that the Administrator determines used in the United States during that calendar year a petroleum- or coal-based product, natural gas, or natural gas liquid as a feedstock, or used a perfluorocarbon in semiconductor research or manufacturing in the United States during that calendar year, an emission allowance for each carbon dioxide equivalent of greenhouse gas that was not emitted through the use of that feedstock or perfluorocarbon, notwithstanding the submission of an emission allowance or offset allowance for that carbon dioxide equivalent under subsection (a).

(2) NONAPPLICABILITY TO CERTAIN FEEDSTOCK USES.—Paragraph (1) shall not apply to any feedstock use to which subsection (b)(2) applies.

(h) EXPORT CREDIT.—Not later than 90 days after the end of each of calendar years 2012 through 2050, the Administrator shall establish and distribute to each entity that the Administrator determines exported from the United States a product described in paragraph (2), (3), or (5) of subsection (a) during that calendar year a quantity of emission allowances equal to the quantity of allowances submitted for that product under 1 of those paragraphs.

(i) INTERNATIONAL FLIGHT CREDIT.—Not later than 90 days after the end of each of calendar years 2012 through 2050, the Administrator shall establish and distribute to each entity that the Administrator determines purchased in the United States fuel for an international flight the greenhouse gas emissions of which were regulated by the laws of another country a quantity of emission allowances equal to the quantity of allowances submitted for that fuel under subsection (a)(2).

(j) DETERMINATION OF COMPLIANCE.—Not later than 180 days after the end of each of calendar years 2012 through 2050, the Administrator shall determine whether the owners and operators of all covered entities are in full compliance with subsection (a) for that calendar year.

(k) PROHIBITION.—A covered entity shall not submit, and the Administrator shall not accept, any allowance established pursuant to section 1501 in satisfaction, in whole or in part, of the compliance obligation under subsection (a).

SEC. 203. PENALTY FOR NONCOMPLIANCE.

(a) CASH PENALTY.—

(1) IN GENERAL.—The owner or operator of any covered entity that fails for any year to submit to the Administrator by the applicable deadline described in section 202 1 or more of the allowances due pursuant to that section shall be liable for the payment to the Administrator of a cash penalty.

(2) AMOUNT.—The amount of a cash penalty required to be paid under paragraph (1) shall be, as determined by the Administrator, an amount equal to the product obtained by multiplying—

(A) the quantity of allowances that the owner or operator failed to submit; and

(B) the greater of—

(i) $200; or

(ii) an amount, in dollars, equal to 3 times the average market value of an emission allowance during the calendar year for which the allowances were due.

(3) TIMING.—A cash penalty required under this subsection shall be immediately due and payable to the Administrator, without demand.

(4) DEPOSIT.—The Administrator shall deposit each cash penalty paid under this subsection into the Treasury of the United States.

(5) NO EFFECT ON LIABILITY.—A cash penalty due and payable by the owner or operator of a covered entity under this subsection shall not diminish the liability of the owner or operator for any fine, penalty, or assessment against the owner or operator for the same violation under any other provision of this Act or any other law.

(b) COMPENSATION.—The owner or operator of a covered entity that fails for any year to submit to the Administrator, by the deadline described in section 202, 1 or more of the emission allowances due pursuant to that section shall be liable to compensate for the shortfall with a submission of excess allowances during—

(1) the following calendar year; or

(2) such longer period as the Administrator may prescribe.

(c) PROHIBITION.—It shall be unlawful for the owner or operator of any entity liable under subsections (a) and (b) to fail to comply with a requirement under either of those subsections.

(d) NO EFFECT ON OTHER LAW.—Nothing in this title limits or otherwise affects the application of any other enforcement provision under this Act or under any other law.

SEC. 204. REGULATIONS.

Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations to carry out this title.

SEC. 205. REPORT TO CONGRESS.

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall submit to the President and Congress a report on the regulation under this Act of greenhouse gases emitted through the use of natural gas in the United States.

(b) REQUIREMENTS.—The report submitted under subsection (a) shall include options for increasing the percentage of the natural gas used in the United States that is subject to greenhouse gas emission-reduction measures while minimizing regulatory complexity.

TITLE III—REDUCING EMISSIONS THROUGH OFFSETS AND INTERNATIONAL ALLOWANCES

Subtitle A—Offsets in the United States

SEC. 301. OUTREACH INITIATIVE ON REVENUE ENHANCEMENT FOR AGRICULTURAL PRODUCERS.

(a) IN GENERAL.—The Secretary of Agriculture, acting through the Chief of the Natural Resources Conservation Service, the Chief of the Forest Service, the Director of the National Institute of Food and Agriculture, and land-grant colleges and universities, in consultation with the Administrator and the heads of other appropriate departments and agencies, shall establish an outreach initiative to provide information to agricultural producers, agricultural organizations, foresters, State and local officials,

leaders from small businesses, nonprofit groups that may engage in forest or natural resource projects, forest workers, Indian tribes, and other landowners (referred to in this section as ''interested parties'') about opportunities to earn new revenue under this subtitle.

(b) COMPONENTS.—The initiative under this section—

(1) shall be designed to ensure, to the maximum extent practicable, that interested parties receive detailed, practical information about—

(A) opportunities to earn new revenue under this subtitle;

(B) measurement protocols, monitoring, verifying, inventorying, registering, insuring, and marketing offsets under this title;

(C) emerging domestic and international markets for energy crops, allowances, and offsets; and

(D) local, regional, and national databases and aggregation networks to facilitate achievement, measurement, registration, and sales of offsets;

(2) shall provide, in cooperation with other stakeholders—

(A) outreach materials, including the handbook published under subsection (c), to interested parties;

(B) workshops; and

(C) technical assistance; and

(3) may include the creation and development of regional marketing centers or coordination with existing centers (including centers within the Natural Resources Conservation Service or the National Institute of Food and Agriculture or at land-grant colleges and universities).

(c) HANDBOOK.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary of Agriculture, in consultation with the Administrator and after providing an opportunity for public comment, shall publish a handbook for use by interested parties that provides easy-to-use guidance on achieving, reporting, registering, and marketing offsets.

(2) DISTRIBUTION.—The Secretary of Agriculture shall ensure, to the maximum extent practicable, that the handbook—

(A) is made available through the Internet and in other electronic media;

(B) includes, with respect to the electronic form of the handbook described in subparagraph (A), electronic forms and calculation tools to facilitate the petition process for new methodologies; and

(C) is distributed widely through land-grant colleges and universities and other appropriate institutions.

(3) UPDATING.—The Secretary of Agriculture shall update the handbook at least every 5 years, or more frequently as needed to reflect developments in science, practices, methodologies, measurement protocols, and emerging markets.

SEC. 302. ESTABLISHMENT OF A DOMESTIC OFFSET PROGRAM.

(a) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator, in conjunction with the Secretary of Agriculture, shall promulgate regulations authorizing the certification and issuance of offset allowances in accordance with this subtitle.

(b) USE.—

(1) IN GENERAL.—Subject to paragraph (3), the quantity of offset allowances issued pursuant to subsection (d) in a calendar year shall not exceed 15 percent of the quantity of emission allowances established for that year pursuant to section 201(a).

(2) USE OF INTERNATIONAL ALLOWANCES.—

(A) IN GENERAL.—If the quantity of offset allowances issued in a calendar year pursuant to subsection (d) is less than 15 percent of the quantity of emission allowances established for that year pursuant to section 201(a), the Administrator shall allow the use, by covered entities in that year, of international allowances under section 322 and international forest carbon credits under section 1313.

(B) MAXIMUM QUANTITY.—The maximum aggregate quantity of international allowances and international forest carbon credits the use of which the Administrator shall allow for a calendar year under subparagraph (A) shall be equal to the difference between—

(i) 15 percent of the quantity of emission allowances established for that year pursuant to section 201(a); and

(ii) the quantity of offset allowances issued in that year pursuant to subsection (d).

(3) CARRY-OVER.—

(A) IN GENERAL.—If the sum of the quantity of offset allowances issued for a calendar year pursuant to subsection (d) and the quantity of international allowances and international forest carbon credits used in that calendar year pursuant to paragraph (2) is less than 15 percent of the quantity of emission allowances established for that calendar year pursuant to section 201(a), notwithstanding paragraph (1), the quantity of offset allowances issued pursuant to subsection (d) in the subsequent calendar year shall not exceed the sum obtained by adding—

(i) 15 percent of the quantity of emission allowances established for that subsequent calendar year pursuant to section 201(a); and

(ii) the difference between—

(I) 15 percent of the quantity of emission allowances established for that year pursuant to section 201(a); and

(II) the sum obtained by adding the quantity of offset allowances issued in the preceding calendar year pursuant to subsection (d) and the quantity of international allowances and international forest carbon credits used in that year pursuant to paragraph (2).

(4) EXCHANGE FOR REGIONAL GREENHOUSE GAS INITIATIVE OFFSETS.—The Administrator shall—

(A) issue offset allowances, at an appropriate discount rate, for offset allowances issued under the Regional Greenhouse Gas Initiative; and

(B) ensure that enough capacity remains within the limitation under paragraph (1) to carry out exchanges with all interested parties.

(c) REQUIREMENTS.—The regulations promulgated pursuant to subsection (a) shall—

(1) authorize the issuance and certification of offset allowances only for greenhouse gas emission reductions or increases in sequestration relative to the offset project baseline, for offset projects approved pursuant to section 304 in categories on the list issued under section 303;

(2) ensure that those offsets represent real, verifiable, additional, permanent, and enforceable reductions in greenhouse gas emissions or increases in sequestration;

(3) require that the project developer for an offset project establish the project baseline and register emissions with the Registry;

(4) specify the types of offset projects eligible to generate offset allowances, in accordance with section 303;

(5) establish procedures to monitor, quantify, and discount reductions in greenhouse gas emissions or increases in biological sequestration, in accordance with section 303;

(6) establish procedures for project initiation and approval, in accordance with section 304;

(7) establish procedures for third-party verification, registration, and issuance of offset allowances, in accordance with section 305;

(8) ensure permanence of offsets by mitigating and compensating for reversals, in accordance with section 306; and

(9) assign a unique serial number to each offset allowance issued under this section.

(d) OFFSET ALLOWANCES AWARDED.—The Administrator shall issue to a project developer offset allowances for qualifying emission reductions and biological sequestrations from offset projects that satisfy the applicable requirements of this subtitle, unless an alternative recipient is specified in a legally-binding contract or agreement.

(e) TRANSFERABILITY; COMPENSATION FOR REVERSALS.—

(1) TRANSFERABILITY.—An offset allowance generated pursuant to this subtitle may be sold, traded, or transferred, on the condition that the offset allowance has not expired or been retired or canceled.

(2) COMPENSATION FOR REVERSALS.—With respect to a biological sequestration project, a project developer shall be responsible for mitigating and compensating for reversals of registered offset allowances unless a different responsible party is specified in a legally-binding contract or agreement.

(f) ACCOUNTING PERIOD.—

(1) IN GENERAL.—The Administrator shall issue offset allowances—

(A) on an annual basis, beginning on the date on which the initiation of an offset project is approved; and

(B) that equal the verified and certified emission reductions or increases in sequestration achieved by the offset project.

(2) BASELINE VALIDITY.—An emission baseline approved for an offset project shall be valid for a period of 5 years before being subject to revision.

SEC. 303. ELIGIBLE OFFSET PROJECT TYPES.

(a) IN GENERAL.—An offset allowance from an agricultural, forestry, or other land use-related project shall be provided only for achieving an offset of 1 or more greenhouse gases by a method other than a reduction of combustion of greenhouse gas-emitting fuel.

(b) CATEGORIES OF ELIGIBLE OFFSET PROJECTS.—

(1) IN GENERAL.—The Administrator, after providing public notice and an opportunity for comment, shall issue and periodically revise a list of categories of offset projects for the Administrator shall issue an offset methodology.

(2) CATEGORIES.—The Administrator shall consider including on the list under paragraph (1)—

(A) agricultural and rangeland sequestration and management practices, including—

(i) altered tillage practices;

(ii) winter cover cropping, continuous cropping, and other means to increase biomass returned to soil in lieu of planting followed by fallowing;

(iii) conversion of cropland to rangeland or grassland, on the condition that the land has been in nonforest use for at least 10 years before the date of initiation of the project;

(iv) reduction of nitrogen fertilizer use or increase in nitrogen use efficiency;

(v) reduction in the frequency and duration of flooding of rice paddies; and

(vi) reduction in carbon emissions from organic soils;

(B) changes in carbon stocks attributed to land use change and forestry activities limited to—

(i) afforestation or reforestation of acreage not forested as of October 18, 2007; and

(ii) forest management resulting in an increase in forest stand volume;

(C) manure management and disposal, including—

(i) waste aeration; and

(ii) methane capture and combustion;

(D) subject to the requirements of this subtitle, any other terrestrial offset practices identified by the Administrator, including—

(i) the capture or reduction of fugitive greenhouse gas emissions for which no covered entity is required under section 202(a) to submit any emission allowances, offset allowances, or international allowances;

(ii) methane capture and combustion at nonagricultural facilities; and

(iii) other actions that result in the avoidance or reduction of greenhouse gas emissions in accordance with section 302;

(E) combinations of any of the offset practices described in subparagraphs (A) through (D); and

(F) any other category proposed to the Administrator by petition.

(c) REQUIREMENTS FOR OFFSET METHODOLOGIES.—

(1) ISSUANCE.—Not later than 3 years after the date of enactment of this Act, and after public notice and an opportunity for comment, the Administrator shall issue a methodology for each category of offset project listed pursuant to subsection (b).

(2) SPECIFIC REQUIREMENTS.—The methodology for each category issued under paragraph (1) shall—

(A) specify requirements for—

(i) determining the eligibility of an offset project;

(ii) determining additional emission reductions or sequestrations from an offset project;

(iii) accounting for emission leakage associated with an offset project;

(iv) accounting for a reversal, and managing for the risk of reversal, from an offset project; and

(v) monitoring, verifying, and reporting the operation of an offset project; and

(B) include—

(i) a procedure for determining that—

(I) an offset project does not receive support from an allowance allocation under this Act or from any other government incentive, subsidy, or mandate; and

(II) the emission reductions or sequestrations from an offset project are not double-counted under any other program;

(ii) a procedure for delineating the boundaries of an offset project and determining the extent, if any, of emission leakage from the offset project, based on scientifically sound methods, as determined by the Administrator;

(iii) a description of scientifically sound methods, as determined by the Administrator, for use in monitoring, measuring, and quantifying changes in emissions or sequestrations resulting from an offset project, including—

(I) a method for use in quantifying the uncertainty in those measurements; and

(II) a description of site-specific data that will be used in that monitoring, measurement, and quantification;

(iv) a procedure for use in establishing the baseline for an offset project that ensures that offset allowances will be issued only for emission reductions or sequestrations that are additional;

(v)(I) a threshold of uncertainty in the quantification of emission reductions or sequestrations and for baseline emission levels above which an offset project shall not be eligible to receive offset allowances; and

(II) a procedure by which a project developer may petition for use of different uncertainty factors if the project developer demonstrates to the Administrator that the measurement methods used by the offset project have less uncertainty than assumed under the default methodology;

(vi) clear and objective tests specified by the Administrator that are sufficient to ensure that—

(I) an offset project will be eligible to generate offset allowances only if, in the judgment of the Administrator, the project is additional;

(II) no part of the offset project is required by Federal or State regulations or commonly accepted industry standards, as determined by the Administrator;

(III) the offset project uses technologies or practices that are not in common use within a relevant jurisdiction or industry, as defined by the Administrator; and

(IV) the offset project would not take place in the absence of the revenue generated by the sale of offset allowances;

(vii) a procedure to quantify leakage and ensure that the issuance of offset allowances is reduced by an amount equivalent to the quantity of that leakage;

(viii)(I) a methodology for use in assessing the risk that a sequestration will be reversed;

(II) a description of measures that will be taken to reduce that risk; and

(III) a description of procedures that will be followed to measure, report, and compensate for any reversal that does occur;

(ix) a procedure for use in—

(I) determining whether the quantity of carbon sequestered on or in land where a project is carried out was significantly changed during the 10-year period prior to initiation of the project; and

(II) excluding the offset project from receiving allowances under this subtitle, or adjusting the baseline of the offset project accordingly; and

(x) a protocol for use in reporting emission reductions or sequestrations (and any reversals) at least annually.

(3) CONSULTATION.—In the case of an offset project relating to agriculture or forestry, the Administrator shall consult with the Secretary of Agriculture in carrying out this subsection.

(4) REVISION.—The Administrator shall revise each methodology issued under paragraph (1), after public notice and an opportunity for comment, at least every 5 years.

(5) PROJECT CONFORMITY.—Beginning 1 year after the date by which a methodology is required to be revised under paragraph (4), no further offset allowances shall be issued to an offset project approved under the methodology unless the offset project is demonstrated to be in conformity with the applicable revisions.

(d) TECHNOLOGIES.—

(1) IN GENERAL.—The Administrator may issue, after notice and comment, a list of technologies and associated performance benchmarks the achievement of which the Administrator has determined shall be considered to be additional in specific project applications.

(2) PERIOD OF VALIDITY.—A determination of the Administrator under paragraph (1) shall be valid for not more than 5 years after the date of the determination.

(e) METHODOLOGY TESTING.—The Administrator may not issue a methodology under this section until the Administrator determines that—

(1) the methodology has been tested by 3 independent expert teams on at least 3 different offset projects to which that methodology applies; and

(2) the emission reductions or sequestrations estimated by the expert teams for the same offset project do not differ by more than 10 percent.

SEC. 304. PROJECT INITIATION AND APPROVAL.

(a) PROJECT APPROVAL.—A project developer—

(1) may submit a petition for offset project approval at any time following the effective date of regulations promulgated under section 302; but

(2) may not use or distribute offset allowances until such approval is received and until after the emission reductions or sequestrations supporting the offset allowances have actually occurred.

(b) PETITION PROCESS.—Prior to offset registration and issuance of offset allowances, a project developer shall submit to the Administrator a petition that consists of—

(1) a copy of the monitoring and quantification plan prepared for the offset project, as described in subsection (d);

(2) a greenhouse gas initiation certification, as described in subsection (e); and

(3) subject to this subtitle, any other information identified by the Administrator in the regulations promulgated under section 302 as being necessary to meet the objectives of this subtitle.

(c) APPROVAL AND NOTIFICATION.—

(1) IN GENERAL.—Not later than 180 days after the date on which the Administrator receives a complete petition under subsection (b), the Administrator shall—

(A) determine whether the monitoring and quantification plan satisfies the applicable requirements of this subtitle;

(B) determine whether the greenhouse gas initiation certification indicates a significant deviation in accordance with subsection (e)(3); and

(C) notify the project developer of the determinations under subparagraphs (A) and (B).

(2) APPEAL.—The Administrator shall establish mechanisms for appeal and review of determinations made under this subsection.

(d) MONITORING AND QUANTIFICATION.—

(1) IN GENERAL.—A project developer shall make use of the standardized tools and methods described in this section to monitor, quantify, and discount reductions in greenhouse gas emissions or increases in sequestration.

(2) MONITORING AND QUANTIFICATION PLAN.—A monitoring and quantification plan shall be used to monitor, quantify, and discount reductions in greenhouse gas emissions or increases in sequestration as described in this subsection.

(3) PLAN COMPLETION AND RETENTION.—A monitoring and quantification plan shall be—

(A) completed for all offset projects prior to offset project initiation; and

(B) retained by the project developer for the duration of the offset project.

(4) PLAN REQUIREMENTS.—Subject to section 302, the Administrator, in conjunction with the Secretary of Agriculture, shall specify the required components of a monitoring and quantification plan, including—

(A) a description of the offset project, including project type;

(B) a determination of accounting periods;

(C) an assignment of reporting responsibility;

(D) the contents and timing of public reports, including summaries of the original data, as well as the results of any analyses;

(E) a delineation of project boundaries, based on acceptable methods and formats;

(F) a description of which of the monitoring and quantification tools developed under subsection (f) are to be used to monitor and quantify changes in greenhouse gas fluxes or carbon stocks associated with a project;

(G) a description of which of the standardized methods developed under subsection (g) are to be used to determine additionality, estimate the baseline carbon, and discount for leakage;

(H) based on the selection of tools and standardized methods described in subparagraphs (F) and (G), a determination of uncertainty in accordance with subsection (h);

(I) what site-specific data, if any, will be used in monitoring, quantification, and the determination of discounts;

(J) a description of procedures for use in managing and storing data, including quality-control standards and methods, such as redundancy in case records are lost;

(K) subject to the requirements of this subtitle, any other information identified by the Administrator or the Secretary of Agriculture as being necessary to meet the objectives of this subtitle; and

(L) a description of the risk of reversals for the project, including any way in which the proposed project may alter the risk of reversal for the project or other projects in the area.

(e) GREENHOUSE GAS INITIATION CERTIFICATION.—

(1) IN GENERAL.—In reviewing a petition submitted under subsection (b), the Administrator shall seek to exclude each activity that undermines the integrity of the offset program established under this subtitle, such as the conversion or clearing of land, or marked change in management regime, in anticipation of offset project initiation.

(2) GREENHOUSE GAS INITIATION CERTIFICATION REQUIREMENTS.—A greenhouse gas initiation certification developed under this subsection shall include—

(A) the estimated greenhouse gas flux or carbon stock for the offset project for each of the 4 complete calendar years preceding the effective date of the regulations promulgated under section 302; and

(B) the estimated greenhouse gas flux or carbon stock for the offset project, averaged across each of the 4 calendar years preceding the effective date of the regulations promulgated under section 302.

(3) DETERMINATION OF SIGNIFICANT DEVIATION.—Based on standards developed by the Administrator, in conjunction with the Secretary of Agriculture—

(A) each greenhouse gas initiation certification submitted pursuant to this section shall be reviewed; and

(B) a determination shall be made as to whether, as a result of activities or behavior inconsistent with the purposes of this title, a significant deviation exists between the average annual greenhouse gas flux or carbon stock and the greenhouse gas flux or carbon stock for a given year.

(4) ADJUSTMENT FOR PROJECTS WITH SIGNIFICANT DEVIATION.—In the case of a significant deviation, the Administrator shall adjust the number of allowances awarded in order to account for the deviation.

(f) DEVELOPMENT OF MONITORING AND QUANTIFICATION TOOLS FOR OFFSET PROJECTS.—

(1) IN GENERAL.—Subject to section 302, the Administrator, in conjunction with the Secretary of Agriculture, shall develop standardized tools for use in the monitoring and quantification of changes in greenhouse gas fluxes or carbon stocks for each offset project type listed under section 303(b).

(2) TOOL DEVELOPMENT.—The tools used to monitor and quantify changes in greenhouse gas fluxes or carbon stocks shall, for each project type, include applicable—

(A) statistically-sound field and remote sensing sampling methods, procedures, techniques, protocols, or programs;

(B) models, factors, equations, or look-up tables; and

(C) any other process or tool considered to be acceptable by the Administrator, in conjunction with the Secretary of Agriculture.

(g) DEVELOPMENT OF ACCOUNTING AND DISCOUNTING METHODS.—

(1) IN GENERAL.—The Administrator, in consultation with the Secretary of Agriculture, shall—

(A) develop standardized methods for use in accounting for additionality and uncertainty, estimating the baseline, and discounting for leakage for each offset project type listed under section 303(b); and

(B) require that leakage be subtracted from reductions in greenhouse gas emissions or increases in sequestration attributable to a project.

(2) ADDITIONALITY DETERMINATION AND BASELINE ESTIMATION.—The standardized methods used to determine additionality and establish baselines shall, for each project type, at a minimum—

(A) in the case of a sequestration project, determine the greenhouse gas flux and carbon stock on comparable land identified on the basis of—

(i) similarity in current management practices;

(ii) similarity of regional, State, or local policies or programs; and

(iii) similarity in geographical and biophysical characteristics;

(B) in the case of an emission reduction project, use as a basis emissions from comparable land or facilities; and

(C) in the case of a sequestration project or emission reduction project, specify a selected time period.

(3) LEAKAGE.—The standardized methods used to determine and discount for leakage shall, at a minimum, take into consideration—

(A) the scope of the offset system in terms of activities and geography covered;

(B) the markets relevant to the offset project;

(C) emission intensity per unit of production, both inside and outside of the offset project; and

(D) a time period sufficient in length to yield a stable leakage rate.

(h) UNCERTAINTY FOR AGRICULTURAL AND FORESTRY PROJECTS.—

(1) IN GENERAL.—The Administrator, in conjunction with the Secretary of Agriculture, shall develop standardized methods for use in determining and discounting for uncertainty for each offset project type listed under section 303(b).

(2) BASIS.—The standardized methods used to determine and discount for uncertainty shall be based on—

(A) the robustness and rigor of the methods used by a project developer to monitor and quantify changes in greenhouse gas fluxes or carbon stocks;

(B) the robustness and rigor of methods used by a project developer to determine additionality and leakage; and

(C) an exaggerated proportional discount that increases relative to uncertainty, as determined by the Administrator, in conjunction with the Secretary of Agriculture, to encourage better measurement and accounting.

(i) ACQUISITION OF NEW DATA AND REVIEW OF METHODS FOR AGRICULTURAL AND FORESTRY PROJECTS.—The Administrator, in conjunction with the Secretary of Agriculture, shall—

(1) establish a comprehensive field sampling program to improve the scientific bases on which the standardized tools and methods developed under this section are based; and

(2) review and revise the standardized tools and methods developed under this section, based on—

(A) validation of existing methods, protocols, procedures, techniques, factors, equations, or models;

(B) development of new methods, protocols, procedures, techniques, factors, equations, or models;

(C) increased availability of field data or other datasets; and

(D) any other information identified by the Administrator, in conjunction with the Secretary of Agriculture, that is necessary to meet the objectives of this subtitle.

(j) EXCLUSION.—No activity for which any emission allowances are received under subtitle C shall generate offset allowances under this subtitle.

SEC. 305. OFFSET VERIFICATION AND ISSUANCE OF ALLOWANCES.

(a) IN GENERAL.—Offset allowances may be claimed for net emission reductions or increases in sequestration annually, after accounting for any necessary discounts in accordance with section 304, by submitting a verification report for an offset project to the Administrator.

(b) OFFSET VERIFICATION.—

(1) SCOPE OF VERIFICATION.—A verification report for an offset project shall be—

(A) completed by a verifier accredited in accordance with paragraph (3); and

(B) developed taking into consideration—

(i) the information and methodology contained within a monitoring and quantification plan;

(ii) data and subsequent analysis of the offset project, including—

(I) quantification of net emission reductions or increases in sequestration;

(II) determination of additionality;

(III) calculation of leakage;

(IV) assessment of permanence;

(V) discounting for uncertainty; and

(VI) the adjustment of net emission reductions or increases in sequestration by the discounts determined under subclauses (II) through (V); and

(iii) subject to the requirements of this subtitle, any other information identified by the Administrator as being necessary to achieve the purposes of this subtitle.

(2) VERIFICATION REPORT REQUIREMENTS.—The Administrator shall specify the required components of a verification report, including—

(A) the quantity of offsets generated;

(B) the amount of discounts applied;

(C) an assessment of methods (and the appropriateness of those methods);

(D) an assessment of quantitative errors or omissions (and the effect of the errors or omissions on offsets);

(E) any potential conflicts of interest between a verifier and project developer; and

(F) any other provision that the Administrator considers to be necessary to achieve the purposes of this subtitle.

(3) VERIFIER ACCREDITATION.—

(A) IN GENERAL.—The regulations promulgated pursuant to section 302 shall establish a process and requirements for accreditation by a third-party verifier that has no conflicts of interest.

(B) PUBLIC ACCESSIBILITY.—Each verifier meeting the requirements for accreditation in accordance with this paragraph shall be listed in a publicly-accessible database, which shall be maintained and updated by the Administrator.

(c) REGISTRATION AND AWARDING OF OFFSETS.—

(1) IN GENERAL.—Not later than 90 days after the date on which the Administrator receives a verification report required under subsection (b), the Administrator shall—

(A) determine whether the offsets satisfy the applicable requirements of this subtitle; and

(B) notify the project developer of that determination.

(2) AFFIRMATIVE DETERMINATION.—In the case of an affirmative determination under paragraph (1), the Administrator shall—

(A) register the offset allowances in accordance with this subtitle; and

(B) issue the offset allowances.

(3) APPEAL AND REVIEW.—The Administrator shall establish mechanisms for the appeal and review of determinations made under this subsection.

SEC. 306. TRACKING OF REVERSALS FOR SEQUESTRATION PROJECTS.

(a) REVERSAL CERTIFICATION.—

(1) IN GENERAL.—The regulations promulgated pursuant to section 302 shall require the submission of a reversal certification for each offset project on an annual basis following the registration of offset allowances.

(2) REQUIREMENTS.—A reversal certification submitted in accordance with this subsection shall state—

(A) whether any unmitigated reversal relating to the offset project has occurred in the year preceding the year in which the certification is submitted; and

(B) the quantity of each unmitigated reversal.

(b) EFFECT ON OFFSET ALLOWANCES.—

(1) INVALIDITY.—The Administrator shall declare invalid all offset allowances issued for any offset project that has undergone a complete reversal.

(2) PARTIAL REVERSAL.—In the case of an offset project that has undergone a partial reversal, the Administrator shall render invalid offset allowances issued for the offset project in direct proportion to the degree of reversal.

(c) ACCOUNTABILITY FOR REVERSALS.—Liability and responsibility for compensation of a reversal of a registered offset allowance under subsection (a) shall lie with the owner of the offset allowance, as described in section 302.

(d) COMPENSATION FOR REVERSALS.—The unmitigated reversal of 1 or more registered offset allowances that were submitted for the purpose of compliance with section 202(a) shall require the submission of—

(1) an equal number of offset allowances; or

(2) a combination of offset allowances and emission allowances equal to the unmitigated reversal.

(e) PROJECT TERMINATION.—A project developer may cease participation in the domestic offset program established under this subtitle at any time, on the condition that any registered allowances awarded for increases in sequestration have been compensated for by the project developer through the submission of an equal number of any combination of offset allowances and emission allowances.

SEC. 307. EXAMINATIONS.

(a) REGULATIONS.—The regulations promulgated pursuant to section 302 shall govern the examination and auditing of offset allowances.

(b) REQUIREMENTS.—The governing regulations described in subsection (a) shall specifically consider—

(1) principles for initiating and conducting examinations;

(2) the type or scope of examinations, including—

(A) reporting and recordkeeping; and

(B) site review or visitation;

(3) the rights and privileges of an examined party; and

(4) the establishment of an appeal process.

SEC. 308. TIMING AND THE PROVISION OF OFFSET ALLOWANCES.

(a) INITIATION OF OFFSET PROJECTS.—An offset project that commences operation on or after the effective date of the governing regulations described in section 307(a) shall be eligible to generate offset allowances under this subtitle if the offset project meets the other applicable requirements of this subtitle.

(b) PRE-EXISTING PROJECTS.—

(1) IN GENERAL.—The Administrator shall allow for the transition into the Registry of offset projects and banked offset allowances that, as of the effective date of regulations promulgated under section 307(a), are registered under or meet the standards of the Climate Registry, the California Action Registry, the GHG Registry, the Chicago Climate Exchange, the GHG Clean Projects Registry, or any other Federal, State, or private reporting programs or registries, if the Administrator determines that such other offset projects and banked offset allowances under those other programs or registries satisfy the applicable requirements of this subtitle.

(2) EXCEPTION.—An offset allowance that is expired, retired, or canceled under any other offset program, registry, or market as of the effective date of the governing regulations described in section 307(a) shall be ineligible for transition into the Registry.

SEC. 309. OFFSET REGISTRY.

In addition to the requirements established by section 304, an offset allowance registered under this subtitle shall be accompanied in the Registry by—

(1) a verification report submitted pursuant to section 305(a);

(2) a reversal certification submitted pursuant to section 306(a); and

(3) subject to the requirements of this subtitle, any other information identified by the Administrator as being necessary to achieve the purposes of this subtitle.

SEC. 310. ENVIRONMENTAL CONSIDERATIONS.

(1) COORDINATION TO MINIMIZE NEGATIVE EFFECTS.—In promulgating regulations under this subtitle, the Administrator, in conjunction with the Secretary of Agriculture, 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 subtitle.

(2) REPORT ON POSITIVE EFFECTS.—Not later than 2 years after the date of enactment of this Act, the Administrator, in conjunction with the Secretary of Agriculture, shall submit to Congress a report detailing—

(A) the incentives, programs, or policies capable of fostering improvements to human health or the environment in conjunction with the implementation of offset projects under this subtitle; and

(B) the cost and benefits of those incentives, programs, or policies.

(3) COORDINATION TO ENHANCE ENVIRONMENTAL BENEFITS.—In promulgating regulations under this subtitle, the Administrator, in conjunction with the Secretary of Agriculture and the Secretary of Interior, shall—

(A) act to enhance and increase the adaptive capability of natural systems and resilience of those systems to climate change, including through the support of biodiversity, native species, and land management practices that foster natural ecosystem conditions; and

(B) coordinate actions taken under this paragraph, to the maximum extent practicable, with existing programs that have overlapping outcomes to maximize environmental benefits.

(4) USE OF NATIVE PLANT SPECIES IN COMPLIANCE OFFSET PROJECTS.—Not later than 18 months after the date of enactment of this Act, the Administrator, in conjunction with the Secretary of Agriculture, shall promulgate regulations for the selection, use, and storage of native and nonnative plant materials—

(A) to ensure native plant materials are given primary consideration, in accordance with applicable Department of Agriculture guidance for use of native plant materials;

(B) to prohibit the use of Federal- or State-designated noxious weeds; and

(C) to prohibit the use of a species listed by a regional or State invasive plant council within the applicable region or State.

SEC. 311. PROGRAM REVIEW.

Not later than 5 years after the date of enactment of this Act, and periodically thereafter, the Administrator, in conjunction with the Secretary of Agriculture, shall review and revise, as necessary to achieve the purposes of this Act, the regulations promulgated under this subtitle.

Subtitle B—Offsets and Emission Allowances From Other Countries

SEC. 321. OFFSET ALLOWANCES ORIGINATING FROM PROJECTS IN OTHER COUNTRIES.

(a) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations establishing a system under which the Administrator shall register and issue offset allowances for projects that reduce greenhouse gas emissions or increase sequestration of carbon dioxide in countries other than the United States.

(b) USE.—

(1) IN GENERAL.—Subject to paragraph (3), the quantity of offset allowances issued pursuant to this section in a calendar year shall not exceed 5 percent of the quantity of emission allowances established for that year pursuant to section 201(a).

(2) USE OF INTERNATIONAL ALLOWANCES.—

(A) IN GENERAL.—If the quantity of offset allowances issued in a calendar year pursuant to this section is less than 5 percent of the quantity of emission allowances established for that year pursuant to section 201(a), the Administrator shall allow the use, by covered entities in that year, of international allowances under section 322.

(B) MAXIMUM QUANTITY.—The maximum aggregate quantity of international allowances the use of which use the Administrator shall allow under subparagraph (A) shall be equal to the difference between—

(i) 5 percent of the quantity of emission allowances established for that year pursuant to section 201(a); and

(ii) the quantity of domestic offset allowances issued in that year pursuant to this section.

(3) CARRY-OVER.—

(A) IN GENERAL.—If the sum of the quantity of offset allowances issued in a calendar pursuant to this section and the quantity of international allowances used in that calendar year pursuant to paragraph (2) is less than 5 percent of the quantity of emission allowances established for that year pursuant to section 201(a), notwithstanding paragraph (1), the quantity of offset allowances issued pursuant to this section in the subsequent calendar year shall not exceed the sum of—

(i) 5 percent of the quantity of emission allowances established for that subsequent calendar year pursuant to section 201(a); and

(ii) the difference between—

(I) 5 percent of the quantity of emission allowances established for that year pursuant to section 201(a); and

(II) the sum of the quantity of offset allowances issued in the preceding calendar year pursuant to this section and the quantity of international allowances used in that year pursuant to paragraph (2).

(c) REQUIREMENTS.—The regulations promulgated pursuant to subsection (a) shall—

(1) take into consideration protocols adopted in accordance with the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992; and

(2) require that, in order to be approved for use under this subtitle—

(A) a project shall be determined by the Administrator to meet the requirements under the regulations established pursuant to subtitle A; and

(B) the emission allowance shall not be provided for a project at facility that competes directly with a United States facility.

(d) ENTITY CERTIFICATION.—The owner or operator of a covered entity that submits an offset allowance issued pursuant to this section shall certify that the allowance has not been retired from use in the registry of the applicable foreign country.

SEC. 322. EMISSION ALLOWANCES FROM OTHER COUNTRIES.

(a) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations, taking into consideration protocols adopted in accordance with the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992, approving the use in the United States of emission allowances issued by countries other than the United States.

(b) REQUIREMENTS.—The regulations promulgated pursuant to subsection (a) shall require that, in order to be approved for use in the United States—

(1) an emission allowance shall have been issued by a foreign country pursuant to a governmental program that imposes mandatory absolute tonnage limits on greenhouse gas emissions from the foreign country, or 1 or more industry sectors in that country, pursuant to protocols described in subsection (a); and

(2) the governmental program be of comparable stringency to the program established by this Act, including comparable monitoring, compliance, and enforcement.

(c) FACILITY CERTIFICATION.—The owner or operator of a covered entity that submits an international allowance under this subtitle shall certify that the allowance has not been retired from use in the registry of the applicable foreign country.

Subtitle C—Agriculture and Forestry Program in the United States

SEC. 331. ALLOCATION.

(a) FIRST PERIOD.—Not later than 330 days before the beginning of each of calendar years 2012 through 2030, the Administrator shall allocate to the Secretary of Agriculture, for the program established pursuant to section 332, 4.25 percent of the emission allowances established pursuant to section 201(a) for that calendar year.

(b) SECOND PERIOD.—Not later than 330 days before the beginning of each of calendar years 2031 through 2050, the Administrator shall allocate to the Secretary of Agriculture, for the program established pursuant to section 332, 4.5 percent of the emission allowances established pursuant to section 201(a) for that calendar year.

SEC. 332. AGRICULTURE AND FORESTRY PROGRAM.

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Secretary of Agriculture shall promulgate regulations establishing a program for distributing emission allowances allocated pursuant to section 331 to entities in the agricultural and forestry sectors of the United States, including entities engaged in organic farming, as a reward for—

(1) achieving real, verifiable, additional, permanent, and enforceable reductions in greenhouse gas emissions from the operations of the entities;

(2) achieving real, verifiable, additional, permanent, and enforceable increases in greenhouse gas sequestration on land owned or managed by the entities; and

(3) conducting pilot projects or other research regarding innovative practices for use in measuring—

(A) greenhouse gas emission reductions;

(B) sequestration; or

(C) other benefits and associated costs of the pilot projects.

(b) NITROUS OXIDE AND METHANE.—The Secretary of Agriculture shall ensure that, during any 5-year period, the average annual percentage of the quantity of emission allowances established for a calendar year that is distributed to entities under the program established under subsection (a) specifically for achieving real, verifiable, additional, permanent, and enforceable reductions in nitrous oxide emissions through soil management or achieving real, verifiable, additional, permanent, and enforceable reductions in methane emissions through enteric fermentation and manure management shall be 0.5 percent.

(c) NEW METHODOLOGY INCUBATOR.—

(1) IN GENERAL.—The Secretary of Agriculture shall ensure that, during any 5-year period, the average annual percentage of the quantity of emission allowances established for a calendar year that is distributed to entities under the program established under paragraph (2) specifically for creating methodologies, tools, and support for the development and deployment of new project types shall be at least 0.25 percent.

(2) SUPPORT FOR INNOVATION.—

(A) ACQUISITION OF NEW DATA, IMPROVEMENT OF METHODOLOGIES, AND DEVELOPMENT OF NEW TOOLS FOR DESIGNATED OFFSET ACTIVITY CATEGORIES.—The Administrator, in conjunction with the Secretary of Agriculture, shall establish a comprehensive field sampling and pilot project program to improve the scientific data and calibration of standardized tools and methodologies that—

(i) are used to measure greenhouse gas reductions or sequestration and baselines for categories of activities not covered by an emission limitation under this Act; and

(ii) are likely to provide significant emission reductions or sequestration.

(B) TARGETED SUPPORT FOR DEVELOPMENT AND DEPLOYMENT OF NEW TECHNOLOGIES.—

(i) IN GENERAL.—The Administrator shall establish a program for development and deployment of new technologies and methods in greenhouse gas reductions or sequestration for activities not covered by an emission limitation under this Act.

(ii) SELECTION; FUNDING.—In carrying out the program under clause (i), the Administrator shall—

(I) select activities for participation in the program based on—

(aa) the potential emission reductions or sequestration of the activities; and

(bb) a market penetration review; and

(II) provide funding for a select number of projects—

(aa) to cover research on technological and other barriers, prototypes, first-of-the-kind risk coverage, and initial market barriers; and

(bb) under limited categories of activities that are dependent on forward progress.

(d) REQUIREMENT.—The Secretary of Agriculture shall distribute emission allowances under this section in a manner that—

(1) maximizes the avoidance or reduction of greenhouse gas emissions; and

(2) ensures that entities participating in the program under this section do not receive more compensation for emission reductions under this program than the entities would receive for the same reductions through an offset project under subtitle A.

(e) PROHIBITION.—Emission reductions or sequestration increases generating offset allowances pursuant to subtitle A shall not be used the basis for a distribution of emission allowances under this section.

SEC. 333. AGRICULTURAL AND FORESTRY GREENHOUSE GAS MANAGEMENT RESEARCH.

(a) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary of Agriculture, in consultation with the Administrator and scientific, agricultural, and forestry experts, shall prepare and submit to Congress a report that describes the status of research on agricultural and forestry greenhouse gas management, including a description of—

(1) research on soil carbon sequestration and other agricultural and forestry greenhouse gas management that has been carried out;

(2) any additional research that is necessary, including research into innovative practices to attempt to measure—

(A) greenhouse gas emission reductions;

(B) sequestration; or

(C) other benefits or associated costs;

(3) the proposed priority for additional research;

(4) the most appropriate approaches for conducting the additional research; and

(5) the extent to which and the manner in which allowances that are specific to agricultural and forestry operations, including harvested wood products and the reduction of hazardous fuels to reduce the risk of uncharacteristically severe wildfires, should be valued and allotted.

(b) RESEARCH.—After the date of submission of the report described in subsection (a), the President and the Secretary of Agriculture (in collaboration with the Administrator and the member institutions of higher education of the Consortium for Agricultural Soil Mitigation of Greenhouse Gases, institutions of higher education, and research entities) shall initiate a program to conduct any additional research that is necessary.

TITLE IV—ESTABLISHING A GREENHOUSE GAS EMISSION ALLOWANCE TRADING MARKET

Subtitle A—Trading

SEC. 401. SALE, EXCHANGE, AND RETIREMENT OF ALLOWANCES.

Except as otherwise provided in this Act, and subject to the regulations promulgated pursuant to subtitle B, the lawful holder of an allowance may, without restriction—

(1) sell, exchange, or transfer the allowance; or

(2) submit the allowance for compliance in accordance with section 202.

SEC. 402. NO RESTRICTION ON TRANSACTIONS.

The privilege of purchasing, holding, selling, exchanging, and retiring allowances shall not be restricted to the owners and operators of covered entities.

SEC. 403. ALLOWANCE TRANSFER AND TRACKING SYSTEM.

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations establishing a system for issuing, recording, transferring, and tracking allowances.

(b) REQUIREMENTS.—The regulations promulgated pursuant to subsection (a) shall—

(1) specify all necessary procedures and requirements for an orderly and competitive functioning of the allowance trading system; and

(2) provide that the transfer of allowances shall not be effective until such date as a written certification of the transfer, signed by a responsible official of each party to the transfer, is received and recorded by the Administrator in accordance with the regulations promulgated pursuant to subsection (a).

Subtitle B—Market Oversight and Enforcement

SEC. 411. FINDING.

Congress finds that it is necessary to establish an interagency working group to enhance the integrity, efficiency, orderliness, fairness, and competitiveness of the development by the United States of a new financial market for emission allowances, including by ensuring that—

(1) the market—

(A) is designed to prevent fraud and manipulation, which could potentially arise from many sources, including—

(i) the concentration of market power within the control of a limited number of individuals or entities; and

(ii) the abuse of material, nonpublic information; and

(B)(i) is appropriately transparent, with real-time reporting of quotes and trades;

(ii) makes information on price, volume, and supply, and other important statistical information, available to the public on fair, reasonable, and nondiscriminatory terms;

(iii) is subject to appropriate recordkeeping and reporting requirements regarding transactions; and

(iv) has the confidence of investors;

(2) the market—

(A) functions smoothly and efficiently, generating prices that accurately reflect supply and demand for emission allowances; and

(B) promotes just and equitable principles of trade;

(3) the need of market participants and regulators for transparency is balanced against legitimate business concerns regarding the release of confidential, proprietary information;

(4) the market is subject to effective and comprehensive oversight and integrates strong enforcement mechanisms, including mechanisms for cooperation with other national and international oversight regimes;

(5) an appropriate interagency forum exists—

(A) for ongoing assessment of emerging regulatory matters and information-sharing; and

(B) to ensure regulatory coordination of the market;

(6) the market establishes an equitable system for best execution of customer orders; and

(7) the market protects investors and the public interest.

SEC. 412. CARBON MARKET OVERSIGHT AND REGULATION.

(a) DELEGATION OF AUTHORITY BY PRESIDENT.—The President, taking into consideration the recommendations of the Working Group established by subsection (b), shall delegate to members of the Working Group and the heads of other appropriate Federal entities the authority to promulgate regulations to enhance the integrity, efficiency, orderliness, fairness, and competitiveness of the development by the United States of a new financial market for emission allowances, based on the following core principles:

(1) The market shall—

(A) be designed to prevent fraud and manipulation relating to the trading of emission allowances and related markets, which could potentially arise from many sources, including—

(i) the concentration of market power within the control of a limited number of individuals or entities; and

(ii) the abuse of material, nonpublic information;

(B)(i) be appropriately transparent, with real-time reporting of quotes and trades; and

(ii) make information on price, volume, and supply, and other important statistical information available to the public on fair, reasonable, and nondiscriminatory terms;

(C) be subject to appropriate recordkeeping and reporting requirements regarding transactions; and

(D) have the confidence of investors.

(2) The market shall—

(A) function smoothly and efficiently, generating prices that accurately reflect supply and demand for emission allowances;

(B) be designed to prevent excessive speculation that could cause sudden or unreasonable fluctuations or unwarranted changes in the price of emission allowances; and

(C) promote just and equitable principles of trade.

(3) The need of market participants and regulators for transparency shall be balanced against legitimate business concerns concerning the release of confidential, proprietary information.

(4) The market shall be subject to effective and comprehensive oversight, which integrates strong enforcement mechanisms, including mechanisms for cooperation with other national and international oversight regimes.

(5) There shall be an appropriate interagency forum—

(A) for ongoing assessment of emerging regulatory matters and information sharing; and

(B) to ensure regulatory coordination of the market.

(6) The market shall establish an equitable system for best execution of customer orders.

(7) The market shall protect investors and the public interest.

(b) ESTABLISHMENT.—There is established an interagency working group, to be known as the ''Carbon Markets Working Group'' (referred to in this section as the ''Working Group'').

(c) MEMBERSHIP.—The Working Group shall be composed of the following members (or their designees):

(1) The Administrator, who shall serve as Chairperson of the Working Group.

(2) The Secretary of the Treasury.

(3) The Chairman of the Securities and Exchange Commission.

(4) The Chairman of the Commodity Futures Trading Commission.

(5) The Chairman of the Federal Energy Regulatory Commission.

(6) Such other Executive branch officials as may be appointed by the President.

(d) DUTIES.—

(1) IDENTIFICATION OF ISSUES AND APPROPRIATE ACTIVITIES.—

(A) IN GENERAL.—The Working Group shall identify—

(i) the major issues relating to the integrity, efficiency, orderliness, fairness, and competitiveness of the development by the United States of a new financial market for emission allowances under the cap-and-trade system for emission allowances established under this Act;

(ii) any relevant recommendations provided to the Working Group by Federal, State, or local governments, organizations, individuals, and entities; and

(iii) the activities, such as market regulation, policy coordination, and contingency planning, that are appropriate to carry out those recommendations.

(B) CONSULTATION.—In identifying appropriate activities under subparagraph (A)(iii), the Working Group shall consult with representatives of, as appropriate—

(i) various information exchanges and clearinghouses;

(ii) self-regulatory entities, securities exchanges, transfer agents, and clearing entities;

(iii) participants in the emission allowance trading market; and

(iv) other Federal entities, including—

(I) the Federal Reserve; and

(II) the Federal Trade Commission.

(2) STUDY.—The Working Group shall conduct a study of the major issues relating to the regulation of the emission allowance trading market and other carbon markets.

(3) REPORT.—Not later than 270 days after the date of enactment of this Act, and annually thereafter, the Working Group shall submit to the President and Congress a report describing—

(A) the progress made by the Working Group;

(B) recommendations of the Working Group regarding any regulations proposed pursuant to subsection (a);

(C) recommendations for additional legislative action, if necessary; and

(D) a timetable for the implementation of the new regulations to ensure that the regulations take effect before the effective date of regulations governing the emission allowance trading system.

(4) MEMORANDA OF UNDERSTANDING.—Not later than 270 days after the date of enactment of this Act, the Administrator shall enter into a memorandum of understanding with the head of each appropriate Federal entity (including each appropriate Federal entity represented by a member of the Working Group, as applicable) relating to regulatory and enforcement coordination, information sharing, and other related matters to minimize duplicative or conflicting regulatory efforts.

(5) REGULATIONS.—Not later than 270 days after the date of enactment of this Act, the heads of other appropriate Federal entities to which the President has delegated regulatory authority under subsection (a) shall promulgate regulations in accordance with subsection (a).

(e) AUTHORITIES.—In promulgating and implementing regulations pursuant to this section, the promulgating Federal agencies shall have authorities equivalent to the authorities of those agencies under existing law.

(f) ENFORCEMENT.—Regulations promulgated under this section shall—

(1) be fully enforceable and subject to such fines and penalties as are provided under the laws (including regulations) administered by the Federal agency that promulgated the regulations under this section; and

(2) for the purpose of enforcement, in accordance with section 1722, be considered to have been promulgated pursuant to this Act.

(g) ADMINISTRATION.—

(1) INFORMATION FROM FEDERAL AGENCIES.—

(A) IN GENERAL.—The Working Group may secure directly from any Federal agency such information as the Working Group considers necessary to carry out this section.

(B) PROVISION OF INFORMATION.—On request of the Chairperson of the Working Group, the head of the agency shall provide the information to the Working Group.

(2) COMPENSATION OF MEMBERS.—A member of the Working Group who is an officer or employee of the Federal Government shall serve without compensation in addition to the compensation received for the services of the member as an officer or employee of the Federal Government.

(3) ADMINISTRATOR SUPPORT.—To the extent permitted by law and subject to the availability of appropriations, the Administrator shall provide to the Working Group such administrative and support services as are necessary to assist the Working Group in carrying out the duties described in subsection (d).

(h) EFFECT OF SECTION.—Nothing in this section limits or restricts any regulatory or enforcement authority of a Federal entity as in effect on the date of enactment of this Act.

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

Subtitle C—Carbon Market Efficiency Board

SEC. 421. ESTABLISHMENT.

There is established a board, to be known as the ''Carbon Market Efficiency Board''.

SEC. 422. COMPOSITION AND ADMINISTRATION.

(a) MEMBERSHIP.—

(1) COMPOSITION.—The Board shall be composed of—

(A) 7 members who are citizens of the United States, to be appointed by the President, by and with the advice and consent of the Senate; and

(B) an advisor who is a scientist with expertise in climate change and the effects of climate change on the environment, to be appointed by the President, by and with the advice and consent of the Senate.

(2) REQUIREMENTS.—In appointing members of the Board under paragraph (1), the President shall—

(A) ensure fair representation of the financial, agricultural, industrial, and commercial sectors, and the geographical regions, of the United States, and include a representative of consumer interests;

(B) appoint not more than 1 member from each such geographical region; and

(C) ensure that not more than 4 members of the Board serving at any time are affiliated with the same political party.

(3) COMPENSATION.—

(A) IN GENERAL.—A member of the Board shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for level II of the Executive Schedule under section 5313 of title 5, United States Code, for each day (including travel time) during which the member is engaged in the performance of the duties of the Board.

(B) CHAIRPERSON.—The Chairperson of the Board shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for level I of the Executive Schedule under section 5312 of title 5, United States Code, for each day (including travel time) during which the member is engaged in the performance of the duties of the Board.

(4) PROHIBITIONS.—

(A) CONFLICTS OF INTEREST.—An individual employed by, or holding any official relationship (including any shareholder) with, any entity engaged in the generation, transmission, distribution, or sale of energy, an individual who has any pecuniary interest in the generation, transmission, distribution, or sale of energy, or an individual who has a pecuniary interest in the implementation of this Act, shall not be appointed to the Board under this subsection.

(B) NO OTHER EMPLOYMENT.—A member of the Board shall not hold any other employment during the term of service of the member.

(b) TERM; VACANCIES.—

(1) TERM.—

(A) IN GENERAL.—The term of a member of the Board shall be 14 years, except that the members first appointed to the Board shall be appointed for terms in a manner that ensures that—

(i) the term of not more than 1 member shall expire during any 2-year period; and

(ii) no member serves a term of more than 14 years.

(B) OATH OF OFFICE.—A member shall take the oath of office of the Board by not later than 15 days after the date on which the member is appointed under subsection (a)(1).

(C) REMOVAL.—

(i) IN GENERAL.—A member may be removed from the Board on determination of the President for cause.

(ii) NOTIFICATION.—Not later than 30 days before removing a member from the Board for cause under clause (i), the President shall provide to Congress an advance notification of the determination by the President to remove the member.

(2) VACANCIES.—

(A) IN GENERAL.—A vacancy on the Board—

(i) shall not affect the powers of the Board; and

(ii) shall be filled in the same manner as the original appointment was made.

(B) SERVICE UNTIL NEW APPOINTMENT.—A member of the Board the term of whom has expired or otherwise been terminated shall continue to serve until the date on which a replacement is appointed under subparagraph (A)(ii), if the President determines that service to be appropriate.

(c) CHAIRPERSON AND VICE CHAIRPERSON.—Of members of the Board, the President shall appoint—

(1) 1 member to serve as Chairperson of the Board for a term of 4 years; and

(2) 1 member to serve as Vice-Chairperson of the Board for a term of 4 years.

(d) MEETINGS.—

(1) INITIAL MEETING.—The Board shall hold the initial meeting of the Board as soon as practicable after the date on which all members have been appointed to the Board under subsection (a)(1).

(2) PRESIDING OFFICER.—A meeting of the Board shall be presided over by—

(A) the Chairperson;

(B) in any case in which the Chairperson is absent, the Vice-Chairperson; or

(C) in any case in which the Chairperson and Vice-Chairperson are absent, a chairperson pro tempore, to be elected by the members of the Board.

(3) QUORUM.—Four members of the Board shall constitute a quorum for a meeting of the Board.

(4) OPEN MEETINGS.—The Board shall be subject to section 552b of title 5, United States Code (commonly known as the ''Government in the Sunshine Act'').

(e) RECORDS.—The Board shall be subject to section 552 of title 5, United States Code (commonly known as the ''Freedom of Information Act'').

(f) REVIEW BY GOVERNMENT ACCOUNTABILITY OFFICE.—Not later than January 1, 2013, and annually thereafter, the Comptroller General of the United States shall conduct a review of the efficacy of the Board in fulfilling the purposes and duties of the Board under this subtitle.

SEC. 423. DUTIES.

The Board shall—

(1) gather such information as the Board determines to be appropriate regarding the status of the allowance market established pursuant to this Act, including information relating to—

(A) allowance allocation and availability;

(B) the price of allowances;

(C) macro- and micro-economic effects of unexpected significant increases and decreases in allowance prices, or shifts in the allowance market, should those increases, decreases, or shifts occur;

(D) the success of the market in promoting achievement of the purposes of this Act;

(E) economic effect thresholds that could warrant implementation of 1 or more cost relief measures described in section 521(a);

(F) in the event any cost relief measure described in section 521(a) is implemented, the effects of the measure on the market; and

(G) the minimum levels of cost relief measures that are necessary to achieve avoidance of economic harm and ensure achievement of the purposes of this Act;

(2) employ cost relief measures in accordance with section 521; and

(3) submit to the President and the Congress, and publish on the Internet, quarterly reports—

(A) describing—

(i) the status of the allowance market established under this Act;

(ii) regional, industrial, and consumer responses to the market and the economic costs and benefits of the market;

(iii) where practicable, investment responses to the market;

(iv) any corrective measures that Congress should take to relieve excessive net costs of the market; and

(v) plans to compensate for any such measures, to ensure that the long-term emissions reduction goals of this Act are achieved;

(B) that are timely and succinct, to ensure regular monitoring of market trends; and

(C) that are prepared independently by the Board.

Subtitle D—Climate Change Technology Board

SEC. 431. ESTABLISHMENT.

There is established, as an agency of the Federal Government, the Climate Change Technology Board.

SEC. 432. PURPOSE.

The purpose of the board established by section 431 is to advance the purposes of this Act by using the funds made available to the board under titles VIII through XI to accelerate the commercialization and diffusion of low- and zero-carbon technologies and practices.

SEC. 433. INDEPENDENCE.

The board established by section 431 shall have the authority to distribute funds made available to the board under this Act.

SEC. 434. ADVANCE NOTIFICATION OF DISTRIBUTIONS OF FUNDS.

Not less than 60 days before distributing any funds made available under this Act to the board established by section 431, the board shall—

(1) publish in the Federal Register a detailed notification of the distribution; and

(2) provide a detailed notification of the distribution to—

(A) the President;

(B) in the Senate—

(i) the Committee on Appropriations;

(ii) the Committee on Banking, Housing, and Urban Affairs;

(iii) the Committee on Budget;

(iv) the Committee on Commerce, Science, and Transportation;

(v) the Committee on Energy and Natural Resources;

(vi) the Committee on Environment and Public Works;

(vii) the Committee on Finance;

(viii) the Committee on Homeland Security and Governmental Affairs; and

(ix) the Committee on Small Business and Entrepreneurship;

(C) in the House of Representatives—

(i) the Committee on Appropriations;

(ii) the Committee on Budget;

(iii) the Committee on Energy and Commerce;

(iv) the Committee on Natural Resources;

(v) the Committee on Oversight and Government Reform;

(vi) the Committee on Science and Technology;

(vii) the Committee on Small Business;

(viii) the Committee on Transportation and Infrastructure;

(ix) the Committee on Ways and Means; and

(x) the Select Committee on Energy Independence and Global Warming; and

(D) the Joint Economic Committee and Joint Committee on Taxation of Congress.

SEC. 435. CONGRESSIONAL OVERSIGHT OF BOARD EXPENDITURES.

(a) DISAPPROVAL.—An obligation of funds for which a notification is submitted under section 434 shall not occur if Congress enacts legislation disapproving the obligation of funds by not later than 30 days after the date of receipt of the notification.

(b) REPORTS.—Not later than 90 days after the end of each of calendar years 2012

through 2050, the board established by section 431 shall submit to each committee of Congress identified in section 434 a report describing, with respect to that calendar year—

(1) the actual amounts obligated during that year;

(2) the purposes for which the amounts were obligated; and

(3) the balance, if any, of the amounts that—

(A) were obligated during that year; but

(B) remain unexpended as of the date of submission of the report.

SEC. 436. REQUIREMENTS.

(a) COMPOSITION.—The board established by section 431 shall be composed of 5 directors who are citizens of the United States, of whom 1 shall be elected annually by the board to serve as Chairperson.

(b) POLITICAL AFFILIATION.—Not more than 3 directors serving on the board at any time may be affiliated with the same political party.

(c) APPOINTMENT AND TERM.—Each director shall be appointed by the President, by and with the advice and consent of the Senate, for a term of 5 years.

(d) QUORUM.—Three directors shall constitute a quorum for a meeting of the board.

(e) PROHIBITIONS.—

(1) CONFLICTS OF INTEREST.—No individual employed by, or holding any official relationship with (including as a shareholder), any entity engaged in the sector in which businesses receive distributions of funds by the board, and no individual who has a pecuniary interest in the implementation of this Act, shall be appointed director.

(2) NO OTHER EMPLOYMENT.—A director shall not hold any other employment during the term of service of the director.

(f) VACANCIES.—

(1) IN GENERAL.—A vacancy on the board—

(A) shall not affect the powers of the board, subject to the condition that the board has a sufficient number of directors to establish a quorum; and

(B) shall be filled in the same manner as the original appointment was made.

(2) SERVICE UNTIL NEW APPOINTMENT.—A director whose term has expired or who has been removed from the board shall continue to serve until the date on which a replacement is appointed, if the President determines that service to be appropriate.

(g) REMOVAL.—

(1) IN GENERAL.—A director may be removed from the board for cause, on determination of the President.

(2) NOTIFICATION.—Not later than 30 days before removing a director for cause under paragraph (1), the President shall provide to the Congress an advance notification of the determination by the President to remove the director.

SEC. 437. REVIEWS AND AUDITS BY COMPTROLLER GENERAL.

The Comptroller General of the United States shall conduct periodic reviews and audits of the efficacy of the distributions of funds made by the board established by section 431.

Subtitle E—Auction on Consignment

SEC. 441. REGULATIONS.

Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations under which the Administrator shall, at the request of a recipient of a distribution of emission allowances under this Act—

(1) include those emission allowances among the quantity of emission allowances sold by the Administrator at regular auction under this Act; and

(2) transfer the proceeds of the sale of those allowances to the recipient.

TITLE V—FEDERAL PROGRAM TO PREVENT ECONOMIC HARDSHIP

Subtitle A—Banking

SEC. 501. EFFECT OF TIME.

The passage of time shall not, by itself, cause an allowance to be retired or otherwise diminish the compliance value of the allowance.

Subtitle B—Borrowing

SEC. 511. REGULATIONS.

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations under which, subject to subsection (b), the owner or operator of a covered entity may—

(1) borrow emission allowances from the Administrator; and

(2) for a calendar year, submit borrowed emission allowances to the Administrator in satisfaction of up to 15 percent of the compliance obligation under section 202.

(b) LIMITATION.—An emission allowance borrowed under subsection (a) shall be an emission allowance established by the Administrator for a specific future calendar year pursuant to section 201(a).

SEC. 512. TERM.

The owner or operator of a covered entity shall not submit, and the Administrator shall not accept, a borrowed emission allowance in partial satisfaction of the compliance obligation under section 202 for any calendar year that is more than 5 years earlier than the calendar year included in the identification number of the borrowed emission allowance.

SEC. 513. REPAYMENT WITH INTEREST.

For each borrowed emission allowance submitted in partial satisfaction of the compliance obligation under section 202 for a particular calendar year (referred to in this section as the ‘‘use year’’), the quantity of emission allowances that the owner or operator is required to submit under section 202 for the year from which the borrowed emission allowance was taken (referred to in this section as the ‘‘source year’’) shall be equal to 1.1 raised by an exponent equal to the difference between the source year and the use year expressed as a positive whole number.

Subtitle C—Emergency Off-Ramps

SEC. 521. EMERGENCY OFF-RAMPS TRIGGERED BY BOARD.

(a) POWERS OF BOARD.—The Board may carry out 1 or more of the following cost relief measures to ensure functioning, stable, and efficient markets for emission allowances:

(1) Increase the quantity of emission allowances that covered entities may borrow from the Administrator.

(2) Expand the period during which a covered entity may repay the Administrator for an emission allowance borrowed under paragraph (1).

(3) Increase the quantity of emission allowances obtained on a foreign greenhouse gas emission trading market that the owner or operator of any covered entity may use to satisfy the allowance submission requirement of the covered entity under section 201, on the condition that the Administrator has certified the market in accordance with the regulations promulgated pursuant to section 322.

(4) Increase the quantity of offset allowances generated in accordance with section 303 that the owner or operator of any covered entity may use to satisfy the total allowance submission requirement of the covered entity under section 201.

(b) SUBSEQUENT ACTIONS.—On determination by the Board to carry out a cost relief measure pursuant to subsection (a), the Board shall—

(1) allow the cost relief measure to be used only during the applicable allocation year;

(2) exercise the cost relief measure incrementally, and only as needed to avoid significant economic harm during the applicable allocation year;

(3) specify the terms of the relief to be achieved using the cost relief measure;

(4) in accordance with section 423, submit to the President and Congress a report describing the actions carried out by the Board; and

(5) evaluate, at the end of the applicable allocation year, actions that need to be carried out during subsequent years to compensate for any cost relief measure carried out during the applicable allocation year.

(c) LIMITATIONS.—Nothing in this section gives the Board the authority—

(1) to consider or prescribe entity-level petitions for relief from the costs of an emission allowance allocation or trading program established under Federal law;

(2) to carry out any investigative or punitive process under the jurisdiction of any Federal or State court;

(3) to interfere with, modify, or adjust any emission allowance allocation scheme established under Federal law; or

(4) to modify the total quantity of emission allowances issued under this Act for the period of calendar years 2012 through 2050.

SEC. 522. COST-CONTAINMENT AUCTIONS.

(a) IN GENERAL.—In December of each of calendar years 2012 through 2027, the Administrator shall conduct a cost-containment auction of emission allowances that shall be separate from other auctions of emission allowances conducted by the Administrator under this Act.

(b) RESTRICTION TO COVERED ENTITIES.—In any calendar year referred to in subsection (a), only covered entities that were required under section 202 to submit emission allowances for the preceding calendar year shall be eligible to purchase emission allowances at the cost-containment auction under that subsection.

(c) USE OF EMISSION ALLOWANCES PURCHASED AT A COST-CONTAINMENT AUCTION.—An emission allowance purchased at a cost-containment auction shall—

(1) be submitted by the purchaser for compliance under section 202 not later than 1 calendar year after the date of purchase of the emission allowance; and

(2) otherwise be valid for compliance under that section irrespective of the year for which the emission allowance was established by the Administrator.

SEC. 523. COST-CONTAINMENT AUCTION PRICE.

(a) IN GENERAL.—At each cost-containment auction, the Administrator shall offer emission allowances for sale beginning at a minimum price, which shall be known as the ‘‘cost-containment auction price’’.

(b) COST-CONTAINMENT AUCTION PRICE IN 2012.—

(1) IN GENERAL.—The cost-containment auction price for the cost-containment auction that takes place in December 2012 shall be the price established under paragraph (2).

(2) INITIAL COST-CONTAINMENT AUCTION PRICE.—

(A) PRESIDENTIAL DETERMINATION.—Not later than 2 years after the date of enactment of this Act, the President shall establish the cost-containment auction price for calendar year 2012 from within the range specified in subparagraph (B), the cost-containment auction price for calendar year 2012.

(B) RANGE.—The cost-containment auction price per emission allowance for December 2012 shall be—

(i) not less than $22; and

(ii) not more than $30.

(C) ECONOMIC MODELING.—The President shall establish the cost-containment auction price under this paragraph based on economic computer modeling relating to this Act conducted by—

(i) the Administrator; and

(ii) the Administrator of the Energy Information Administration.

(D) PUBLIC INPUT.—The Administrator and the Administrator of the Energy Information Administration shall provide public notice of, and an opportunity to comment on, the computer models, assumptions, and protocols planned to be used in modeling relating to this Act under subparagraph (C).

(c) COST-CONTAINMENT AUCTION PRICE IN SUBSEQUENT YEARS.—At the cost-containment auction for each of calendar years 2013 through 2027, the cost-containment auction price per emission allowance shall be equal to the product obtained by multiplying—

(1) the cost-containment auction price that applied to the cost-containment auction that was conducted during the preceding calendar year; and

(2) the sum of—

(A) the annual rate of United States dollar inflation for the calendar year (as measured by the Consumer Price Index); and

(B) 1.05.

SEC. 524. REGULAR AUCTION RESERVE PRICE.

(a) IN GENERAL.—At any regular auction, there shall be a regular auction reserve price below which the Administrator shall not sell any emission allowance.

(b) REGULAR AUCTION RESERVE PRICE IN 2012.—At any regular auction that takes place during calendar year 2012, the regular auction reserve price per emission allowance shall be $10.

(c) REGULAR AUCTION RESERVE PRICE IN SUBSEQUENT YEARS.—For each of calendar years 2013 through 2027, the regular auction reserve price at any regular auction that takes place during the calendar year shall be equal to the product obtained by multiplying—

(1) the regular auction reserve price that applied to each regular auction conducted during the preceding calendar year; and

(2) the sum of—

(A) the annual rate of United States dollar inflation for the calendar year (as measured by the Consumer Price Index); and

(B) 1.05.

SEC. 525. POOL OF EMISSION ALLOWANCES FOR THE COST-CONTAINMENT AUCTIONS.

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall establish a cost-containment auction pool to reserve the emission allowances that shall be offered for sale at the annual cost-containment auctions.

(b) FILLING THE COST-CONTAINMENT AUCTION POOL.—

(1) IN GENERAL.—Notwithstanding section 201(a), the Administrator shall, not later than 2 years after the date of enactment of this Act, reserve a total of 6,000,000,000 of the emission allowances established for the period of calendar years 2030 through 2050 pursuant to that section and transfer the emission allowances to the cost-containment auction pool.

(2) GRADUATED REMOVAL.—For each of calendar years 2031 through 2050, the quantity of emission allowances reserved pursuant to paragraph (1) from the quantity established for that year pursuant to section 201(a) shall be greater, by a percentage that remains constant from calendar year to calendar year, than the quantity reserved from the preceding year.

(c) SUPPLEMENTING THE COST-CONTAINMENT AUCTION POOL.—The Administrator shall transfer to the cost-containment auction pool each emission allowance that was not sold at a regular auction because of the operation of the regular auction reserve price.

SEC. 526. LIMIT ON THE QUANTITY OF EMISSION ALLOWANCES SOLD AT ANY COST-CONTAINMENT AUCTION.

(a) IN GENERAL.—At each cost-containment auction, there shall be a limit on the quantity of emission allowances that the Administrator may sell at the auction.

(b) COST-CONTAINMENT AUCTION LIMIT IN 2012.—At the cost-containment auction that takes place during December 2012, the cost-containment auction limit described in subsection (a) shall be 450,000,000 emission allowances.

(c) COST-CONTAINMENT AUCTION LIMIT IN SUBSEQUENT YEARS.—At the cost-containment auction during each of calendar years 2013 through 2027, the cost-containment auction limit described in subsection (a) shall be the product obtained by multiplying—

(1) the cost-containment auction limit that applied to the cost-containment auction that took place during the preceding calendar year; and

(2) 0.99.

(d) PER-ENTITY PURCHASE LIMIT.—

(1) IN GENERAL.—Subject to paragraph (2), the Administrator shall, by regulation, establish for each cost-containment auction a limitation on the number of emission allowances that any single entity may purchase at the cost-containment auction.

(2) REQUIREMENT.—A limitation under paragraph (1) shall be established at a quantity that ensures fair access to emission allowances by all covered entities that are eligible to purchase emission allowances at the cost-containment auction.

SEC. 527. USING THE PROCEEDS OF THE ANNUAL COST-CONTAINMENT AUCTIONS.

(a) ACHIEVING ADDITIONAL EMISSION REDUCTIONS FROM UN-CAPPED SOURCES.—

(1) IN GENERAL.—The Administrator shall use 70 percent of the proceeds from each cost-containment auction to achieve additional greenhouse gas emission reductions from entities that are not subject to the compliance obligation under section 202.

(2) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations to implement this subsection.

(b) PROVIDING ADDITIONAL RELIEF TO ENERGY CONSUMERS.—The Administrator shall deposit 30 percent of the proceeds from each cost-containment auction in the Climate Change Consumer Assistance Fund established by section 581.

SEC. 528. RETURNING EMISSION ALLOWANCES NOT SOLD AT THE ANNUAL COST-CONTAINMENT AUCTIONS.

(a) ORDER OF SALE OF EMISSION ALLOWANCES IN COST-CONTAINMENT AUCTION POOL.—The Administrator shall not sell at a cost-containment auction an emission allowance reserved pursuant to section 525(b) from the quantity of emission allowances established for a particular calendar year until such time as the Administrator has sold all emission allowances reserved from the quantity of emission allowances established for earlier calendar years.

(b) RETURN OF UNSOLD EMISSION ALLOWANCES IN THE COST-CONTAINMENT AUCTION POOL.—Immediately prior to the cost-containment auction during each of calendar years 2022 through 2027, the Administrator shall remove from the cost-containment auction pool, and make subject again to allocation or sale at regular auction in accordance with this Act, each emission allowance that—

(1) has, by that time, remained in the cost-containment auction pool for more than 9 years; and

(2) was established pursuant to section 201(a) for a calendar year that is fewer than 10 years subsequent to the calendar year during which the impending cost-containment auction will occur.

SEC. 529. DISCONTINUING THE ANNUAL COST-CONTAINMENT AUCTIONS.

(a) IN GENERAL.—Notwithstanding section 521(a), if the cost-containment auction pool is exhausted at a cost-containment auction, the Administrator shall conduct no further cost-containment auctions.

(b) RETIREMENT OF EMISSION ALLOWANCES NOT SOLD AT REGULAR AUCTIONS OCCURRING AFTER FINAL COST-CONTAINMENT AUCTION.—Immediately following any regular auction that occurs after the Administrator has conducted a final cost-containment auction, the Administrator shall retire any emission allowances not sold at that regular auction because of the operation of the regular auction reserve price.

Subtitle D—Transition Assistance for Workers

SEC. 531. ESTABLISHMENT.

There is established in the Treasury a fund, to be known as the ''Climate Change Worker Training and Assistance Fund.''

SEC. 532. AUCTIONS.

(a) IN GENERAL.—In accordance with subsections (b) and (c), to raise funds for deposit in the Climate Change Worker Training and Assistance Fund, for each of calendar years 2012 through 2050, the Administrator shall—

(1) auction a quantity of the emission allowances established pursuant to section 201(a) for each calendar year; and

(2) immediately upon receipt of the auction proceeds, deposit the auction proceeds in the Climate Change Worker Training and Assistance Fund.

(b) NUMBER; FREQUENCY.—For each calendar year during the period described in subsection (a), the Administrator shall—

(1) conduct not fewer than 4 auctions; and

(2) schedule the auctions in a manner to ensure that—

(A) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(B) the interval between each auction is of equal duration.

(c) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—For each calendar year of the period described in subsection (a), the Administrator shall auction a quantity of emission allowances in accordance with the applicable percentages described in the following table:

Calendar Year	Percentage for auction for Climate Change Worker Training and Assistance Fund
2012	1
2013	1
2014	1
2015	1
2016	1
2017	1
2018	2
2019	2
2020	2
2021	2
2022	2
2023	2
2024	2
2025	2
2026	2
2027	2
2028	3
2029	3
2030	3
2031	4
2032	4

Calendar Year	Percentage for auction for Climate Change Worker Training and Assistance Fund
2033	4
2034	4
2035	4
2036	4
2037	4
2038	4
2039	3
2040	3
2041	3
2042	3
2043	3
2044	3
2045	3
2046	3
2047	3
2048	3
2049	3
2050	3.

SEC. 533. DEPOSITS.

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 532, immediately upon receipt of those proceeds, in the Climate Change Worker Training and Assistance Fund.

SEC. 534. USES.

(a) ENERGY EFFICIENCY AND RENEWABLE ENERGY WORKER TRAINING PROGRAM.—For each of calendar years 2012 through 2050, 30 percent of the funds deposited in the Climate Change Worker Training and Assistance Fund for the preceding year under section 533 shall be made available, without further appropriation or fiscal year limitation, to carry out the Energy Efficiency and Renewable Energy Worker Training Program established by section 171(e) of the Workforce Investment Act of 1998 (29 U.S.C. 2916(e)).

(b) CLIMATE CHANGE WORKER ADJUSTMENT PROGRAM.—For each of calendar years 2012 through 2050, 60 percent of the funds deposited in the Climate Change Worker Training and Assistance Fund for the preceding year under section 533 shall be made available, without further appropriation or fiscal year limitation, to carry out the Climate Change Worker Assistance Program established pursuant to section 535.

(c) WORKFORCE TRAINING AND SAFETY.—For each of calendars year 2012 through 2050, 10 percent of the funds deposited in the Climate Change Worker Training and Assistance Fund for the preceding year under section 533 shall be made available, without further appropriation or fiscal year limitation, to carry out section 536.

SEC. 535. CLIMATE CHANGE WORKER ASSISTANCE PROGRAM.

(a) PURPOSE.—The purpose of this section is to ensure that any individual workers and groups of employees that are adversely affected by Federal policy and climate change legislation receive the benefits, skill training, retraining, and job search assistance that will enable the workers and groups to maintain self-sufficiency and obtain family-sustaining jobs that contribute to overall economic productivity, international competitiveness, and the positive quality of life expected by all individuals in the United States.

(b) DEFINITIONS.—In this section:

(1) DEPUTY ASSISTANT SECRETARY.—The term ''Deputy Assistant Secretary'' means the Deputy Assistant Secretary for Climate Change Adjustment Assistance appointed under subsection (e)(2).

(2) MASC.—The term ''MASC'' means the Multi-Agency Steering Committee established under subsection (d)(1).

(3) OFFICE.—The term ''Office'' means the Office of Climate Change Adjustment Assistance established by subsection (e).

(4) PROGRAM.—The term ''Program'' means the Climate Change Worker Adjustment Assistance Program established under regulations promulgated under subsection (c).

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

(c) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary, in consultation with the Administrator, the Secretary of Energy, and the Secretary of Commerce, shall promulgate regulations to establish a Climate Change Worker Adjustment Assistance Program to achieve the purpose of this section.

(d) MULTI-AGENCY STEERING COMMITTEE.—

(1) IN GENERAL.—The Secretary shall establish a Multi-Agency Steering Committee.

(2) COMPOSITION.—The MASC shall be—

(A) composed of representatives of the Secretary, the Secretary of Commerce, and the Secretary of Energy; and

(B) chaired by the Administrator.

(3) ACTIVITIES.—The MASC shall—

(A) not later than 60 days after the date of enactment of this Act, negotiate and sign a memorandum of understanding that affirms the commitment of relevant Federal agencies to work cooperatively to carry out the activities of the Program;

(B) not later than 120 days after the date of enactment of this Act, establish a National Climate Change Advisory Committee (referred to in this subsection as the ''Advisory Committee''), which shall be composed of an equal number of representatives, to be nominated by the Speaker of the House of Representatives and the Majority Leader of the Senate, of labor organizations (as defined in section 401.9 of title 29, Code of Federal Regulations (as in effect on the date of enactment of this Act)) and business organizations to advise the MASC on—

(i) the strategic plan and the structure and operation of the Program;

(ii) the content of applicable regulations; and

(iii) industry trends, workforce developments, and other matters relating to the impact of Federal climate change legislation;

(C)(i) not later than 120 days after the date of enactment of this Act, hold planning meetings; and

(ii) not later than 270 days after the date of enactment of this Act, formulate a comprehensive strategic plan for addressing impacts of Federal climate change legislation on each segment of the workforce;

(D) report the anticipated results of the strategic plan to the Committee on Ways and Means of the House of Representatives and the Committee on Finance of the Senate;

(E) submit to the President and Congress an annual report on the performance, achievements, and challenges of the Program; and

(F) meet as often as necessary, but not less often than quarterly, in person—

(i) to monitor the administration of the Program; and

(ii) to ensure that the Program is being carried out by the Office in a manner consistent with the purpose of the Program.

(e) OFFICE OF CLIMATE CHANGE ADJUSTMENT ASSISTANCE.—

(1) ESTABLISHMENT.—There is established in the Department of Labor an office to be known as the ''Office of Climate Change Adjustment Assistance''.

(2) HEAD OF OFFICE.—The head of the Office shall be the Deputy Assistant Secretary for Climate Change Adjustment Assistance, who shall be appointed by the President, by and with the advice and consent of the Senate.

(3) PRINCIPAL FUNCTIONS.—The principal functions of the Deputy Assistant Secretary shall be—

(A) to oversee and implement the administration of the Program; and

(B) to carry out functions delegated to and by the Secretary under this section.

(f) PROGRAM ADMINISTRATION.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall promulgate regulations for administration of the Program.

(2) COORDINATION.—The Secretary shall develop the regulations in consultation with—

(A) the MASC;

(B) the Committee on Ways and Means of the House of Representatives;

(C) the Committee on Education and Labor of the House of Representatives;

(D) the Committee on Finance of the Senate; and

(E) the Committee on Health, Education, Labor, and Pensions of the Senate.

(3) INCLUSIONS.—The regulations shall include definitions of and procedures for—

(A) the provision of comprehensive information to workers about the benefit allowances, training, and other employment services available under this section (including application procedures, and the appropriate filing dates, for the allowances, training, and services);

(B) the filing of petitions for certification of eligibility for workers to apply for climate change adjustment assistance, including mechanisms to ensure rapid response to filed petitions;

(C) the establishment of eligibility requirements for eligible climate change training and assistance benefits and the terms of the disbursal of any assistance benefits;

(D) requests for a hearing by a petitioner, or any other person or organization with a substantial interest in the proceedings;

(E) an appeals process;

(F) termination of any certification eligibility;

(G) certification of eligibility requirements for a group of workers, adversely affected secondary workers, and industry-wide certification, including a mechanism by which the Secretary will notify each Governor of a State in which workers are located of the certification; and

(H) a means of ensuring publication of any determinations in the Federal Register and on the website of the Department of Labor.

(g) PROGRAM BENEFITS.—

(1) DEFINITIONS.—In this subsection:

(A) BASE REPLACEMENT WAGE AMOUNT.—The term ''base replacement wage amount'' means, as determined by the case manager of an applicant, the total weekly wages or salary of the applicant at the most recent position held by the applicant at a firm or public agency before the date on which the position of the applicant was partially or totally terminated by the firm or public agency.

(B) CLIMATE CHANGE READJUSTMENT ALLOWANCE.—The term ''climate change readjustment allowance'' means a regular payment made to an applicant that, in combination with unemployment insurance payments made to the applicant, is equal to the base replacement wage amount.

(C) HEALTH CARE BENEFIT REPLACEMENT AMOUNT.—The term ''health care benefit replacement amount'' means, as determined by the case manager of an applicant who is eligible to receive a climate change readjustment allowance, a regular payment made to a health care provider to allow the applicant to maintain health care benefits, for the applicant and the family of the applicant, with no loss of service, during the period for which the applicant is eligible to receive the climate change readjustment allowance.

(2) CLIMATE CHANGE ADJUSTMENT ASSISTANCE.—The Secretary shall determine, in consultation with the MASC and the National Climate Change Advisory Committee, the types of climate change training and assistance benefits that should be provided under the Program.

(3) TYPES OF ELIGIBLE ASSISTANCE.—Benefits eligible to be disbursed under the Program include a payment of—

(A) a climate change readjustment allowance; and

(B) a health care benefit replacement amount.

(4) LIMITATIONS ON CLIMATE CHANGE READJUSTMENT ALLOWANCES.—An eligible worker may receive the benefits described in subparagraphs (A) and (B) of paragraph (3) for a duration of not longer than 3 years.

(5) PAYMENTS AS A BRIDGE TO RETIREMENT.—A worker eligible to receive climate change adjustment assistance may apply for a lump sum payment to be paid to a retirement plan in order to qualify for retirement under the rules and regulations of that plan.

(6) EMPLOYMENT AND CASE MANAGEMENT SERVICES.—The Secretary shall provide, through agreements with State employment services agencies, to adversely affected workers covered by a certification of eligibility for a climate change readjustment allowance, the following employment and case management information and 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—

(i) training available in local and regional areas;

(ii) individual counseling to determine which training is most suitable; and

(iii) information on how to apply for that training.

(D) Information on how to apply for financial aid, including—

(i) referring workers to educational opportunity centers under section 402F of the Higher Education Act of 1965 (20 U.S.C. 1070a–16), where applicable; and

(ii) notifying workers that the workers may ask financial aid administrators at institutions of higher education to allow use of their current year income in the financial aid process.

(E) Short-term provisional services, including development of learning skills, communications skills, interviewing skills, punctuality, personal maintenance skills, and professional conduct to prepare individuals for employment or training.

(F) Individual career counseling, including job search and placement counseling, during the period in which the individual is receiving climate change readjustment allowances under this section, and for the purpose of job placement after receiving that training.

(G) 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 those labor market areas;

(ii) information on job skills necessary to obtain jobs identified in job vacancy listings described in clause (i);

(iii) information relating to local occupations that are in demand and earnings potential of those occupations; and

(iv) skill requirements for local occupations described in clause (iii).

(H) 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.

(7) STATE ADMINISTRATION OF WORKER ASSISTANCE.—A State employment security agency, acting pursuant to an agreement with the Secretary, shall carry out such administrative activities (including using State agency personnel employed in accordance with applicable standards for a merit system of personnel administration) as are necessary for the proper and efficient operation of the Program, including—

(A) making determinations of eligibility for, and payment of, climate change readjustment allowances and health care benefit replacement amounts;

(B) developing recommendations regarding use of those payments as a bridge to retirement in accordance with this subsection; and

(C) the provision of employment and case management services to eligible workers as described in paragraph (6).

(h) TRAINING.—

(1) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, the Secretary shall establish procedures for the allocation among States, for each fiscal year, of funds available to pay the costs of training for climate change adjustment assistance-eligible individuals under this section.

(2) INCLUSION IN STRATEGIC PLAN.—The procedures established under paragraph (1) shall be described in the strategic plan described in subsection (d)(3)(C)(ii).

(3) DISTRIBUTION.—In establishing and implementing the procedures under paragraph (1), the Secretary shall—

(A) provide for at least 3 distributions of funds available for training during a fiscal year; and

(B) during the first such distribution for a fiscal year, disburse not more than 50 percent of the total amount of funds available to a State for training for that fiscal year.

(4) APPROVAL OF TRAINING.—

(A) IN GENERAL.—If the Secretary makes a determination described in subparagraph (B), the Secretary shall approve training described in that subparagraph for the worker.

(B) DETERMINATION.—The determination referred to in subparagraph (A) is a determination that—

(i) a worker would benefit from appropriate training;

(ii) there is reasonable expectation of employment following completion of the training;

(iii) training approved by the Secretary is reasonably available to the worker from government agencies or a private source;

(iv) the worker is qualified to undertake and complete the training; and

(v) the training is suitable for the worker and available at a reasonable cost.

(C) PAYMENT.—A worker approved to receive training under this paragraph shall be entitled to have payment of the costs of the training (subject to applicable limitations under this section) paid on behalf of the Secretary directly or through a voucher system.

(5) TRAINING PROGRAMS.—The training programs for which a worker may be approved under paragraph (4) include—

(A) employer-based training, including on-the-job training, customized training, and skill upgrading for incumbent workers;

(B) 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.);

(C) any training program provided by a workforce investment board established under section 111 of that Act (29 U.S.C. 2821);

(D) any program of remedial education;

(E) skill development and training for jobs relating to renewable energy, low- or zero-carbon technologies, energy efficiency, and the remediation and cleanup of environmentally distressed areas; and

(F) any other training program approved by the Secretary.

(6) REGULATIONS.—The Secretary shall promulgate regulations that establish criteria for use in carrying out this subsection.

(7) 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.

(8) ADDITIONAL ON-THE-JOB TRAINING.—Under the Program, the Secretary may provide funds to be used as job search allowances and relocation allowances.

(9) LABOR CONSULTATION.—If a labor organization represents a substantial number of workers who are engaged in similar work or training in a geographical area that is the same as the geographical area that is proposed to be funded under this section, the labor organization shall be provided an opportunity to be consulted and to submit comments with respect to the proposal.

(i) CONSISTENCY WITH CURRENT LABOR LAWS.—The Secretary shall determine which Federal worker protection, nondiscrimination requirements, and labor standards apply to the Program.

SEC. 536. WORKFORCE TRAINING AND SAFETY.

(a) DEFINITION OF ZERO- AND LOW-EMITTING CARBON ENERGY TECHNOLOGY.—In this section, the term ''zero- and low-emitting carbon energy technology'' means any technology that has a rated capacity of at least 750 megawatts of power.

(b) EDUCATION PROGRAMS.—In order to enhance the educational opportunities and safety of future generations of scientists, engineers, heath physicists, and energy workforce employees, funds made available under section 534(c) shall be used for programs to assist institutions of education in the United States—

(1) to remain at the forefront of science education and research;

(2) to operate advanced energy research facilities and carry out other related educational activities; and

(3) to conduct climate change science and policy education.

(c) WORKFORCE TRAINING.—

(1) IN GENERAL.—The Secretary of Labor shall promulgate regulations—

(A) to implement a program to provide workforce training to meet the high demand for workers skilled in zero- and low-emitting carbon energy technologies;

(B) to implement programs for—

(i) electrical craft certification;

(ii) career and technology awareness at the primary and secondary education levels;

(iii) preapprenticeship career technical education for all zero- and low-emitting carbon energy technologies relating to industrial skilled crafts;

(iv) community college and skill center training for zero- and low-emitting carbon energy technology technicians;

(v) training of construction management personnel for zero- and low-carbon emitting carbon energy technology construction projects; and

(vi) regional grants for integrated zero- and low-emitting carbon energy technology workforce development programs; and

(C) to ensure the safety of workers in the fields described in subparagraphs (A) and (B).

(2) CONSULTATION.—In carrying out this subsection, the Secretary of Labor shall consult with relevant Federal agencies, representatives of the zero- and low-carbon emitting technologies industries, and organized labor regarding the skills and safety measures required in those industries.

Subtitle E—Transition Assistance for Carbon-Intensive Manufacturers

SEC. 541. ALLOCATION.

(a) IN GENERAL.—Not later than 330 days before the beginning of each of calendar years 2012 through 2030, the Administrator shall allocate a percentage of the quantity of emission allowances established pursuant to section 201(a) for that calendar year for distribution among owners and operators of carbon-intensive manufacturing facilities in the United States.

(b) QUANTITIES OF EMISSION ALLOWANCES ALLOCATED.—The quantities of emission allowances allocated pursuant to subsection (a) shall be the quantities represented by the percentages in the following table:

Calendar Year	Percentage for distribution among carbon-intensive manufacturing facilities in United States
2012	11
2013	11
2014	11
2015	11
2016	11
2017	11
2018	11
2019	11
2020	11
2021	11
2022	10
2023	9
2024	7
2025	6
2026	5
2027	4
2028	3
2029	2
2030	1.

SEC. 542. DISTRIBUTION.

(a) DEFINITIONS.—In this section:

(1) CURRENTLY OPERATING FACILITY.—The term ''currently operating facility'' means an eligible manufacturing facility that had significant operations during the calendar year preceding the calendar year for which emission allowances are distributed under this section.

(2) ELIGIBLE MANUFACTURING FACILITY.—

(A) IN GENERAL.—The term ''eligible manufacturing facility'' means a manufacturing facility located in the United States that principally manufacturers iron, steel, pulp, paper, cement, rubber, chemicals, glass, ceramics, sulfur hexafluoride, or aluminum and other nonferrous metals.

(B) EXCLUSION.—The term ''eligible manufacturing facility'' does not include a facility eligible to receive emission allowances under subtitle F or H.

(3) INDIRECT CARBON DIOXIDE EMISSIONS.—The term ''indirect carbon dioxide emissions'' means the product obtained by multiplying (as determined by the Administrator)—

(A) the quantity of electricity consumption at an eligible manufacturing facility; and

(B) the rate of carbon dioxide emission per kilowatt-hour output for the region in which the manufacturer is located.

(4) NEW ENTRANT MANUFACTURING FACILITY.—The term ''new entrant manufacturing facility'', with respect to a calendar year, means an eligible manufacturing facility that began operation during or after the calendar year for which emission allowances are being distributed under this section.

(b) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations establishing a system for distributing, for each of calendar years 2012 through 2030, among owners and operators of individual carbon-intensive manufacturing facilities in the United States, the emission allowances allocated for that year by section 541.

(c) TOTAL ALLOCATION FOR CURRENTLY OPERATING FACILITIES.—As part of the system established under subsection (b), the Administrator shall, for each calendar year, distribute 96 percent of the total quantity of emission allowances available for allocation to owners and operators of carbon-intensive manufacturing facilities under section 541 to owners and operators currently operating those facilities.

(d) TOTAL ALLOCATION FOR CURRENTLY OPERATING FACILITIES IN EACH CATEGORY OF MANUFACTURING.—The regulations promulgated under subsection (b) shall provide that the quantity of emission allowances distributed by the Administrator for a calendar year to facilities in each category of currently operating facilities shall be equal to the product obtained by multiplying—

(1) the total quantity of emission allowances available for allocation under section 541; and

(2) the ratio that (during the calendar year preceding the calendar year for which emission allowances are being distributed under this section)—

(A) the sum of the average annual direct and indirect carbon dioxide equivalent emissions during the 3-calendar-year period immediately preceding the year of distribution under this section by currently operating facilities in the category; bears to

(B) the sum of the average annual direct and indirect carbon dioxide equivalent emissions during the 3-calendar-year period immediately preceding the year of distribution under this section by all currently operating facilities.

(e) INDIVIDUAL ALLOCATIONS TO CURRENTLY OPERATING FACILITIES.—The regulations promulgated under subsection (b) shall provide that the quantity of emission allowances distributed by the Administrator for a calendar year to the owner or operator of a currently operating facility shall be a quantity equal to the product obtained by multiplying—

(1) the total quantity of emission allowances available for allocation to owners and operators of currently operating facilities in the appropriate category, as determined under subsection (c); and

(2) the proportion that, during the 3-calendar-year period immediately preceding the calendar year for which emission allowances are being distributed under this section—

(A) the sum of the average annual direct and indirect carbon dioxide equivalent emissions during the 3-calendar-year period immediately preceding the calendar year under this section by the facility; bears to

(B) the sum of the average annual direct and indirect carbon dioxide equivalent emissions during the 3-calendar-year period immediately preceding the calendar year under this section of all currently operating facilities in the same category.

(f) ENERGY INTENSITY-BASED ALLOCATION.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator shall submit to Congress a report containing an analysis of the feasibility of distributing a portion or all of the emission allowances distributed under this section to single facilities on an energy-intensity basis.

(2) REGULATIONS.—If the report under paragraph (1) contains a determination by the Administrator that an energy intensity-based distribution program would encourage efficiency, and would not cause undue economic harm, the Administrator, not later than 18 months after the date of submission of the report, shall promulgate regulations establishing a program to supplement or replace the emission allowance allocations required under subsection (d) for any industry category or subcategory that the Administrator determines to be appropriately benchmarked.

(g) INDIVIDUAL ALLOCATION TO NEW ENTRANT MANUFACTURING FACILITIES.—

(1) IN GENERAL.—As part of the system established under subsection (b), the Administrator shall, for each calendar year, distribute 4 percent of the total quantity of emission allowances available for allocation to owners and operators of carbon-intensive manufacturing facilities under section 541 to those manufacturing facilities that are new entrant manufacturing facilities.

(2) INDIVIDUAL ALLOCATION.—Subject to paragraph (3), the quantity of emission allowances distributed by the Administrator for a calendar year to the owner or operator of a new entrant manufacturing facility shall equal the product obtained by multiplying—

(A) the total quantity of emission allowances available for allocation under paragraph (1); and

(B) the proportion that—

(i) the estimated direct and indirect carbon dioxide equivalent emissions of the individual new entrant manufacturing facility during the preceding calendar year; bears to

(ii) the sum of the estimated direct and indirect carbon dioxide equivalent emissions of all new entrant manufacturing facilities during the preceding calendar year.

(3) MAXIMUM ALLOCATION.—In no case may the quantity of emission allowances allocated to a new entrant manufacturing facility under this subsection exceed the quantity that would have been allocated to the new entrant manufacturing facility if the new entrant manufacturing facility had been a currently operating facility during the preceding calendar year.

(h) FACILITIES THAT SHUT DOWN.—

(1) IN GENERAL.—The system established pursuant to subsection (b) shall ensure, notwithstanding any other provision of this subtitle, that—

(A) emission allowances are not distributed to an owner or operator of any facility that has been permanently shut down at the time of distribution;

(B) the owner or operator of any facility that permanently shuts down in a calendar year shall promptly return to the Administrator any emission allowances that the Administrator has distributed for that facility for any subsequent calendar years; and

(C) if a facility receives a distribution of emission allowances under this subtitle for a calendar year and subsequently permanently shuts down during that calendar year, the owner or operator of the facility shall promptly return to the Administrator a number of emission allowances equal to the number that the Administrator determines is the portion that the owner or operator will no longer need to submit for that facility under section 202.

(2) EXEMPTION.—Subparagraphs (B) and (C) of paragraph (1) shall not apply if an owner or operator of a facility demonstrates to the Administrator that, not later than 2 years after the date on which the facility shut down, the owner or operator will open a comparable new facility, or increase the capacity of an existing facility by a comparable capacity, within the United States.

(i) PETROLEUM REFINERS.—The Administrator may include, in the system established pursuant to subsection (b), provisions for distributing not more than 10 percent of the emission allowances allocated pursuant to section 541 for each calendar year solely among owners and operators of entities that manufacture in the United States petroleum-based liquid or gaseous fuel, in recognition of the direct emission of carbon dioxide by those entities in the manufacture of those fuels.

Subtitle F—Transition Assistance for Fossil Fuel-Fired Electricity Generators

SEC. 551. ALLOCATION.

(a) IN GENERAL.—Not later than 330 days before the beginning of each of calendar years 2012 through 2030, the Administrator shall allocate a percentage of the quantity of emission allowances established pursuant to section 201(a) for that calendar year for distribution among owners and operators of fossil fuel-fired electricity generators in the United States.

(b) QUANTITIES OF EMISSION ALLOWANCES ALLOCATED.—The quantities of emission allowances allocated pursuant to subsection (a) shall be the quantities represented by the percentages in the following table:

Calendar year	Percentage for distribution among fossil fuel-fired electricity generators in United States
2012	18
2013	18
2014	18
2015	18
2016	17.75
2017	17.5
2018	17.25
2019	16.25
2020	15
2021	13.5
2022	11.25
2023	10.25
2024	9
2025	8.75
2026	5.75
2027	4.5
2028	4.25
2029	3
2030	2.75.

SEC. 552. DISTRIBUTION.

(a) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations establishing a system for distributing, for each of calendar years 2012 through 2030, among owners and operators of individual fossil fuel-fired electricity generators in the United States, the emission allowances allocated for that year by section 551.

(b) CALCULATION.—The regulations promulgated pursuant to subsection (a) shall provide that the quantity of emission allowances distributed to the owner or operator of an individual fossil fuel-fired electricity generator for a calendar year shall be equal to the product obtained by multiplying—

(1) the quantity of emission allowances allocated pursuant to section 551; and

(2) the quotient obtained by dividing—

(A) the average annual quantity of carbon dioxide equivalents emitted by the fossil fuel-fired electricity generator during the 3 calendar years preceding the date of enactment of this Act; by

(B) the average annual quantity of carbon dioxide equivalents emitted by all fossil fuel-fired electricity generators during those 3 calendar years.

(c) RURAL ELECTRIC COOPERATIVES.—

(1) IN GENERAL.—The Administrator shall include, in the regulations promulgated pursuant to subsection (a), provisions for distributing solely among rural electric cooperatives not more than 5 percent of the emission allowances allocated pursuant to section 551 for each calendar year.

(2) PILOT PROGRAM.—

(A) IN GENERAL.—In carrying out paragraph (1), the Administrator shall establish a pilot program to distribute, to rural electric cooperatives in the States described in subparagraph (B), for each of calendar years 2012 through 2029, 15 percent of the total number of emission allowances allocated for the calendar year to rural electric cooperatives under section 551.

(B) DESCRIPTION OF STATES.—The States referred to in subparagraph (A) are—

(i) 1 State located east of the Mississippi River in which 13 rural electric cooperatives sold to consumers in that State electricity in a quantity of 9,000,000 to 10,000,000 megawatt-hours, according to data of the Energy Information Administration for calendar year 2005; and

(ii) 1 State located west of the Mississippi River in which 30 rural electric cooperatives sold to consumers in that State electricity in a quantity of 3,000,000 to 4,000,000 megawatt-hours, according to data of the Energy Information Administration for calendar year 2005.

(C) LIMITATION.—No rural electric cooperative that receives emission allowances under this paragraph shall receive any additional emission allowance under subtitle A or the regulations promulgated under subsection (a).

(D) REPORT.—Not later than January 1, 2015, and every 3 years thereafter, the Administrator shall submit to Congress a report describing the success of the pilot program established under this paragraph, including a description of—

(i) the benefits realized by ratepayers of the rural electric cooperatives that receive allowances under the pilot program; and

(ii) the use by those rural electric cooperatives of advanced, low greenhouse gas-emitting electric generation technologies, if any.

Subtitle G—Transition Assistance for Refiners of Petroleum-Based Fuel

SEC. 561. ALLOCATION.

(a) FIRST PERIOD.—Not later than 330 days before the beginning of each of calendar years 2012 through 2017, the Administrator shall allocate 2 percent of the quantity of emission allowances established pursuant to section 201(a) for that calendar year for distribution among owners and operators of entities that manufacture petroleum-based liquid or gaseous fuel in the United States.

(b) SECOND PERIOD.—Not later than 330 days before the beginning of each of calendar years 2018 through 2030, the Administrator shall allocate 1 percent of the emission allowances established pursuant to section 201(a) for that calendar year for distribution among owners and operators of entities described in subsection (a).

SEC. 562. DISTRIBUTION.

(a) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations establishing a system for distributing, among owners and operators of individual entities described in section 561, for each calendar year identified in that section, the emission allowances allocated for that year by that section.

(b) REQUIREMENTS.—The regulations promulgated pursuant to subsection (a) shall—

(1) provide that the quantity of emission allowances distributed to the owner or operator of an entity described in section 561 for a calendar year identified in that section shall be the product obtained by multiplying—

(A) the quantity of emission allowances allocated for that year by section 561; by

(B) the quotient obtained by dividing—

(i) the annual average quantity of units of petroleum-based liquid or gaseous fuel that the entity manufactured in the United States during the 3 calendar years preceding the date of distribution of emission allowances; by

(ii) the annual average quantity of petroleum-based liquid or gaseous fuel that all entities described in section 561 manufactured in the United States during the 3 calendar years preceding the date of distribution of emission allowances; and

(2) notwithstanding paragraph (1), provide for appropriate adjustments to reflect the effects of subsections (b)(2), (c), and (h) of section 202.

Subtitle H—Transition Assistance for Natural-Gas Processors

SEC. 571. ALLOCATION.

Not later than 330 days before the beginning of each of calendar years 2012 through 2030, the Administrator shall allocate 0.75 percent of the quantity of emission allowances established pursuant to section 201(a) for that calendar year for distribution among owners and operators of—

(1) natural gas processing plants in the United States (other than in the State of Alaska);

(2) entities that produce natural gas in the State of Alaska or the Federal waters of the outer Continental Shelf off the coast of that State; and

(3) entities that hold title to natural gas, including liquefied natural gas, or natural-gas liquid at the time of importation into the United States.

SEC. 572. DISTRIBUTION.

(a) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations establishing a system for distributing, among owners and operators of individual entities described in section 571, for each calendar year identified in that section, the emission allowances allocated for that year by that section.

(b) REQUIREMENTS.—The regulations promulgated pursuant to subsection (a) shall—

(1) provide that the quantity of emission allowances distributed to the owner or operator of an entity described in section 571 for a calendar year identified in that section shall be the product obtained by multiplying—

(A) the quantity of emission allowances allocated for that year by section 571; by

(B) the quotient obtained by dividing—

(i) the annual average quantity, during the 3 calendar years preceding the date of distribution of emission allowances, of units of—

(I) natural gas processed in the United States by the entity (other than in the State of Alaska);

(II) natural gas produced in the State of Alaska or the Federal waters of the outer Continental Shelf off the coast of that State by the entity and not reinjected into the field; and

(III) natural gas, including liquefied natural gas, and natural-gas liquids to which the entity held title at the time of importation into the United States; by

(ii) the annual average quantity, over the 3 calendar years preceding the date of distribution of emission allowances, of units of—

(I) natural gas processed in the United States by the entities described in section 571 (other than in the State of Alaska);

(II) natural gas produced in the State of Alaska or the Federal waters of the outer Continental Shelf off the coast of that State by the entities described in section 571 and not reinjected into the field; and

(III) natural gas, including liquefied natural gas, and natural-gas liquids to which the entities described in section 571 held title at the time of importation into the United States; and

(2) notwithstanding paragraph (1), provide for appropriate adjustments to reflect the effects of subsections (b)(2) and (c) of section 202.

Subtitle I—Federal Program for Energy Consumers

SEC. 581. ESTABLISHMENT.

There is established in the Treasury a fund, to be known as the ''Climate Change Consumer Assistance Fund''.

SEC. 582. AUCTION.

(a) IN GENERAL.—In accordance with subsections (b) and (c), to raise funds for deposit in the Climate Change Consumer Assistance Fund, for each of calendar years 2012 through 2050, the Administrator shall—

(1) auction a quantity of the emission allowances established pursuant to section 201(a) for each calendar year; and

(2) immediately upon receipt of the auction proceeds, deposit the auction proceeds in the Climate Change Consumer Assistance Fund.

(b) NUMBER; FREQUENCY.—For each calendar year during the period described in subsection (a), the Administrator shall—

(1) conduct not fewer than 4 auctions; and

(2) schedule the auctions in a manner to ensure that—

(A) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(B) the interval between each auction is of equal duration.

(c) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—For each calendar year of the period described in subsection (a), the Administrator shall auction a quantity of emission allowances in accordance with the applicable percentages described in the following table:

Calendar Year	Percentage for auction for Climate Change Consumer Assistance Fund
2012	3.5
2013	3.75
2014	3.75
2015	4
2016	4.25
2017	4.5
2018	5
2019	6
2020	6
2021	6
2022	7
2023	7
2024	8
2025	8
2026	9
2027	10
2028	10
2029	11
2030	12
2031	14
2032	14
2033	14
2034	15
2035	15
2036	15
2037	15
2038	15
2039	15
2040	15
2041	15
2042	15
2043	15
2044	15
2045	15
2046	15
2047	15
2048	15
2049	15
2050	15.

SEC. 583. DEPOSITS.

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 582, immediately on receipt of those proceeds, in the Climate Change Consumer Assistance Fund.

SEC. 584. DISBURSEMENTS FROM THE CLIMATE CHANGE CONSUMER ASSISTANCE FUND.

No disbursements shall be made from the Climate Change Consumer Assistance Fund except pursuant to an appropriations Act.

SEC. 585. SENSE OF SENATE ON TAX INITIATIVE TO PROTECT CONSUMERS.

It is the sense of the Senate that funds deposited in the Climate Change Consumer Assistance Fund under section 583 should be used to fund a tax initiative to protect consumers, especially consumers in greatest need, from increases in energy costs and other costs.

TITLE VI—PARTNERSHIPS WITH STATES, LOCALITIES, AND INDIAN TRIBES

Subtitle A—Partnerships With State Governments to Prevent Economic Hardship While Promoting Efficiency

SEC. 601. ASSISTING ENERGY CONSUMERS THROUGH LOCAL DISTRIBUTION COMPANIES.

(a) ALLOCATION.—

(1) FIRST PERIOD.—Not later than 330 days before the beginning of calendar year 2012, the Administrator shall allocate—

(A) 9.5 percent of the quantity of emission allowances established pursuant to section 201(a) for that calendar year for distribution among electricity local distribution companies in the United States; and

(B) 3.25 percent of the quantity of emission allowances established pursuant to section 201(a) for that calendar year for distribution among natural gas local distribution companies in the United States.

(2) SECOND PERIOD.—Not later than 330 days before the beginning of each of calendar years 2013 through 2025, the Administrator shall allocate—

(A) 9.75 percent of the quantity of emission allowances established pursuant to section 201(a) for that calendar year for distribution among electricity local distribution companies in the United States; and

(B) 3.25 percent of the quantity of emission allowances established pursuant to section 201(a) for that calendar year for distribution among natural gas local distribution companies in the United States.

(3) THIRD PERIOD.—Not later than 330 days before the beginning of each of calendar years 2026 through 2050, the Administrator shall allocate—

(A) 10 percent of the quantity of emission allowances established pursuant to section 201(a) for that calendar year for distribution among electricity local distribution companies in the United States; and

(B) 3.5 percent of the quantity of emission allowances established pursuant to section 201(a) for that calendar year for distribution among natural gas local distribution companies in the United States.

(b) DISTRIBUTION.—

(1) IN GENERAL.—For each calendar year, the emission allowances allocated under subsection (a) shall be distributed by the Administrator to each local distribution entity based on the proportion that—

(A) the quantity of electricity or natural gas delivered by the local distribution entity during the 3 calendar years preceding the calendar year for which the emission allowances are distributed, adjusted upward for electricity or natural gas not delivered as a result of consumer energy-efficiency programs implemented by the local distribution entity and verified by the regulatory agency of the local distribution entity; bears to

(B) the total quantity of electricity or natural gas delivered by all local distribution entities during those 3 calendar years, adjusted upward for the total electricity or natural gas not delivered as a result of consumer energy-efficiency programs implemented by all local distribution entities and verified by the regulatory agencies of the local distribution entities.

(2) BASIS.—The Administrator shall base the determination of the quantity of electricity or natural gas delivered by a local distribution entity for the purpose of paragraph (1) on the most recent data available in annual reports filed with the Energy Information Administration of the Department of Energy.

(c) USE.—

(1) ELIGIBLE CONSUMER CLASSES.—

(A) REGULATION.—Not later than 1 year after the date of enactment of this Act, the Administrator, in consultation with the Secretary of Energy, shall establish, by regulation, the consumer classes to which a local distribution entity shall direct emission allowance proceeds, including low-income and middle-income residential energy consumers and small business commercial consumers that are not allocated emission allowances pursuant to title V.

(B) REQUIREMENT.—The regulation required under subparagraph (A) shall be promulgated in consultation with—

(i) the Secretary of Health and Human Services;

(ii) the Secretary of Agriculture;

(iii) appropriate State agencies; and

(iv) local distribution entities, the regulatory agencies of the local distribution entities, and consumer advocates.

(C) DEFINING LOW-INCOME CONSUMERS.—

(i) IN GENERAL.—Subject to clause (ii), the Administrator shall specify eligibility criteria for low-income residential energy consumers for purposes of the regulation required under subparagraph (A).

(ii) INCLUSIONS.—An individual shall be eligible as a low-income residential energy consumer for purposes of the regulation required under subparagraph (A) if the individual (or the household of which the individual is a member) qualifies for—

(I) benefits under the food stamp program established under the Food Stamp Act of 1977 (7 U.S.C. 2011 et seq.);

(II) a premium or cost-sharing subsidy under section 1860D–14 of the Social Security Act (42 U.S.C. 1395w–114); or

(III) a low-income program carried out before December 31, 2011, by an electricity or natural gas local distribution entity serving the individual.

(2) CLIMATE CHANGE IMPACT ASSISTANCE PROGRAMS.—

(A) IN GENERAL.—Each local distribution entity that receives emission allowances under subsection (b) shall develop a climate change impact economic assistance program in accordance with this paragraph.

(B) REGULATIONS.—

(i) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator shall promulgate regulations establishing minimum requirements for the development of climate change impact economic assistance programs under subparagraph (A).

(ii) DEADLINE.—The regulations promulgated pursuant to clause (i) shall require each local distribution entity that receives emission allowances under this section to implement a climate change impact economic assistance program by not later than December 31, 2011, that—

(I) mitigates increases in electricity or natural gas costs, as applicable, that are attributable to the implementation of this Act;

(II) provides to qualifying low-income individuals and households a timely rebate on electricity or natural gas bills, as applicable;

(III) provides greater rebates to consumers in the lowest income classes;

(IV) includes energy efficiency and other programmatic measures designed to reduce the quantity of electricity or natural gas, as applicable, consumed by qualifying low-income households; and

(V) includes economic assistance, energy efficiency, and other programmatic measures designed to reduce the quantity of energy consumed by other residential, small business, and commercial energy consumers that do not receive allowances under this Act.

(C) DEVELOPMENT.—

(i) IN GENERAL.—A local distribution entity may develop an assistance program under this paragraph—

(I) in consultation with appropriate State regulatory authorities; or

(II) for the purpose of supplementing an existing low-income consumer assistance plan of the entity.

(ii) LISTS OF ELIGIBLE CONSUMERS.—In developing a list of consumers eligible to receive assistance pursuant to a climate change impact economic assistance program under this paragraph, a local distribution entity—

(I) may use any list maintained by a State or local agency of eligible recipients of existing public assistance programs; and

(II) shall strictly maintain the privacy of the eligible recipients.

(D) APPROVAL.—

(i) IN GENERAL.—A local distribution entity shall submit the proposed assistance program of the entity to the Administrator for approval.

(ii) APPROVAL OF EXISTING PROGRAMS.—On request of a local distribution entity, the Administrator may approve an existing, State-approved low-income consumer assistance plan of the entity as a climate change impact economic assistance program for purposes of this paragraph, if the Administrator determines that the plan meets the requirements of this paragraph.

(E) IMPLEMENTATION.—On approval of an assistance program by the Administrator under subparagraph (D)(i), a local distribution entity may implement the program, subject to the oversight of appropriate State authorities.

(d) SALE OF EMISSION ALLOWANCES.—

(1) IN GENERAL.—A local distribution entity that receives emission allowances under subsection (b) shall—

(A) sell each emission allowance distributed to the local distribution entity, through direct sale or pursuant to a contract with a third party to sell the allowance, by not later than the date that is 1 year after the date of receipt of the emission allowance; and

(B) seek fair market value for each emission allowance sold.

(2) PROCEEDS.—

(A) IN GENERAL.—Subject to subparagraph (B), the proceeds from the sale of emission allowances under paragraph (1) shall be used solely—

(i) to mitigate economic impacts on the consumer classes established pursuant to subsection (c)(1)(A), including by reducing transmission or distribution charges or issuing rebates;

(ii) to promote the use of zero- and low-carbon distributed generation technologies and energy efficiency on the part of consumers; and

(iii) to implement demand response programs and targeted assistance programs to benefit the consumer classes established pursuant to subsection (c)(1)(A).

(B) MINIMUM PERCENTAGE REQUIREMENT.—

(i) IN GENERAL.—Except as provided in clause (ii), each local distribution entity shall use not less than 30 percent of the proceeds from the sale of emission allowances under paragraph (1) to benefit low-income residential energy consumers.

(ii) EXCEPTION.—Notwithstanding clause (i), a regulatory agency with authority over a local distribution entity (including a governing board of a municipally owned or cooperatively owned local distribution entity) may reduce the percentage requirement under clause (i) if the agency determines that the increase in electricity or natural gas costs, as applicable, of eligible low-income consumers served by the local distribution entity resulting from the implementation of this Act are mitigated.

(C) PROHIBITION.—No local distribution entity may use any proceeds from the sale of emission allowances under paragraph (1) to provide to any consumer a rebate that is based solely on the quantity of electricity or natural gas used by the consumer.

(D) TREATMENT.—Proceeds from the sale of an emission allowance under this paragraph shall not be considered to be income of a local distribution entity if the value of the proceeds is fully disbursed during the 1-year period beginning on the date of sale of the emission allowance.

(e) REPORTS.—

(1) IN GENERAL.—For each calendar year for which a local distribution entity receives emission allowances under this section, the entity shall submit to the Administrator a report describing, with respect to that calendar year—

(A) the date of each sale of each emission allowance;

(B) the amount of revenue generated from the sale of emission allowances; and

(C) how, and to what extent, the local distribution entity used the proceeds of the sale of emission allowances, including the amount of the proceeds directed to each consumer class covered in the form of rebates, energy efficiency, demand response, and distributed generation.

(2) AVAILABILITY OF REPORTS.—The Administrator shall make available to the public all reports submitted by entities under paragraph (1), including by publishing those reports on the Internet.

(f) OPT-OUT.—If a local distribution entity elects not to receive emission allowances under this section or fails to comply with a requirement of this section, as determined by the Administrator, the emission allowances that would otherwise be distributed to the local distribution entity shall be—

(1) provided to the State served by the local distribution entity; and

(2) used by the State to carry out the objectives of this section.

SEC. 602. ASSISTING STATE ECONOMIES THAT RELY HEAVILY ON MANUFACTURING AND COAL.

(a) ALLOCATION.—

(1) IN GENERAL.—Not later than 330 days before the beginning of each of calendar years 2012 through 2050, of the quantity of emission allowances established pursuant to section 201(a) for the applicable calendar year, the Administrator shall allocate a percentage for distribution among States the economies of which rely heavily on manufacturing or on coal, as determined by the Administrator, in accordance with the table contained in paragraph (2).

(2) PERCENTAGES FOR ALLOCATION.—For each of calendar years 2012 through 2050, the Administrator shall allocate to States described in paragraph (1) the percentage of emission allowances specified in the following table:

Calendar year	Percent of emission allowances for allocation among States relying heavily on manufacturing and on coal
2012	3
2013	3
2014	3
2015	3
2016	3.25
2017	3.25
2018	3.25
2019	3.25
2020	3.25
2021	3.25
2022	3.25
2023	3.5
2024	3.5
2025	3.5
2026	3.5
2027	3.5
2028	3.5
2029	3.5
2030	3.5
2031	4
2032	4
2033	4
2034	4
2035	4
2036	4
2037	4
2038	4
2039	4

Calendar year	Percent of emission allowances for allocation among States relying heavily on manufacturing and on coal
2040	4
2041	4
2042	4
2043	4
2044	4
2045	4
2046	4
2047	4
2048	4
2049	4
2050	4.

(b) DISTRIBUTION.—The emission allowances available for allocation to States under subsection (a) for a calendar year shall be distributed as follows:

(1) For each calendar year, ½ of the quantity of emission allowances shall be distributed among the States based on the proportion that—

(A) the average annual per-capita employment in manufacturing in a State during the period beginning on January 1, 1988, and ending on December 31, 1992, as determined by the Secretary of Labor; bears to

(B) the average annual per-capita employment in manufacturing in all States during the period beginning on January 1, 1988, and ending on December 31, 1992, as determined by the Secretary of Labor.

(2) For each calendar year, ½ of the quantity of emission allowances available for States under subsection (a) shall be distributed among individual States as follows:

(A) In the case of any State in which the ratio of lignite (in British thermal units) that was mined from 1988 through 1992 within the boundaries of the State to the total quantity of coal (in British thermal units) that was consumed from 1988 through 1992 within the boundaries of that State exceeds 0.75, the share of allowances of the State shall be based on the proportion that—

(i) twice the quantity of carbon contained in the total quantity of coal that was mined within the boundaries of the State from 1988 through 1992, as determined by the Secretary of Energy; bears to

(ii) the sum of twice the quantity of carbon contained in the total quantity of coal that was mined from 1988 through 1992 within the boundaries of all States described in subparagraph (A) and the quantity of carbon contained in the total quantity of coal that was mined from 1988 through 1992 within the boundaries of all other States, as determined by the Secretary of Energy.

(B) In the case of any State other than a State described in subparagraph (A), the share of allowances of the State shall be based on the proportion that—

(i) the quantity of carbon contained in the total quantity of coal that was mined within the boundaries of the State from 1988 through 1992, as determined by the Secretary of Energy; bears to

(ii) the sum of twice the quantity of carbon contained in the total quantity of coal that was mined from 1988 through 1992 in all States described in subparagraph (A) and the quantity of carbon contained in the total quantity of coal that was mined from 1988 through 1992 within the boundaries of all other States, as determined by the Secretary of Energy.

(c) USE.—During any calendar year, a State shall retire or use for 1 or more of the purposes described in section 614(d) all of the allowances allocated to the State (or proceeds of sale of those emission allowances) under this section for that calendar year.

(d) DEADLINE FOR USE.—A State shall distribute or sell emission allowances for use in accordance with subsection (c) by not later than January 1 of each emission allowance allocation year.

(e) RETURN OF ALLOWANCES.—Not later than 330 days before the end of each emission allowance allocation year, each State shall return to the Administrator any emission allowances allocated to the State for the preceding calendar year but not distributed or sold by the deadline described in subsection (d).

(f) REPORT.—A State receiving allowances under this section shall annually submit to the appropriate congressional committees and the appropriate Federal agencies a report describing the purposes for which the State has used—

(1) the allowances received under this section; and

(2) the proceeds of the sale by the State of allowances received under this section.

Subtitle B—Partnerships With States, Localities, and Indian Tribes to Reduce Emissions

SEC. 611. MASS TRANSIT.

(a) TRANSPORTATION SECTOR EMISSION REDUCTION FUND.—There is established in the Treasury of the United States a fund, to be known as the ‘‘Transportation Sector Emission Reduction Fund’’.

(b) AUCTION OF ALLOWANCES.—In accordance with subsections (c) and (d), to fund awards for public transportation-related activities, for each of calendar years 2012 through 2050, the Administrator shall auction a quantity of the emission allowances established pursuant to section 201(a) for each calendar year.

(c) NUMBER; FREQUENCY.—For each calendar year during the period described in subsection (b), the Administrator shall—

(1) conduct not fewer than 4 auctions; and

(2) schedule the auctions in a manner to ensure that—

(A) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(B) the interval between each auction is of equal duration.

(d) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—For each calendar year of the period described in subsection (b), the Administrator shall auction a quantity of emission allowances in accordance with the applicable percentages described in the following table:

Calendar Year	Percentage for auction for public transportation
2012	1
2013	1
2014	1
2015	1
2016	1
2017	1
2018	2
2019	2
2020	2
2021	2
2022	2.75
2023	2.75
2024	2.75
2025	2.75
2026	2.75
2027	2.75
2028	2.75
2029	2.75
2030	2.75
2031	2.75
2032	2.75
2033	2.75
2034	2.75
2035	2.75
2036	2.75
2037	2.75
2038	2.75
2039	2.75
2040	2.75
2041	2.75
2042	2.75
2043	2.75
2044	2.75
2045	2.75
2046	2.75
2047	2.75
2048	2.75
2049	2.75
2050	2.75.

(e) DEPOSITS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to subsections (b) and (c), immediately on receipt of those proceeds, in the Transportation Sector Emission Reduction Fund established by subsection (a).

(f) USE OF FUNDS.—For each of calendar years 2012 through 2050, all funds deposited in the Transportation Sector Emission Reduction Fund in the preceding year pursuant to subsection (e) shall be made available, without further appropriation or fiscal year limitation, for grants described in subsections (g) through (i).

(g) GRANTS TO PROVIDE FOR ADDITIONAL AND IMPROVED PUBLIC TRANSPORTATION SERVICE.—

(1) IN GENERAL.—Of the funds deposited in the Transportation Sector Emission Reduction Fund each year pursuant to subsection (e), 65 percent shall be distributed to designated recipients (as defined in section 5307(a) of title 49, United States Code) to maintain or improve public transportation through activities eligible under that section, including—

(A) improvements to lighting, heating, cooling, or ventilation systems in stations and other facilities that reduce direct or indirect greenhouse gas emissions;

(B) adjustments to signal timing or other vehicle controlling systems that reduce direct or indirect greenhouse gas emissions;

(C) purchasing or retrofitting rolling stock to improve efficiency or reduce greenhouse gas emissions; and

(D) improvements to energy distribution systems.

(2) DISTRIBUTION.—Of the proceeds of auctions conducted under this section, the Administrator shall distribute under paragraph (1)—

(A) 60 percent in accordance with the formulas contained in subsections (a) through (c) of section 5336 of title 49, United States Code; and

(B) 40 percent in accordance with the formula contained in section 5340 of that title.

(3) TERMS AND CONDITIONS.—A grant provided under this subsection shall be subject to the terms and conditions applicable to a grant provided under section 5307 of title 49, United States Code.

(4) COST SHARE.—The Federal share of cost of carrying out an activity using a grant under this subsection shall be determined in accordance with section 5307(e) of title 49, United States Code.

(h) GRANTS FOR CONSTRUCTION OF NEW PUBLIC TRANSPORTATION PROJECTS.—

(1) IN GENERAL.—Of the funds deposited in the Transportation Sector Emission Reduction Fund each year pursuant to subsection

(e), 30 percent shall be distributed to State and local government authorities for design, engineering, and construction of new fixed guideway transit projects or extensions to existing fixed guideway transit systems.

(2) APPLICATIONS.—Applications for grants under this subsection shall be reviewed according to the process and criteria established under section 5309(c) of title 49, United States Code, for major capital investments and section 5309(d) of title 49, United States Code for other projects.

(3) TERMS AND CONDITIONS.—Grant funds awarded under this subsection shall be subject to the terms and conditions applicable to a grant made under section 5309 of title 49, United States Code.

(i) GRANTS FOR TRANSPORTATION ALTERNATIVES AND TRAVEL DEMAND REDUCTION PROJECTS.—

(1) IN GENERAL.—Of the funds deposited into the Transportation Sector Emission Reduction Fund each year pursuant to subsection (e), 5 percent shall be awarded to designated recipients (as defined in section 5307(a) of title 49, United States Code) to assist in reducing the direct and indirect greenhouse gas emissions of the systems of the designated recipients, through—

(A) programs to reduce vehicle miles traveled;

(B) bicycle and pedestrian infrastructure, including trail networks integrated with transportation plans or bicycle mode-share targets; and

(C) programs to establish or expand telecommuting or car pool projects that do not include new roadway capacity.

(2) DISTRIBUTION OF FUNDS.—In determining the recipients of grants under this subsection, applications shall be evaluated based on the total direct and indirect greenhouse gas emissions reductions that are projected to result from the project and projected reductions as a percentage of the total direct and indirect emissions of an entity.

(3) GOVERNMENT SHARE OF COSTS.—The Federal share of the cost of an activity funded using amounts made available under this subsection may not exceed 80 percent of the cost of the activity.

(4) TERMS AND CONDITIONS.—Except to the extent inconsistent with the terms of this subsection, grant funds awarded under this subsection shall be subject to the terms and conditions applicable to a grant made under section 5307 of title 49, United States Code.

(j) CONDITION FOR RECEIPT OF FUNDS.—To be eligible to receive funds under this section, projects or activities must be part of an integrated State-wide transportation plan that shall—

(1) include all modes of surface transportation;

(2) integrate transportation data collection, monitoring, planning, and modeling;

(3) report on estimated greenhouse gas emissions;

(4) be designed to reduce greenhouse gas emissions from the transportation sector; and

(5) be certified by the Administrator as consistent with the purposes of this Act.

SEC. 612. UPDATING STATE BUILDING ENERGY EFFICIENCY CODES.

(a) IN GENERAL.—Section 304 of the Energy Conservation and Production Act (42 U.S.C. 6833) is amended to read as follows:

"SEC. 304. UPDATING STATE BUILDING ENERGY EFFICIENCY CODES.

"(a) UPDATES.—

"(1) IN GENERAL.—Not later than 3 years after the date of enactment of the Lieberman-Warner Climate Security Act of 2008, and not less frequently every 3 years thereafter, the Secretary shall support updating the national model building energy codes and standards to achieve overall energy savings, as compared to the IECC (2006) for residential buildings and ASHRAE Standard 90.1 (2004) for commercial buildings, of at least—

"(A) 30 percent, with respect to each edition of a model code or standard published during the period beginning on January 1, 2010, and ending on December 31, 2019;

"(B) 50 percent, with respect to each edition of a model code or standard published on or after January 1, 2020; and

"(C) targets for intermediate and subsequent years, to be established by the Secretary not less than 3 years before the beginning on each target year, in coordination with IECC and ASHRAE Standard 90.1 cycles, at the maximum level of energy efficiency that is technologically feasible and lifecycle cost-effective.

"(2) REVISIONS TO IECC AND ASHRAE.—

"(A) IN GENERAL.—If the IECC or ASHRAE Standard 90.1 regarding building energy use is revised, not later than 1 year after the date of the revision, the Secretary shall determine whether the revision will—

"(i) improve energy efficiency in buildings; and

"(ii) meet the energy savings goals described in paragraph (1).

"(B) MODIFICATIONS.—

"(i) IN GENERAL.—If the Secretary makes a determination under subparagraph (A)(ii) that a code or standard does not meet the energy savings goals established under paragraph (1) or if a national model code or standard is not updated for more than 3 years, not later than 1 year after the determination or the expiration of the 3-year period, the Secretary shall establish a modified code or standard that meets the energy savings goals.

"(ii) REQUIREMENTS.—

"(I) ENERGY SAVINGS.—A modification to a code or standard under clause (i) shall—

"(aa) achieve the maximum level of energy savings that is technically feasible and lifecycle cost-effective;

"(bb) be achieved through an amendment or supplement to the most recent revision of the IECC or ASHRAE Standard 90.1 and taking into consideration other appropriate model codes and standards; and

"(cc) incorporate available appliances, technologies, and construction practices.

"(II) TREATMENT AS BASELINE.—A modification to a code or standard under clause (i) shall serve as the baseline for the next applicable determination of the Secretary under subparagraph (A)(i).

"(C) PUBLIC PARTICIPATION.—The Secretary shall—

"(i) publish in the Federal Register a notice relating to each goal, determination, and modification under this paragraph; and

"(ii) provide an opportunity for public comment regarding the goals, determinations, and modifications.

"(b) STATE CERTIFICATION OF BUILDING ENERGY CODE UPDATES.—

"(1) GENERAL CERTIFICATION.—

"(A) IN GENERAL.—Not later than 2 years after the date of enactment of the Lieberman-Warner Climate Security Act of 2008, each State shall certify to the Secretary that the State has reviewed and updated the provisions of the residential and commercial building codes of the State regarding energy efficiency.

"(B) ENERGY SAVINGS.—A certification under subparagraph (A) shall include a demonstration that the applicable provisions of the State code meet or exceed, as applicable—

"(i)(I) the IECC (2006) for residential buildings; or

"(II) the ASHRAE Standard 90.1 (2004) for commercial buildings; or

"(ii) the quantity of energy savings represented by the provisions referred to in clause (i).

"(2) REVISION OF CODES AND STANDARDS.—

"(A) IN GENERAL.—If the Secretary makes an affirmative determination under subsection (a)(2)(A)(i) or establishes a modified code or standard under subsection (a)(2)(B), not later than 2 years after the determination or proposal, each State shall certify that the State has reviewed and updated the provisions of the residential and commercial building codes of the State regarding energy efficiency.

"(B) ENERGY SAVINGS.—A certification under subparagraph (A) shall include a demonstration that the applicable provisions of the State code meet or exceed—

"(i) the modified code or standard; or

"(ii) the quantity of energy savings represented by the modified code or standard.

"(C) FAILURE TO DETERMINE.—If the Secretary fails to make a determination under subsection (a)(2)(A)(i) by the date specified in subsection (a)(2), or if the Secretary makes a negative determination, not later than 2 years after the specified date or the date of the determination, each State shall certify that the State has—

"(i) reviewed the revised code or standard; and

"(ii) updated the provisions of the residential and commercial building codes of the State as necessary to meet or exceed, as applicable—

"(I) any provisions of a national code or standard determined to improve energy efficiency in buildings; or

"(II) energy savings achieved by those provisions through other means.

"(c) ACHIEVEMENT OF COMPLIANCE BY STATES.—

"(1) IN GENERAL.—Not later than 3 years after the date on which a State makes a certification under subsection (b), the State shall certify to the Secretary that the State has achieved compliance with the building energy code that is the subject of the certification.

"(2) RATE OF COMPLIANCE.—The certification shall include documentation of the rate of compliance based on independent inspections of a random sample of the new and renovated buildings covered by the State code during the preceding calendar year.

"(3) COMPLIANCE.—A State shall be considered to achieve compliance for purposes of paragraph (1) if—

"(A) at least 90 percent of new and renovated buildings covered by the State code during the preceding calendar year substantially meet all the requirements of the code; or

"(B) the estimated excess energy use of new and renovated buildings that did not meet the requirements of the State code during the preceding calendar year, as compared to a baseline of comparable buildings that meet the requirements of the code, is not more than 10 percent of the estimated energy use of all new and renovated buildings covered by the State code during the preceding calendar year.

"(d) FAILURE TO CERTIFY.—

"(1) EXTENSION OF DEADLINES.—The Secretary shall extend a deadline for certification by a State under subsection (b) or (c) for not more than 1 additional year, if the State demonstrates to the satisfaction of the Secretary that the State has made—

"(A) a good faith effort to comply with the certification requirement; and

"(B) significant progress with respect to the compliance.

"(2) NONCOMPLIANCE BY STATE.—

"(A) IN GENERAL.—A State that fails to submit a certification required under subsection (b) or (c), and to which an extension

is not provided under paragraph (1), shall be considered to be out of compliance with this section.

''(B) EFFECT ON LOCAL GOVERNMENTS.—A local government of a State that is out of compliance with this section may be considered to be in compliance with this section if the local government meets each applicable certification requirement of this section.

''(e) TECHNICAL ASSISTANCE.—

''(1) IN GENERAL.—The Secretary shall provide technical assistance (including building energy analysis and design tools, building demonstrations, and design assistance and training) to ensure that national model building energy codes and standards meet the goals described in subsection (a)(1).

''(2) ASSISTANCE TO STATES.—The Secretary shall provide technical assistance to States—

''(A) to implement this section, including procedures for States to demonstrate that the codes of the States achieve equivalent or greater energy savings than the national model codes and standards;

''(B) to improve and implement State residential and commercial building energy efficiency codes; and

''(C) to otherwise promote the design and construction of energy-efficient buildings.

''(f) INCENTIVE FUNDING.—

''(1) IN GENERAL.—The Secretary shall provide incentive funding to States—

''(A) to implement this section; and

''(B) to improve and implement State residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

''(2) AMOUNT.—In determining whether, and in what amount, to provide incentive funding under this subsection, the Secretary shall take into consideration actions proposed by the State—

''(A) to implement this section;

''(B) to implement and improve residential and commercial building energy efficiency codes; and

''(C) to promote building energy efficiency through use of the codes.

''(3) ADDITIONAL FUNDING.—The Secretary shall provide additional funding under this subsection for implementation of a plan to demonstrate a rate of compliance with applicable residential and commercial building energy efficiency codes at a rate of not less than 90 percent, based on energy performance—

''(A) to a State that has adopted and is implementing, on a statewide basis—

''(i) a residential building energy efficiency code that meets or exceeds the requirements of the IECC (2006) (or a successor code that is the subject of an affirmative determination by the Secretary under subsection (a)(2)(A)(i)); and

''(ii) a commercial building energy efficiency code that meets or exceeds the requirements of the ASHRAE Standard 90.1 (2004) (or a successor standard that is the subject of an affirmative determination by the Secretary under subsection (a)(2)(A)(i)); or

''(B) in the case of a State in which no statewide energy code exists for residential buildings or commercial buildings, or in which the State code fails to comply with subparagraph (A), to a local government that has adopted and is implementing residential and commercial building energy efficiency codes, as described in subparagraph (A).

''(4) TRAINING.—Of the amounts made available to carry out this subsection, the Secretary may use not more than $500,000 for each State to train State and local officials to implement State or local energy codes in accordance with a plan described in paragraph (3).''.

(b) CONFORMING AMENDMENT.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is amended by adding at the end the following:

''(17) IECC.—The term 'IECC' means the International Energy Conservation Code.''.

SEC. 613. ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT PROGRAM.

(a) IN GENERAL.—In accordance with subsection (b), to fund the Energy Efficiency and Conservation Block Grant Program under subtitle E of title V of the Energy Independence and Security Act of 2007 (42 U.S.C. 17151 et seq.), for each of calendar years 2012 through 2050, the Administrator shall—

(1) auction 2 percent of the emission allowances established pursuant to section 201(a) for the calendar year; and

(2) immediately on completion of an auction, transfer the proceeds of the auction to the Secretary of Energy for use in carrying out that block grant program.

(b) NUMBER; FREQUENCY.—For each calendar year during the period described in subsection (a), the Administrator shall—

(1) conduct not fewer than 4 auctions; and

(2) schedule the auctions in a manner to ensure that—

(A) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(B) the interval between each auction is of equal duration.

SEC. 614. STATE LEADERS IN REDUCING EMISSIONS.

(a) ALLOCATION.—

(1) IN GENERAL.—Not later than 330 days before the beginning of each of calendar years 2012 through 2050, the Administrator shall allocate a percentage of the quantity of emission allowances established pursuant to section 201(a) for the applicable calendar year for distribution among States that, as determined by the Administrator, are leaders in the effort of the United States to reduce greenhouse gas emissions and improve energy efficiency, in accordance with paragraph (2).

(2) PERCENTAGES FOR ALLOCATION.—For each of calendar years 2012 through 2050, the Administrator shall distribute in accordance with paragraph (1) the percentage of emission allowances specified in the following table:

Calendar Year	Percentage for State leaders in reducing greenhouse gas emissions and improving energy efficiency
2012	4
2013	4
2014	4
2015	4
2016	4.25
2017	4.25
2018	4.55
2019	4.75
2020	5
2021	5
2022	6
2023	6.25
2024	6.5
2025	6.75
2026	7
2027	7.25
2028	7.5
2029	7.75
2030	8
2031	9
2032	10
2033	10

Calendar Year	Percentage for State leaders in reducing greenhouse gas emissions and improving energy efficiency
2034	10
2035	10
2036	10
2037	10
2038	10
2039	10
2040	10
2041	10
2042	10
2043	10
2044	10
2045	10
2046	10
2047	10
2048	10
2049	10
2050	10.

(b) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations establishing a system for annually scoring historical State investments and achievements in reducing greenhouse gas emissions and increasing energy efficiency for purposes of subsection (a).

(c) DISTRIBUTION.—

(1) IN GENERAL.—The emission allowances available for allocation to States under subsection (a) shall be distributed among the States based on the proportion that, for a calendar year—

(A) the score of the State, as determined under subsection (b); bears to

(B) the scores of all States, as determined under subsection (b).

(2) STATE CAP-AND-TRADE PROGRAMS.—Allowances under this section for any calendar year shall be distributed to—

(A) States that have never established State or regional cap-and-trade programs for greenhouse gas emissions; and

(B) States that did establish State or regional cap-and-trade programs for greenhouse gas emissions and that, not later than the beginning of the applicable calendar year—

(i) chose to transition the programs into the national system established by this Act; and

(ii) completed the transition and discontinued the State or regional cap-and-trade programs.

(d) USE.—

(1) IN GENERAL.—During any calendar year, a State shall retire or use all emission allowances allocated to the State (or proceeds of sale of those emission allowances) under this section for that calendar year for 1 or more of the following purposes:

(A) To mitigate impacts on low-income energy consumers.

(B) To promote energy efficiency (including support of electricity and natural gas demand reduction, waste minimization, and recycling programs).

(C) To promote investment in nonemitting electricity generation technology, including planning for the siting of facilities employing that technology in States (including in territorial waters of States).

(D) To improve public transportation and passenger rail service and otherwise promote reductions in vehicle miles traveled.

(E) To encourage advances in energy technology that reduce or sequester greenhouse gas emissions.

(F) To address local or regional impacts of climate change, including by accommodating, protecting, or relocating affected communities and public infrastructure.

(G) To collect, evaluate, disseminate, and use information necessary for affected coastal communities to adapt to climate change (such as information derived from inundation prediction systems).

(H) To mitigate obstacles to investment by new entrants in electricity generation markets and energy-intensive manufacturing sectors.

(I) To address local or regional impacts of climate change policy, including providing assistance to displaced workers.

(J) To engage local and municipal governments to provide capacity building and related technical assistance to local and municipal low-carbon green job creation and workforce development programs.

(K) To mitigate impacts on carbon-intensive industries in internationally competitive markets.

(L) To reduce hazardous fuels and prevent and suppress wildland fire.

(M) To fund rural, municipal, and agricultural water projects that are consistent with the sustainable use of water resources.

(N) To improve recycling infrastructure.

(O) To increase public education on the benefits of recycling, particularly with respect to greenhouse gases.

(P) To improve residential, commercial, and industrial collection of recyclables.

(Q) To improve recycling system efficiency.

(R) To increase recycling yields.

(S) To improve the quality and usefulness of recycled materials.

(T) To promote industry cluster or industry sector strategies that involve public-private partnerships of State and local economic and workforce development agencies, leaders from renewable energy, efficiency and low-carbon industries, and other community-based stakeholders, in the development of regional strategies to maximize the creation of good, career-track jobs.

(U) To develop and implement plans to anticipate and reduce the potential threats to health resulting from climate change, including—

(i) development, improvement, and integration of disease surveillance systems, rapid response systems, and communication methods and materials; and

(ii) identification and prioritization of vulnerable communities and populations.

(V) To fund any other purpose the States determine to be necessary to mitigate any negative economic impacts as a result of—

(i) global warming; or

(ii) new regulatory requirements as a result of this Act.

(e) DEADLINE FOR USE.—A State shall distribute or sell emission allowances for use in accordance with subsection (c) by not later than January 1 of each emission allowance allocation year.

(f) RETURN OF ALLOWANCES.—Not later than 330 days before the end of each emission allowance allocation year, each State shall return to the Administrator any emission allowances allocated to the State for the preceding calendar year but not distributed or sold by the deadline described in subsection (e).

(g) RECYCLING.—During any calendar year, a State shall use not less than 5 percent of the quantity of emission allowances allocated to the State (or proceeds of sale of those emission allowances) under this section for increasing recycling rates through activities such as—

(1) improving recycling infrastructure;

(2) increasing public education on the benefits of recycling, particularly with respect to greenhouse gases;

(3) improving residential, commercial, and industrial collection of recyclables;

(4) increasing recycling efficiency;

(5) increasing recycling yields; and

(6) improving the quality and usefulness of recycled materials.

(h) HOME HEATING OIL.—During any calendar year, any State that ranks among the top 20 States in terms of annual usage of home heating oil, as determined by the Secretary of Energy, shall use not less than 5 percent of the quantity of emission allowances allocated to the State (or proceeds of the sale of those allowances) under this section for protecting consumers of home heating oil in the State from suffering hardship as a result of any increases in home heating oil prices.

(i) REPORT.—A State receiving allowances under this section shall annually submit to the appropriate congressional committees and the appropriate Federal agencies a report describing the purposes for which the State has used—

(1) the allowances received under this section; and

(2) the proceeds of the sale by the State of allowances received under this section.

Subtitle C—Partnerships With States and Indian Tribes to Adapt to Climate Change

SEC. 621. ALLOCATION.

(a) IN GENERAL.—Not later than 330 days before the beginning of each of calendar years 2012 through 2050, the Administrator shall allocate a percentage of the quantity of emission allowances established pursuant to section 201(a) for the applicable calendar year for distribution among States and Indian tribes for activities carried out in response to the impacts of global climate change, in accordance with subsection (b).

(b) PERCENTAGES FOR ALLOCATION.—For each of calendar years 2012 through 2050, the Administrator shall distribute in accordance with subsection (a) the percentage of emission allowances specified in the following table:

Calendar Year	Percentage for States and Indian tribes for adaptation activities
2012	3
2013	3
2014	3
2015	3
2016	3.25
2017	3.25
2018	3.25
2019	3.25
2020	3.25
2021	3.25
2022	3.25
2023	3.25
2024	3.25
2025	3.25
2026	3.5
2027	3.5
2028	3.5
2029	3.5
2030	3.5
2031	4
2032	4
2033	4
2034	4
2035	4
2036	4
2037	4
2038	4
2039	4
2040	4
2041	4
2042	4
2043	4
2044	4
2045	4
2046	4
2047	4
2048	4
2049	4
2050	4.

SEC. 622. COASTAL IMPACTS.

(a) DEFINITIONS.—In this section:

(1) COASTAL STATE.—

(A) IN GENERAL.—The term ''Coastal State'' means any State that borders on 1 or more of the Atlantic Ocean, the Gulf of Mexico, the Pacific Ocean, the Arctic Ocean, or a Great Lake.

(B) INCLUSIONS.—The term ''Coastal State'' includes—

(i) the Commonwealth of Puerto Rico;

(ii) Guam;

(iii) American Samoa;

(iv) the Commonwealth of the Northern Mariana Islands; and

(v) the United States Virgin Islands.

(C) EXCLUSION.—The term ''Coastal State'' does not include the State of Alaska.

(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) GREAT LAKE.—The term ''Great Lake'' means—

(A) Lake Erie;

(B) Lake Huron (including Lake Saint Clair);

(C) Lake Michigan;

(D) Lake Ontario;

(E) Lake Superior; and

(F) the connecting channels of those Lakes, including—

(i) the Saint Marys River;

(ii) the Saint Clair River;

(iii) the Detroit River;

(iv) the Niagara River; and

(v) the Saint Lawrence River to the Canadian border.

(4) 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.

(b) ALLOCATION.—Of the emission allowances allocated each year pursuant to section 621, the Administrator shall allocate 40 percent to Coastal States.

(c) DISTRIBUTION.—The emission allowances available for allocation under subsection (b) for a calendar year shall be distributed among Coastal States, as follows:

(1) 50 percent based on the proportion that—

(A) the number of shoreline miles of a Coastal State; bears to

(B) the total number of shoreline miles of all Coastal States.

(2) 30 percent based on the proportion that—

(A) the population of a Coastal State; bears to

(B) the total population of all Coastal States.

(3) 20 percent divided equally among all Coastal States.

(d) USE OF EMISSION ALLOWANCES OR PROCEEDS.—

(1) IN GENERAL.—During any calendar year, a Coastal State receiving emission allowances under this section shall use the emission allowances (or proceeds of sale of those emission allowances) only for projects and activities to plan for and address the impacts of climate change in the coastal watershed.

(2) SPECIFIC USES.—The projects and activities described in paragraph (1) shall include projects and activities—

(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; and

(v) related flooding;

(B) to identify 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 the development of plans to protect, or, as necessary or applicable, to relocate the facilities or infrastructure;

(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) habitat loss (particularly loss of coastal wetland);

(vi) species migrations; and

(vii) marine, estuarine, and freshwater ecosystem changes associated with climate change.

(3) COORDINATION.—In carrying out this subsection, a Coastal State shall coordinate with the Administrator and the heads of other appropriate Federal agencies to ensure, to the maximum extent practicable, an efficient and effective use of emission allowances (or proceeds of sale of those emission allowances) allocated under this section.

(4) TECHNICAL ASSISTANCE AND TRAINING.—The Administrator and the heads of such other Federal agencies as are appropriate, including the National Oceanic and Atmospheric Administration, Environmental Protection Agency, United States Geological Survey, Department of the Interior, Corps of Engineers, and Department of Transportation, shall provide technical assistance and training for State and local officials to assist Coastal States in carrying out this subsection.

(5) INSTITUTIONS OF HIGHER EDUCATION PARTICIPATION.—If appropriate, institutions of higher education should use the expertise and research capacity of the institutions to carry out the goals of this subsection, specifically with regard to conducting the research and planning necessary to respond to the impacts on coastal areas from climate change.

(e) RETURN OF UNUSED EMISSION ALLOWANCES.—Any Coastal State receiving emission allowances under this section shall return to the Administrator any such emission allowances that the Coastal State has failed to use in accordance with subsection (d) by not later than 5 years after the date of receipt of the emission allowances from the Administrator.

(f) USE OF RETURNED EMISSION ALLOWANCES.—The Administrator shall, in accordance with subsection (c), distribute any emission allowances returned to the Administrator under subsection (e) to States other than the State that returned those allowances to the Administrator.

(g) REPORT.—A State receiving allowances under this section shall annually submit to the appropriate congressional committees and the appropriate Federal agencies a report describing the purposes for which the State has used—

(1) the allowances received under this section; and

(2) the proceeds of the sale by the State of allowances received under this section.

SEC. 623. IMPACTS ON WATER RESOURCES AND AGRICULTURE.

(a) IN GENERAL.—Of the emission allowances allocated each year pursuant to section 621, the Administrator shall allocate 25 percent to the States facing the earliest and most severe impacts on the availability of freshwater and on agriculture, as determined by the Administrator.

(b) USE.—

(1) IN GENERAL.—For each calendar year, a State receiving emission allowances under this section shall use the allowances, or the proceeds from the sale of the allowances, only for projects and activities to plan for and address the impacts of climate change on water resources.

(2) REGIONALLY-SPECIFIC ANALYSIS.—In developing State programs under paragraph (1), a State shall develop a regionally-specific analysis of the potential climate-change impacts on local water resources.

(3) IMPLEMENTATION PRIORITIES.—Implementation priorities shall be developed through an integrated analysis of a full range of water management alternatives (including urban and agricultural conservation, habitat and watershed protection and restoration, wastewater recycling, groundwater cleanup, nonstructural alternatives, floodplain restoration, and urban stormwater management) to direct funding to the most cost-effective strategies that will generate significant net environmental benefits.

(4) SPECIFIC USES.—Projects and activities under this subsection shall include projects and activities—

(A) to promote investment in research into the impacts of climate change on water resource planning;

(B) to promote water resource planning;

(C) to develop and implement sustainable strategies for adapting to climate change; and

(D) to implement measures to reduce the greenhouse gas emissions of water utilities.

(c) REPORT.—A State receiving allowances under this section shall annually submit to the appropriate congressional committees and the appropriate Federal agencies a report describing the purposes for which the State has used—

(1) the allowances received under this section; and

(2) the proceeds of the sale by the State of allowances received under this section.

SEC. 624. IMPACTS ON ALASKA.

(a) ALLOCATION.—Of the allowances allocated for each year pursuant to section 621, the Administrator shall allocate 20 percent of the allowances to the State of Alaska for the uses described in subsection (b).

(b) USE.—

(1) IN GENERAL.—For each calendar year, emission allowances distributed to the State of Alaska under this section, or the proceeds from the sale of the allowances, shall be used only for projects and activities to plan for and address the impacts of climate change on the State and State residents.

(2) STATE-SPECIFIC ANALYSIS.—In order to receive allowances under this section, the State of Alaska shall develop a State-specific analysis of the potential climate-change impacts on residents of the State.

(3) IMPLEMENTATION PRIORITIES.—Implementation priorities shall be developed through an integrated analysis of impacts and strategies.

(c) REPORT.—The State of Alaska shall annually submit to the appropriate congressional committees and the appropriate Federal agencies a report describing the purposes for which the State has used—

(1) the allowances received under this section; and

(2) the proceeds of the sale by the State of allowances received under this section.

SEC. 625. IMPACTS ON INDIAN TRIBES.

(a) PURPOSES.—The purposes of this section are—

(1) to demonstrate the commitment of the United States to maintaining the unique and continuing relationship of the United States with, and responsibility of the United States to, Indian tribes;

(2) to recognize the obligation of the United States to prepare for the likely disproportionate consequences of global climate change facing Indian tribes located throughout the United States;

(3) to establish, in accordance with the principles of self-determination and government-to-government consultation, cost-efficient mechanisms to provide for meaningful participation by Indian tribes in the planning, implementation, and administration of programs and services authorized by this Act;

(4) to support and assist Indian tribes in the development of strong and stable tribal governments that are capable of administering innovative programs and economic development initiatives in the face of global climate change;

(5) to establish a self-sustaining Tribal Climate Change Assistance Fund to address local and regional impacts of climate change affecting Indian tribes, now and in the future;

(6) to ensure that any proceeds from the sale of emission allowances allocated for Indian tribes are soundly invested and distributed by the Administrator through direct consultation with Indian tribes as beneficiaries; and

(7) to authorize the Administrator to distribute, by regulation, funds to Indian tribes in accordance with the principles established by the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450 et seq.), in consultation with the Secretary of the Interior and Indian tribes, not later than 5 years after the date of enactment of this Act.

(b) ESTABLISHMENT OF PROGRAM.—

(1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall establish a program—

(A) to assist Indian tribes in addressing local and regional impacts of climate change in accordance with subsection (a); and

(B) to distribute proceeds from the Tribal Climate Change Assistance Fund established by subsection (c) on an annual basis, beginning not later than January 1, 2011.

(2) REGULATIONS.—The Administrator shall promulgate such regulations as are necessary to establish and carry out the program described in paragraph (1)—

(A) in accordance with subchapter IV of chapter 5 of title 5, United States Code; and

(B) in consultation with representatives of Indian tribes located in each region of the Environmental Protection Agency.

(c) FUND.—There is established in the Treasury of the United States a fund, to be known as the ''Tribal Climate Change Assistance Fund''.

(d) AUCTIONS.—

(1) IN GENERAL.—In accordance with paragraph (2), to raise funds for deposit in the Tribal Climate Change Assistance Fund, for each of calendar years 2012 through 2050, the Administrator shall—

(A) auction 15 percent of the emission allowances allocated pursuant to section 621 for the calendar year; and

(B) immediately on completion of the auction, deposit proceeds of the auction in the Tribal Climate Change Assistance Fund.

(2) NUMBER; FREQUENCY.—For each calendar year during the period described in paragraph (1), the Administrator shall—

(A) conduct not fewer than 4 auctions; and

(B) schedule the auctions in a manner to ensure that—

(i) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(ii) the interval between each auction is of equal duration.

(e) USE OF FUNDS.—

(1) IN GENERAL.—Amounts deposited in the Tribal Climate Change Assistance Fund under subsection (d)(1)(B) that are in excess of amounts appropriated for the applicable fiscal year to carry out the Indian Environmental General Assistance Program Act of 1992 (42 U.S.C. 4368b) and sections 103 and 360(d) of the Clean Air Act (42 U.S.C. 7403, 7601(d)) shall be made available, without further appropriation or fiscal year limitation, to the Administrator to carry out the program established under subsection (b) in accordance with the purposes described in paragraph (2).

(2) PURPOSES.—The Administrator shall use amounts in the Tribal Climate Change Assistance Fund—

(A) to provide assistance to Indian tribes that face disruption or dislocation as a result of climate change;

(B) to assist Indian tribes in planning and designing agricultural, forestry, and other land use-related projects in accordance with the Indian Environmental General Assistance Program Act of 1992 (42 U.S.C. 4368b);

(C) to assist Indian tribes in the collection of greenhouse gas and other air quality data through the Indian Environmental General Assistance Program Act of 1992 (42 U.S.C. 4368b) and the Clean Air Act (42 U.S.C. 7401 et seq.);

(D) to mitigate impacts on low-income Indian energy consumers;

(E) to promote energy efficiency (including support of electricity and natural gas demand reduction, waste minimization, and recycling programs);

(F) to promote investment in nonemitting electricity generation technology, including planning for the siting of facilities employing that technology on tribal land;

(G) to collect, evaluate, disseminate, and use information necessary for affected coastal tribal communities to adapt to climate change (such as information derived from inundation prediction systems);

(H) to address local or regional impacts of climate change policy, including providing assistance to displaced workers;

(I) to reduce hazardous fuels and prevent and suppress wildland fire;

(J) to fund rural, municipal, and agricultural water projects that are consistent with the sustainable use of water resources; and

(K) to fund any other purposes an Indian tribe determines to be necessary to mitigate any negative economic impacts as a result of—

(i) global warming; or

(ii) new regulatory requirements as a result of this Act.

(f) NO TRIBAL AUTHORITY REQUIREMENT.—The Administrator shall not require Indian tribes to obtain tribal authority under section 360(d) of the Clean Air Act (42 U.S.C. 7601(d)) as a condition of participation in any program authorized by this subtitle.

(g) REPORT.—An Indian tribe receiving allowances under this section shall annually submit to the appropriate congressional committees and the appropriate Federal agencies a report describing the purposes for which the Indian tribe has used—

(1) the allowances received under this section; and

(2) the proceeds of the sale by the Indian tribe of allowances received under this section

Subtitle D—Partnerships With States, Localities, and Indian Tribes to Protect Natural Resources

SEC. 631. STATE WILDLIFE ADAPTATION FUND.

(a) ESTABLISHMENT.—There is established in the Treasury of the United States a fund, to be known as the ''State Wildlife Adaptation Fund'' (referred to in this section as the ''Fund'').

(b) AUCTIONS.—

(1) IN GENERAL.—In accordance with paragraph (2) and subsection (c), for each of calendar years 2012 through 2050, the Administrator shall auction a percentage of emission allowances established for the calendar year pursuant to section 201(a) to raise funds for deposit in the Fund.

(2) NUMBER; FREQUENCY.—For each calendar year during the period described in paragraph (1), the Administrator shall—

(A) conduct not fewer than 4 auctions; and

(B) schedule the auctions in a manner to ensure that—

(i) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(ii) the interval between each auction is of equal duration.

(c) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—For each calendar year of the period described in subsection (b)(1), the Administrator shall auction a quantity of emission allowances in accordance with the applicable percentages described in the following table:

Calendar year	Percentage for auction for Fund
2012	2
2013	2
2014	2
2015	2
2016	2
2017	2
2018	2
2019	2
2020	2
2021	2
2022	2
2023	2
2024	3
2025	3
2026	3
2027	4
2028	4
2029	4
2030	4
2031	4
2032	4
2033	4
2034	4
2035	4
2036	4
2037	4
2038	4
2039	4
2040	4
2041	4
2042	4
2043	4
2044	4
2045	4
2046	4
2047	4
2048	4
2049	4
2050	4.

(d) PITTMAN-ROBERTSON WILDLIFE RESTORATION PROGRAM.—

(1) DEPOSIT.—As soon as practicable after conducting an auction under subsection (b), the Administrator shall deposit 78 percent of the proceeds of the auction in the Fund.

(2) USE OF PROCEEDS.—Amounts deposited in the Fund under paragraph (1) shall be made available, without further appropriation or fiscal year limitation, to the Secretary of the Interior for distribution to States through the Wildlife Conservation and Restoration Account established under section 3(a)(2) of the Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669b(a)(2)), to carry out adaptation activities in accordance with comprehensive State adaptation strategies, as described in section 633.

(e) LAND AND WATER CONSERVATION.—

(1) DEPOSIT.—As soon as practicable after conducting an auction under subsection (b), the Administrator shall deposit 22 percent of the proceeds of the auction 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).

(2) USE.—Deposits to the Land and Water Conservation Fund under paragraph (1) shall—

(A) be supplemental to amounts appropriated pursuant to section 3 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460*l*–6), which shall remain available for nonadaptation needs; and

(B) notwithstanding section 3 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460*l*–6), be available without further appropriation or fiscal year limitation.

(3) ALLOCATIONS.—Of the amounts deposited in the Land and Water Conservation Fund under paragraph (1)—

(A) ⅙ shall be allocated to the Secretary of the Interior and made available on a competitive basis to carry out 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)—

(i) to States, in accordance with comprehensive wildlife conservation strategies, and to Indian tribes;

(ii) notwithstanding section 5 of that Act (16 U.S.C. 460*l*–7); and

(iii) in addition to grants provided pursuant to—

(I) annual appropriations Acts;

(II) the Energy Policy Act of 2005 (42 U.S.C. 15801 et seq.); or

(III) any other authorization for non-adaptation needs;

(B) ⅓ shall be allocated to the Secretary of the Interior to carry out 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) ⅙ shall be allocated to the Secretary of Agriculture and made available to the States to carry out adaptation activities through the acquisition of land and interests in land under section 7 of the Forest Legacy Program under the Cooperative Forestry Assistance Act of 1978 (16 U.S.C. 2103c); and

(D) ⅓ shall be allocated to the Secretary of Agriculture to carry out 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).

(4) EXPENDITURE OF FUNDS.—In allocating funds under paragraph (2), the Secretary of the Interior and the Secretary of Agriculture shall take into consideration factors including—

(A) the availability of non-Federal contributions from State, local, or private sources;

(B) opportunities to protect wildlife corridors or otherwise to link or consolidate fragmented habitats;

(C) opportunities to reduce the risk of catastrophic wildfires, extreme flooding, or other climate-related events that are harmful to fish, wildlife, and individuals;

(D) the potential for conservation of species or habitat types at serious risk due to climate change, ocean acidification, and other stressors; and

(E) the potential to provide enhanced access to land and water for fishing, hunting, and other public recreational uses.

SEC. 632. COST-SHARING.

Notwithstanding any other provision of law, a State or Indian tribe that receives a grant under section 631 shall provide 10 percent of the costs of each activity carried out using the grant.

SEC. 633. STATE COMPREHENSIVE ADAPTATION STRATEGIES.

(a) IN GENERAL.—Except as provided in subsection (b), amounts made available to States pursuant to this subtitle shall be used only for activities that are consistent with a State strategy that has been approved by—

(1) the Secretary of the Interior; and

(2) for any State with a coastal zone (within the meaning of the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.)), by the Secretary of Commerce, subject to the condition that approval by the Secretary of Commerce shall be required only for those portions of the strategy relating to activities affecting the coastal zone.

(b) INITIAL RECEIPT OF FUNDS.—

(1) IN GENERAL.—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 receives approval for a State strategy, a State shall be eligible to receive funds under this subtitle for adaptation activities that are—

(A) consistent with the comprehensive wildlife strategy of the State and, if appropriate, other fish, wildlife, and conservation strategies; and

(B) in accordance with a workplan developed in coordination with—

(i) the Secretary of the Interior; and

(ii) for any State with a coastal zone (within the meaning of the Coastal Zone Management Act (16 U.S.C. 1451 et seq.)), the Secretary of Commerce, subject to the condition that coordination with the Secretary of Commerce shall be required only for those portions of the strategy relating to activities affecting the coastal zone.

(2) PENDING APPROVAL.—During the period for which approval by the applicable Secretary of a State strategy described in paragraph (1) is pending, the State may continue receiving funds under this subtitle pursuant to the workplan described paragraph (1)(B).

(c) REQUIREMENTS.—A State strategy shall—

(1) describe the impacts of climate change and ocean acidification on the diversity and health of the fish, wildlife, and plant populations, habitats, aquatic and terrestrial ecosystems, and associated ecological processes;

(2) describe and prioritize proposed conservation, protection, and restoration actions to assist fish, wildlife, aquatic and terrestrial ecosystems, and plant populations in adapting to those impacts;

(3) establish programs for monitoring the impacts of climate change on fish, wildlife, and plant populations, habitats, aquatic and terrestrial ecosystems, and associated ecological processes;

(4) include strategies, specific conservation, protection, and restoration actions, and a timeframe for implementing conservation actions for fish, wildlife, and plant populations, habitats, aquatic and terrestrial ecosystems, and associated ecological processes;

(5) establish methods for—

(A) assessing the effectiveness of conservation, protection, and restoration actions

taken to assist fish, wildlife, and plant populations, habitats, aquatic and terrestrial ecosystems and associated ecological processes in adapting to those impacts; and

(B) updating those actions to respond appropriately to new information or changing conditions;

(6) be developed—

(A) with the participation of the State fish and wildlife agency, the State agency responsible for administration of Land and Water Conservation Fund grants, the State Forest Legacy Program coordinator, the State environmental agency, and the State coastal agency; and

(B) in coordination with the Secretary of the Interior and, if applicable, the Secretary of Commerce;

(7) provide for solicitation and consideration of public and independent scientific input;

(8) include 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;

(9) take into consideration research and information contained in, and coordinate with and integrate the goals and measures identified in, as appropriate, other fish, wildlife, aquatic and terrestrial ecosystems, and habitat conservation strategies, including—

(A) the national fish habitat action plan;

(B) plans under the North American Wetlands Conservation Act (16 U.S.C. 4401 et seq.);

(C) the Federal, State, and local partnership known as ''Partners in Flight'';

(D) federally approved coastal zone management plans under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.);

(E) federally approved regional fishery management plans and habitat conservation activities under the Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.);

(F) the national coral reef action plan;

(G) 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));

(H) habitat conservation plans under section 10 of that Act (16 U.S.C. 1539);

(I) other Federal and State plans for imperiled species;

(J) the United States shorebird conservation plan;

(K) the North American waterbird conservation plan;

(L) federally approved watershed plans under the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.); and

(M) other State-based strategies that comprehensively implement adaptation activities to remediate the effects of climate change and ocean acidification on fish, wildlife, habitats, and aquatic and terrestrial ecosystems; and

(10) be incorporated into a revision of the comprehensive wildlife conservation strategy of a State—

(A) that has been submitted to the United States Fish and Wildlife Service; and

(B)(i) that has been approved by the Service; or

(ii) on which a decision on approval is pending.

(d) UPDATING.—Each State strategy under this section shall be updated not less frequently than once every 5 years.

TITLE VII—RECOGNIZING EARLY ACTION

SEC. 701. REGULATIONS.

Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations establishing a program, to be known as the ''Early Action Program'', for distributing emission allowances to entities that emit greenhouse gas in the United States, in recognition of verified greenhouse gas emission reductions that—

(1) occurred before the date of promulgation of the regulations; and

(2) resulted from actions taken by the entities after January 1, 1994, and before the date of enactment of this Act.

SEC. 702. ALLOCATION.

Not later than 2 years after the date of enactment of this Act, the Administrator shall allocate to the Early Action Program established under section 701 quantities of the emission allowances established for calendar years 2012 through 2025 pursuant to section 201(a), in accordance with the following table:

Calendar year	Percentage for allocation to Early Action Program
2012	5
2013	5
2014	5
2015	4
2016	3
2017	3
2018	1
2019	1
2020	1
2021	1
2022	1
2023	1
2024	1
2025	1.

SEC. 703. GENERAL DISTRIBUTION.

Not later than 4 years after the date of enactment of this Act, the Administrator shall complete distribution to entities described in section 701 of all emission allowances allocated to the Early Action Program under section 702.

SEC. 704. DISTRIBUTION TO ENTITIES HOLDING STATE EMISSION ALLOWANCES.

(a) DEFINITION OF ELIGIBLE ENTITY.—In this section, the term ''eligible entity'' means an entity that—

(1) is located in the United States; and

(2) as of December 31, 2011, holds emission allowances issued—

(A) by the State of California; or

(B) for the Regional Greenhouse Gas Initiative.

(b) DISTRIBUTION.—Of the quantity of emission allowances allocated for the Early Action Program under section 702, each eligible entity shall receive emission allowances sufficient to compensate the eligible entity for the cost to the eligible entity of obtaining and holding the emission allowances under subsection (a)(2).

SEC. 705. DISTRIBUTION TO POWER PLANTS THAT REPOWERED PURSUANT TO CONSENT DECREES.

(a) DEFINITION OF ELIGIBLE FACILITY.—In this section, the term ''eligible facility'' means an electricity generating facility that—

(1) is located in the United States; and

(2) repowered from coal before January 1, 2005, pursuant to a consent decree.

(b) DISTRIBUTION.—Subject to subsection (c), of the quantity of emission allowances allocated for the Early Action Program under section 702, each owner or operator of an eligible facility shall receive a quantity of emission allowances equal to the sum of—

(1) the verified quantity of metric tons of carbon dioxide the emission of which by the eligible facility was avoided as a result of the repowering, during the period beginning on the date on which the repowering began and ending on the date of enactment of this Act; and

(2) the aggregate quantity of emission allowances that, as a result of the lower annual carbon dioxide emissions resulting from the repowering, will not be distributed to the owner or operator of the facility pursuant to subtitle F of title V.

(c) LIMITATION.—Notwithstanding subsection (b), the total quantity of emission allowances distributed pursuant to this section shall not exceed 80,000,000.

SEC. 706. DISTRIBUTION TO CARBON CAPTURE AND SEQUESTRATION PROJECTS.

(a) DEFINITION OF ELIGIBLE PROJECT.—In this section, the term ''eligible project'' means a carbon capture and sequestration project associated with an anthropogenic source of carbon dioxide in the United States, the performance of which is monitored by a network developed by an international collaborative government and industry research program.

(b) DISTRIBUTION.—The regulations established pursuant to section 701 shall provide for the distribution of emission allowances to eligible projects.

(c) LIMITATION.—Notwithstanding subsection (b), the total quantity of emission allowances distributed pursuant to this section shall not exceed 25,000,000.

TITLE VIII—EFFICIENCY AND RENEWABLE ENERGY

Subtitle A—Efficient Buildings

SEC. 801. ALLOCATION.

Not later than 330 days before the beginning of each of calendar years 2012 through 2050, the Administrator shall allocate to the Climate Change Technology Board established by section 431 0.75 percent of the emission allowances established pursuant to section 201(a) for that calendar year, for the purpose of conducting the Efficient Buildings Allowance Program established pursuant to section 802.

SEC. 802. EFFICIENT BUILDINGS ALLOWANCE PROGRAM.

(a) IN GENERAL.—The Climate Change Technology Board shall establish and carry out a program, to be known as the ''Efficient Buildings Allowance Program,'' for distributing the emission allowances allocated pursuant to section 801 among owners of buildings in the United States as reward for constructing highly-efficient buildings in the United States and for increasing the efficiency of existing buildings in the United States.

(b) REQUIREMENTS.—Emission allowances shall be distributed under this section to owners of buildings in the United States based on the extent to which projects relating to the buildings of the owners result in verifiable, additional, and enforceable improvements in energy performance—

(1) in new or renovated buildings that demonstrate exemplary performance by achieving a minimum score of 75 on the benchmarking tool of the Energy Star program established by section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a), or an equivalent score on an established energy performance benchmarking metric selected by the Climate Change Technology Board; and

(2) in retrofitted existing buildings that demonstrate substantial improvement in the score or rating on that benchmarking tool by a minimum of 30 points, or an equivalent improvement using an established performance benchmarking metric selected by the Climate Change Technology Board.

(c) PRIORITY.—In distributing the allowances, priority shall given to projects—

(1) completed by building owners with a proven track record of building energy performance; or

(2) that result in measurable greenhouse gas reduction benefits not encompassed within the metrics of the Energy Star program described in subsection (b)(1).

Subtitle B—Efficient Equipment and Appliances

SEC. 811. ALLOCATION.

Not later than 330 days before the beginning of each of calendar years 2012 through 2050, the Administrator shall allocate to the Climate Change Technology Board established by section 431 0.75 percent of the emission allowances established pursuant to section 201(a) for that calendar year, for the purpose of conducting the Super-Efficient Equipment and Appliances Development Program established pursuant to section 812.

SEC. 812. SUPER-EFFICIENT EQUIPMENT AND APPLIANCES DEPLOYMENT PROGRAM.

(a) IN GENERAL.—The Climate Change Technology Board shall establish and administer a program, to be known as the ''Super-Efficient Equipment and Appliances Deployment Program'', to distribute the emission allowances allocated pursuant to section 811 among retailers and distributors in the United States as reward for increasing the sales by the retailers and distributors of high-efficiency building equipment, high-efficiency consumer electronics, and high-efficiency household appliances through marketing strategies such as consumer rebates, with the goal of minimizing life-cycle costs for consumers and maximizing public benefit.

(b) SIZE OF INDIVIDUAL REWARDS.—The size of each reward for each product-type shall be determined by the Climate Change Technology Board, in consultation with the Administrator, the Secretary of Energy, State and utility efficiency program administrators, and national laboratories.

(c) REPORTING.—Each retailer and distributor participating in the program under this section shall be required to report to the Climate Change Technology Board, on a confidential basis for program-design purposes—

(1) the number of products sold within each product-type; and

(2) wholesale purchase-price data.

(d) COST-EFFECTIVENESS REQUIREMENT.—

(1) DEFINITIONS.—In this subsection:

(A) COST-EFFECTIVENESS.—The term ''cost-effectiveness'' means a measure of aggregate savings equal to the product obtained by multiplying—

(i) the net number of highly-efficient pieces of equipment, electronics, and appliances sold by a retailer or distributor in a calendar year; by

(ii) the savings during the projected useful life, but not to exceed 10 years, of the pieces of equipment, electronics, and appliances, including the impact of any documented measures to retire low-performing devices at the time of purchase of highly-efficient substitutes.

(B) SAVINGS.—The term ''savings'' means megawatt-hours of electricity or million British thermal units of other fuels saved by a product, in comparison to projected energy consumption based on the efficiency performance of displaced new product sales.

(2) REQUIREMENT.—The Climate Change Technology Board shall make cost-effectiveness a top priority in distributing emission allowances pursuant to this section.

Subtitle C—Efficient Manufacturing

SEC. 821. ALLOCATION.

Not later than 330 days before the beginning of each of calendar years 2012 through 2050, the Administrator shall allocate to the Climate Change Technology Board established by section 431 0.75 percent of the emission allowances established pursuant to section 201(a) for that calendar year, for the purpose of conducting the Efficient Manufacturing Program established pursuant to section 822.

SEC. 822. EFFICIENT MANUFACTURING PROGRAM.

(a) IN GENERAL.—The Climate Change Technology Board shall establish and carry out a program, to be known as the ''Efficient Manufacturing Program,'' to distribute the emission allowances allocated pursuant to section 821 among owners and operators of manufacturing facilities in the United States, as reward for achieving high levels of efficiency in the operations of the owners and operators.

(b) REQUIREMENTS.—The Efficient Manufacturing Program established pursuant to subsection (a) shall provide that—

(1) the rewards of emission allowances under the Program shall include rewards for use of recycled material in manufacturing; and

(2) the Climate Change Technology Board shall give priority in distributing emission allowances to entities that—

(A) document the greatest use of domestically-sourced parts and components;

(B) return to productive service existing idle manufacturing capacity;

(C) are located in States with the greatest availability of unemployed manufacturing workers;

(D) compensate workers, at a minimum, in an amount that is equal to at least 100 percent of the State average manufacturing wage, plus health insurance benefits;

(E) demonstrate a high probability of commercial success; and

(F) achieve other criteria, as the Climate Change Technology Board determines to be appropriate.

Subtitle D—Renewable Energy

SEC. 831. ALLOCATION.

(a) FIRST PERIOD.—Not later than 330 days before the beginning of each of calendar years 2012 through 2030, the Administrator shall allocate to the Climate Change Technology Board established by section 431 4 percent of the emission allowances established pursuant to section 201(a) for that calendar year.

(b) SECOND PERIOD.—Not later than 330 days before the beginning of each of calendar years 2031 through 2050, the Administrator shall allocate to the Climate Change Technology Board established by section 431 1 percent of the emission allowances established pursuant to section 201(a) for that calendar year.

SEC. 832. BONUS ALLOWANCES FOR RENEWABLE ENERGY.

(a) DEFINITION OF RENEWABLE-ENERGY SOURCE.—In this section, the term ''renewable-energy source'' means energy from 1 or more of the following sources:

(1) Solar energy.

(2) Wind.

(3) Geothermal energy.

(4) Incremental hydropower.

(5) Biomass.

(6) Ocean waves.

(7) Landfill gas.

(8) Livestock methane.

(9) Fuel cells powered with a renewable-energy source.

(b) BONUS ALLOWANCES.—The Climate Change Technology Board shall distribute the emission allowances allocated pursuant to section 831 among owners, operators, and developers of facilities, including distributed-energy and transmission systems, in the United States that harness a renewable-energy source, as reward for the start-up, expansion, and operation of the facilities.

(c) ADMINISTRATION.—In distributing emission allowances pursuant to this section, the Climate Change Technology Board shall provide appropriate rewards for regulated investor-owned utilities, municipal utilities, electric cooperatives, and independent power producers.

(d) LIMITATION.—A project may not receive a distribution of emission allowances under this section if the project—

(1) receives an award under subtitle A of title IX; or

(2) is supported under subtitle A or subtitle C of title III.

(e) REQUIREMENTS.—

(1) IN GENERAL.—A reward of allowances for construction, alteration, or repair under this subtitle shall be conditioned on a written assurance of payment, to all laborers and mechanics employed by contractors or subcontractors for that work, of wages at rates not less than those prevailing on the same types of work in the locality, as determined by the Secretary of Labor in accordance with sections 3141 through 3144, 3146, and 3147 of title 40, United States Code.

(2) AUTHORITY OF SECRETARY OF LABOR.—With respect to the labor standards described in paragraph (1), the Secretary of Labor shall have the authority and functions established in Reorganization Plan Number 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40, United States Code.

TITLE IX—LOW-CARBON ELECTRICITY AND ADVANCED RESEARCH

Subtitle A—Low- and Zero-Carbon Electricity Technology

SEC. 901. DEFINITIONS.

In this subtitle:

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

(A) redesigning manufacturing processes to begin producing qualifying components and zero- or low-carbon generation technologies;

(B) designing new tooling and equipment for production facilities that produce qualifying components and zero- or low-carbon generation technologies; and

(C) establishing or expanding manufacturing operations for qualifying components and zero- or low-carbon generation technologies.

(2) QUALIFYING COMPONENT.—The term ''qualifying component'' means a component that the Secretary of Energy determines to be specially designed for zero- or low-carbon generation technology.

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

(4) ZERO- OR LOW-CARBON GENERATION.—The term ''zero- or low-carbon generation'' means generation of electricity by an electric generation unit that—

(A) emits no carbon dioxide into the atmosphere; and

(B) was placed into commercial service after the date of enactment of this Act.

(5) ZERO- OR LOW-CARBON GENERATION TECHNOLOGY.—The term ''zero- or low-carbon generation technology'' means a technology used to create zero- or low-carbon generation.

SEC. 902. LOW- AND ZERO-CARBON ELECTRICITY TECHNOLOGY FUND.

There is established in the Treasury of the United States a fund, to be known as the ''Low- and Zero-Carbon Electricity Technology Fund''.

SEC. 903. AUCTIONS.

(a) FIRST PERIOD.—

(1) IN GENERAL.—For each of calendar years 2012 through 2021, the Administrator shall, in accordance with paragraph (2), auction 1.75 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year to raise funds for deposit in the Low- and Zero-Carbon Electricity Technology Fund.

(2) NUMBER; FREQUENCY.—For each calendar year during the period described in paragraph (1), the Administrator shall—

(A) conduct not fewer than 4 auctions; and

(B) schedule the auctions in a manner to ensure that—

(i) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(ii) the interval between each auction is of equal duration.

(b) SECOND PERIOD.—

(1) IN GENERAL.—For each of calendar years 2022 through 2030, the Administrator shall, in accordance with paragraph (2), auction 2 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year to raise funds for deposit in the Low- and Zero-Carbon Electricity Technology Fund.

(2) NUMBER; FREQUENCY.—For each calendar year during the period described in paragraph (1), the Administrator shall—

(A) conduct not fewer than 4 auctions; and

(B) schedule the auctions in a manner to ensure that—

(i) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(ii) the interval between each auction is of equal duration.

(c) THIRD PERIOD.—

(1) IN GENERAL.—For each of calendar years 2031 through 2050, the Administrator shall, in accordance with paragraph (2), auction 1 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year to raise funds for deposit in the Low- and Zero-Carbon Electricity Technology Fund.

(2) NUMBER; FREQUENCY.—For each calendar year during the period described in paragraph (1), the Administrator shall—

(A) conduct not fewer than 4 auctions; and

(B) schedule the auctions in a manner to ensure that—

(i) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(ii) the interval between each auction is of equal duration.

SEC. 904. DEPOSITS.

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 903, immediately on receipt of those proceeds, in the Low- and Zero-Carbon Electricity Technology Fund.

SEC. 905. USE OF FUNDS.

For each of calendar years 2012 through 2050, all funds deposited in the Low- and Zero-Carbon Electricity Technology Fund during the preceding calendar year pursuant to section 904 shall be made available, without further appropriation or fiscal year limitation, to the Climate Change Technology Board established by section 431 to carry out the financial incentives program established under section 906.

SEC. 906. FINANCIAL INCENTIVES PROGRAM.

For fiscal year 2011 and each fiscal year thereafter, the Climate Change Technology Board shall competitively award financial incentives under this subtitle in the technology categories of—

(1) the production of electricity from new zero- or low-carbon generation; and

(2) facility establishment or conversion by manufacturers and component suppliers of zero- or low-carbon generation technology.

SEC. 907. REQUIREMENTS.

(a) IN GENERAL.—The Climate Change Technology Board shall make awards under this section to domestic producers of new zero- or low-carbon generation, and domestic facilities and operations of manufacturers and component suppliers of zero- or low-carbon generation technology—

(1) in the case of producers of new zero- or low-carbon generation, based on the bid of each generator in terms of dollars per megawatt-hour of electricity generated; and

(2) in the case of qualifying manufacturers of zero- or low-carbon generation technology, based on the criteria described in section 909.

(b) ACCEPTANCE OF BIDS.—

(1) IN GENERAL.—In making awards under paragraphs (1) and (2) of subsection (a), the Climate Change Technology Board shall—

(A) solicit bids for reverse auction from appropriate producers and manufacturers, as determined by the Climate Change Technology Board; and

(B) award financial incentives to the producers and manufacturers that submit the lowest bids that meet the requirements established by the Climate Change Technology Board.

(2) FACTORS FOR CONVERSION.—

(A) IN GENERAL.—For the purpose of assessing bids under paragraph (1), the Climate Change Technology Board shall specify a factor for converting megawatt-hours of electricity and million British thermal units of natural gas to common units.

(B) REQUIREMENT.—The conversion factor shall be based on the relative greenhouse gas emission benefits of electricity and natural gas conservation.

SEC. 908. FORMS OF AWARDS.

(a) ZERO- AND LOW-CARBON GENERATORS.—

(1) IN GENERAL.—Subject to paragraph (2), an award for zero- or low-carbon generation under this subtitle shall be in the form of a contract to provide a production payment for commercial service of the generation unit in an amount equal to the product obtained by multiplying—

(A) the amount of the bid by the producer of the zero- or low-carbon generation; and

(B) the quantity of net megawatt-hours generated by the zero- or low-carbon generation unit each year during the first 10 years following the end of the calendar year of the award.

(2) COMMERCIAL SERVICE.—A producer may receive an award for a generation unit under this subsection only if the first year of commercial service of the generation unit occurs within 5 years of the end of the calendar year of the award.

(b) MANUFACTURING OF ZERO- OR LOW-CARBON GENERATION TECHNOLOGY.—

(1) IN GENERAL.—An award for the establishment of a facility or conversion costs for zero- or low-carbon generation technology shall be in an amount equal to not more than 30 percent of the cost of—

(A) establishing, reequipping, or expanding a manufacturing facility to produce—

(i) qualifying zero- or low-carbon generation technology; or

(ii) qualifying components;

(B) engineering integration costs of zero- or low-carbon generation technology and qualifying components; and

(C) property, machine tools, and other equipment acquired or constructed primarily to enable the recipient to test equipment necessary for the construction or operation of a zero- or low-carbon generation facility.

(2) MINIMUM AMOUNT.—The Climate Change Technology Board shall use not less than ¼ of the amounts made available to carry out this section to make awards to entities for the manufacturing of zero- or low-carbon generation technology.

SEC. 909. SELECTION CRITERIA.

(a) IN GENERAL.—In making awards under this subtitle to qualifying manufacturers of zero- or low-carbon generation technology and qualifying components, the Climate Change Technology Board shall select manufacturers that—

(1) document the greatest use of domestically-sourced parts and components;

(2) return to productive service existing idle manufacturing capacity;

(3) are located in States with the greatest availability of unemployed manufacturing workers;

(4) compensate workers in an amount that is at least 100 percent of the State average manufacturing wage, plus health insurance benefits;

(5) demonstrate a high probability of commercial success; and

(6) achieve other criteria, as the Climate Change Technology Board determines to be appropriate.

(b) REQUIREMENTS.—

(1) IN GENERAL.—Funding for construction, alteration, or repair under this subtitle shall be conditioned on a written assurance of payment, to all laborers and mechanics employed by contractors or subcontractors for the construction, alteration, or repair, of wages at rates not less than those prevailing on the same types of work in the locality, as determined by the Secretary of Labor in accordance with sections 3141 through 3144, 3146, and 3147 of title 40, United States Code.

(2) AUTHORITY OF SECRETARY OF LABOR.—The Secretary of Labor shall, with respect to the labor standards described in paragraph (1), have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40, United States Code.

Subtitle B—Advanced Research

SEC. 911. AUCTIONS.

(a) IN GENERAL.—For each of calendar years 2012 through 2050, the Administrator shall, in accordance with subsection (b), auction 0.25 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year to raise funds for deposit in the energy transformation acceleration fund described in section 912.

(b) NUMBER; FREQUENCY.—For each calendar year during the period described in subsection (a), the Administrator shall—

(1) conduct not fewer than 4 auctions; and

(2) schedule the auctions in a manner to ensure that—

(A) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(B) the interval between each auction is of equal duration.

SEC. 912. DEPOSITS.

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 911, immediately on receipt of those proceeds, in an energy transformation acceleration fund in the Treasury that is administered by the Director of the Advanced Research Projects Agency of the Department of Energy.

SEC. 913. USE OF FUNDS.

No amounts deposited in the energy transformation acceleration fund pursuant to section 912 shall be disbursed, except pursuant to an appropriation Act.

TITLE X—FUTURE OF COAL

Subtitle A—Kick-Start for Carbon Capture and Sequestration

SEC. 1001. CARBON CAPTURE AND SEQUESTRATION TECHNOLOGY FUND.

There is established in the Treasury of the United States a fund, to be known as the ''Carbon Capture and Sequestration Technology Fund'' (referred to in this subtitle as the ''Fund''), consisting of such amounts as are deposited in the Fund under section 1003.

SEC. 1002. AUCTIONS.

Not later than 120 days after the date of enactment of this Act, and annually thereafter through 2022, the Administrator shall auction, to raise funds for deposit in the Fund, 1 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year that occurs 3 years after the calendar year during which the auction is conducted.

SEC. 1003. DEPOSITS.

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 1002, immediately on receipt of those proceeds, in the Fund.

SEC. 1004. USE OF FUNDS.

(a) EXPENDITURES FROM FUND.—On request by the Climate Change Technology Board established by section 431 (referred to in this subtitle as the ''Board''), the Secretary of the Treasury shall transfer from the Fund to the Board such amounts as the Board determines are necessary to carry out the Kick-Start Program under section 1005.

(b) AVAILABILITY OF FUNDS.—Funds transferred under subsection (a) shall be made available to the Board without further appropriation or fiscal year limitation.

SEC. 1005. KICK-START PROGRAM.

(a) IN GENERAL.—The Board shall use the amounts in the Fund to establish and implement a program for early deployment of carbon capture and sequestration technology in the United States (referred to in this section as the ''Kick-Start Program'').

(b) GOAL.—The Board shall design and operate the Kick-Start Program with the goal of rapidly bringing into operation in the United States not fewer than 5 nor more than 10 commercial facilities that capture and geologically sequester carbon released when coal is used to generate electricity.

(c) BASIS.—The Board shall base the Kick-Start Program on the ''Early Deployment Fund'' recommendation contained in the final report issued by the Advanced Coal Technology Work Group of the Clean Air Act Advisory Committee of the Environmental Protection Agency and dated January 29, 2008.

(d) COAL DIVERSITY.—The Kick-Start Program shall ensure that a range of domestic coal types is employed in facilities receiving support under the Kick-Start Program.

(e) PRIORITY.—Awards of financial support under the Kick-Start Program shall be made in a manner that maximizes the avoidance or reduction of greenhouse gas emissions.

(f) REQUIREMENTS.—

(1) IN GENERAL.—As a condition of receiving funding for construction, alteration, or repair activities under the Kick-Start Program, an individual or entity shall provide, to each laborer and mechanic employed by each contractor or subcontractor for the activity, a written assurance of payment of wages at rates not less than those prevailing on the same types of work in the locality, as determined by the Secretary of Labor in accordance with sections 3141 through 3144, 3146, and 3147 of title 40, United States Code.

(2) AUTHORITY OF SECRETARY OF LABOR.—With respect to the labor standards described in paragraph (1), the Secretary of Labor shall have the authority and functions established in Reorganization Plan Number 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40, United States Code.

Subtitle B—Long-Term Carbon Capture and Sequestration Incentives

SEC. 1011. ALLOCATION.

Not later than 2 years after the date of enactment of this Act, the Administrator shall—

(1) establish an account to be known as the ''Bonus Allowance Account'' for carbon capture and sequestration projects in the United States; and

(2) allocate to the Bonus Allowance Account quantities of the emission allowances established for calendar years 2012 through 2050 pursuant to section 201(a) in accordance with the following table:

Calendar Year	Percentage for allocation to Bonus Allowance Account
2012	3
2013	3
2014	3
2015	3
2016	3
2017	3
2018	3
2019	3
2020	3
2021	3
2022	3
2023	3
2024	3
2025	3
2026	4
2027	4
2028	4
2029	4
2030	4
2031	1
2032	1
2033	1
2034	1
2035	1
2036	1
2037	1
2038	1
2039	1
2040	1
2041	1
2042	1
2043	1
2044	1
2045	1
2046	1
2047	1
2048	1
2049	1
2050	1.

SEC. 1012. QUALIFYING PROJECTS.

(a) DEFINITIONS.—In this section:

(1) COMMENCED.—The term ''commenced'', with respect to construction, means that an owner or operator has—

(A) obtained the necessary permits to undertake a continuous program of construction; and

(B) entered into a binding contractual obligation, with substantial financial penalties for cancellation, to undertake a program described in subparagraph (A).

(2) CONSTRUCTION.—The term ''construction'' means the fabrication, erection, or installation of the technology for a carbon capture and sequestration project.

(3) NEW ENTRANT.—The term ''new entrant'' means an electric generating unit that begins operation after the date of enactment of this Act.

(b) ELIGIBILITY.—To be eligible to receive emission allowances under this subtitle, a carbon capture and sequestration project shall—

(1) comply with such criteria and procedures as the Administrator may establish, including a requirement, as prescribed in subsection (c), for an annual emission performance standard for carbon dioxide emissions from any unit for which allowances are allocated;

(2) sequester, in a geological formation permitted by the Administrator for that purpose in accordance with regulations promulgated under part C of the Safe Drinking Water Act (42 U.S.C. 300h et seq.), carbon dioxide captured from any unit for which allowances are allocated;

(3) have begun operation during the period beginning on January 1, 2008, and ending on December 31, 2035; and

(4) not produce a transportation fuel that contains more than 10 kilograms of fossil-based carbon per million British thermal units, higher heat value.

(c) EMISSION PERFORMANCE STANDARDS.—Subject to subsection (d), a carbon capture and sequestration project shall be eligible to receive emission allowances under this subtitle only if the project achieves 1 of the following emission performance standards for limiting carbon dioxide emissions from the unit:

(1)(A) An electric generation unit that is not a new entrant and that commences operation of carbon capture and sequestration equipment before January 1, 2016, shall—

(i) treat at least the amount of flue gas equivalent to 100 megawatts of the output of the generation unit; and

(ii) be designed to capture and sequester at least 85 percent of the carbon dioxide in that flue gas.

(B) The bonus allowance adjustment ratio under section 1013(b) shall apply only to the megawatt-hours and carbon dioxide emissions attributable to the treated share of the flue gas of the generation unit.

(2) An electric generation unit that is not a new entrant and that commences operation of carbon capture and sequestration equipment on or after January 1, 2016, shall achieve an average annual emission rate of not more than 1,200 pounds of carbon dioxide per megawatt-hour of net electricity generation, after subtracting the carbon dioxide that is captured and sequestered.

(3) A new entrant electric generation unit for which construction of the unit commenced before July 1, 2018, shall achieve an average annual emission rate of not more than 800 pounds of carbon dioxide per megawatt-hour of net electricity generation, after subtracting the carbon dioxide that is captured and sequestered.

(4) A new entrant electric generation unit for which construction of the unit commenced on or after July 1, 2018, shall achieve an average annual emission rate of not more than 350 pounds of carbon dioxide per megawatt-hour of net electricity generation, after subtracting the carbon dioxide that is captured and sequestered.

(5) Any unit at a covered entity that is not an electric generation unit shall achieve an average annual emission rate that is achieved by the capture and sequestration of a minimum of 85 percent of the total carbon dioxide emissions produced by the unit.

(d) ADJUSTMENT OF PERFORMANCE STANDARDS.—

(1) IN GENERAL.—The Climate Change Technology Board may adjust the emission performance standard for a carbon capture and sequestration project described in subsection (c) for an electric generation unit that uses subbituminous coal, lignite, or petroleum coke in significant quantities.

(2) REQUIREMENT.—In any case described in paragraph (1), the performance standard for the project shall prescribe an annual emission rate that requires the project to achieve

an equivalent reduction from uncontrolled carbon dioxide emissions levels from the use of subbituminous coal, lignite, or petroleum coke, as compared to the emission rate that the project would have achieved if that unit had combusted only bituminous coal during the particular year.

SEC. 1013. DISTRIBUTION.

(a) CALCULATION.—

(1) IN GENERAL.—Subject to section 1014, for each of calendar years 2012 through 2039, the Administrator shall distribute emission allowances from the Bonus Allowance Account established under section 1011 to each qualifying project under this subtitle in a quantity equal to the product obtained by multiplying—

(A) the bonus allowance adjustment factor, as determined under subsection (b);

(B) the number of metric tons of carbon dioxide emissions avoided through capture and geological sequestration of emissions by the project, as determined in accordance with paragraph (2); and

(C) the bonus allowance rate for the applicable calendar year, as provided in the following table:

Calendar Year	Bonus Allowance Rate
2012	2
2013	2
2014	2
2015	2
2016	2
2017	2
2018	1.9
2019	1.8
2020	1.7
2021	1.6
2022	1.3
2023	1.2
2024	1.1
2025	1
2026	0.9
2027	0.8
2028	0.7
2029	0.6
2030	0.5
2031	0.5
2032	0.5
2033	0.5
2034	0.5
2035	0.5
2036	0.5
2037	0.5
2038	0.5
2039	0.5.

(2) AVOIDED CARBON DIOXIDE EMISSIONS.—For the purpose of determining the number of metric tons of carbon dioxide avoided in paragraph (1)(B), the Administrator shall—

(A) in the first year, count as avoided carbon dioxide emissions the proportion of carbon dioxide emissions the owner or operator certifies as the designed level of capture for the project, subject to verification and adjustment; and

(B) in each subsequent year, count the higher of—

(i) the actual metric tons of carbon dioxide sequestered in the preceding year; or

(ii) the proportion of emissions the owner or operator certifies as the result of a modification to the designed capture level of the project, subject to verification and adjustment.

(b) BONUS ALLOWANCE ADJUSTMENT RATIO.—

(1) IN GENERAL.—Except as provided in paragraph (2), the Administrator shall determine the bonus allowance adjustment factor by dividing—

(A) a carbon dioxide emission rate of 350 pounds per megawatt-hour; by

(B) the annual carbon dioxide emission rate, on a pounds per megawatt-hour basis, that a qualifying project at the electric generation unit achieved during a particular year.

(2) EXCEPTIONS.—Notwithstanding paragraph (1), the bonus allowance adjustment factor shall—

(A) in the case of a project that qualifies under section 1012(c)(1), be equal to 1 during the first 4 years that emission allowances are distributed to the project;

(B) in the case of a project that qualifies under section 1012(c)(2), be equal to 1 during the first 4 years that emission allowances are distributed to the project;

(C) in the case of a project that qualifies under section 1012(c)(3), be equal to 1 during the first 8 years that emission allowances are distributed to the project; and

(D) not exceed 1 for any qualifying project.

(c) NON-ELECTRIC GENERATING UNITS.—

(1) IN GENERAL.—For a qualifying project other than an electric generating unit, the Administrator shall by regulation reduce the bonus allowance rates described in section 1013(a)(1)(C) so that the bonus allowance rate for the projects does not exceed the incremental capital and operating costs for carrying out sequestration of carbon dioxide from the facility.

(2) LIMITATION.—In distributing emission allowances under this subtitle, the Administrator shall distribute not more than 20 percent of the quantity of emission allowances in the Bonus Allowance Account for nonelectric generation units described in section 1012(c)(5).

(d) ENHANCED OIL RECOVERY.—For a carbon capture and sequestration project sequestering in a geological formation for purposes of enhanced oil recovery, the Administrator shall by regulation reduce the bonus allowance rates set forth in section 1013(a)(1)(C) to reflect the lower cost of the projects when compared to sequestration into geological formations solely for purposes of disposal.

SEC. 1014. 10-YEAR LIMIT.

A qualifying project may receive annual emission allowances under this subtitle only for—

(1) the first 10 years of operation; or

(2) if the unit covered by the qualifying project began operating before January 1, 2012, the period of calendar years 2012 through 2021.

SEC. 1015. EXHAUSTION OF BONUS ALLOWANCE ACCOUNT.

If, at the beginning of a calendar year, the Administrator determines that the number of emission allowances remaining in the Bonus Allowance Account established under section 1011 will be insufficient to allow the distribution in that calendar year, of the number of allowances that otherwise would be distributed under section 1013 for the calendar year, the Administrator shall, for the calendar year—

(1) distribute the remaining bonus allowances only to qualifying projects that were already qualifying projects during the preceding calendar year;

(2) distribute the remaining bonus allowances to those qualifying projects on a pro rata basis; and

(3) discontinue the program established under this subtitle as of the date on which the Bonus Allowance Account is projected to be fully used based on projects already in operation.

Subtitle C—Legal Framework

SEC. 1021. NATIONAL DRINKING WATER REGULATIONS.

(a) IN GENERAL.—Section 1421 of the Safe Drinking Water Act (42 U.S.C.300h) is amended—

(1) in subsection (b)(1), by striking ''subsection (d)(2)'' and inserting ''subsection (e)(2)'';

(2) by redesignating subsection (d) as subsection (e); and

(3) by inserting after subsection (c) the following:

''(d) CARBON DIOXIDE.—

''(1) REGULATIONS.—Not later than 1 year after the date of enactment of the Lieberman-Warner Climate Security Act of 2008, the Administrator shall promulgate regulations establishing standards for permitting commercial-scale underground injection of carbon dioxide for the purpose of geological sequestration to address climate change.

''(2) INCLUSIONS.—Standards promulgated under paragraph (1) shall include requirements—

''(A)(i) to monitor and control the long-term storage of carbon dioxide;

''(ii) to avoid, to the maximum extent practicable, and quantify any release of carbon dioxide into the atmosphere; and

''(iii) to ensure protection of underground sources of drinking water, human health, and the environment;

''(B) for financial responsibility (including financial responsibility for well plugging, post-injection site care, site closure, monitoring, corrective action, and remedial care), as necessary, allowing for the use of 1 or more financial instruments, including insurance, surety bond, letter of credit, financial guarantee, or qualification as a self-insurer; and

''(C) relating to long-term care and stewardship associated with commercial-scale geological sequestration, including financial responsibility, as necessary, consistent with the degree and duration of risk associated with the geological sequestration of carbon dioxide for purposes of subparagraph (A).

''(3) AUTHORIZATION.—The Administrator may specify the policy or other contractual terms, conditions, or defenses that are necessary to establish evidence of financial responsibility for the purposes of this subsection.''.

(b) CONFORMING AMENDMENT.—Section 1447(a)(4) of the Safe Drinking Water Act (42 U.S.C. 300j–6(a)(4)) is amended by striking ''section 1421(d)(2)'' and inserting ''section 1421(e)(2)''.

SEC. 1022. ASSESSMENT OF GEOLOGICAL STORAGE CAPACITY FOR CARBON DIOXIDE.

(a) DEFINITIONS.—In this section:

(1) ASSESSMENT.—The term ''assessment'' means the national assessment of capacity for carbon dioxide completed under subsection (f).

(2) CAPACITY.—The term ''capacity'' means the portion of a storage formation that can retain carbon dioxide in accordance with the requirements (including physical, geological, and economic requirements) established under the methodology developed under subsection (b).

(3) ENGINEERED HAZARD.—The term ''engineered hazard'' includes the location and completion history of any well that could affect a storage formation or capacity.

(4) RISK.—The term ''risk'' includes any risk posed by a geomechanical, geochemical, hydrogeological, structural, or engineered hazard.

(5) SECRETARY.—The term ''Secretary'' means the Secretary of the Interior, acting through the Director of the United States Geological Survey.

(6) STORAGE FORMATION.—The term ''storage formation'' means a deep saline formation, unmineable coal seam, oil or gas reservoir, or other geological formation that is capable of accommodating a volume of industrial carbon dioxide.

(b) METHODOLOGY.—Not later than 1 year after the date of enactment of this Act, the Secretary shall develop a methodology for conducting an assessment under subsection (f), taking into consideration—

(1) the geographical extent of all potential storage formations in all States;

(2) the capacity of the potential storage formations;

(3) the injectivity of the potential storage formations;

(4) an estimate of potential volumes of oil and gas recoverable by injection and storage of industrial carbon dioxide in potential storage formations;

(5) the risk associated with the potential storage formations; and

(6) the work performed to develop the Carbon Sequestration Atlas of the United States and Canada completed by the Department of Energy in April 2006.

(c) COORDINATION.—

(1) FEDERAL COORDINATION.—

(A) CONSULTATION.—The Secretary shall consult with the Secretary of Energy and the Administrator regarding data sharing and the format, development of methodology, and content of the assessment to ensure the maximum usefulness and success of the assessment.

(B) COOPERATION.—The Secretary of Energy and the Administrator shall cooperate with the Secretary to ensure, to the maximum extent practicable, the usefulness and success of the assessment.

(2) STATE COORDINATION.—The Secretary shall consult with State geological surveys and other relevant entities to ensure, to the maximum extent practicable, the usefulness and success of the assessment.

(d) EXTERNAL REVIEW AND PUBLICATION.—On completion of the methodology under subsection (b), the Secretary shall—

(1) publish the methodology and solicit comments from the public and the heads of affected Federal and State agencies;

(2) establish a panel of individuals with expertise in the matters described in paragraphs (1) through (5) of subsection (b) comprised, as appropriate, of representatives of Federal agencies, institutions of higher education, nongovernmental organizations, State organizations, industry, and international geosciences organizations to review the methodology and comments received under paragraph (1); and

(3) on completion of the review under paragraph (2), publish in the Federal Register the revised final methodology.

(e) PERIODIC UPDATES.—The methodology developed under this section shall be updated periodically (including not less frequently than once every 5 years) to incorporate new data as the data becomes available.

(f) NATIONAL ASSESSMENT.—

(1) IN GENERAL.—Not later than 2 years after the date of publication of the methodology under subsection (d)(3), the Secretary, in consultation with the Secretary of Energy and State geological surveys, shall complete a national assessment of the capacity for carbon dioxide storage in accordance with the methodology.

(2) GEOLOGICAL VERIFICATION.—As part of the assessment, the Secretary shall carry out a characterization program to supplement the geological data relevant to determining storage capacity in carbon dioxide in geological storage formations, including—

(A) well log data;

(B) core data; and

(C) fluid sample data.

(3) PARTNERSHIP WITH OTHER DRILLING PROGRAMS.—As part of the drilling characterization under paragraph (2), the Secretary shall enter into partnerships, as appropriate, with other entities to collect and integrate data from other drilling programs relevant to the storage of carbon dioxide in geological formations.

(4) INCORPORATION INTO NATCARB.—

(A) IN GENERAL.—On completion of the assessment, the Secretary shall incorporate the results of the assessment using, to the maximum extent practicable—

(i) the NatCarb database of the National Energy Technology Laboratory of the Department of Energy; or

(ii) a new database developed by the Secretary, as the Secretary determines to be necessary.

(B) RANKING.—The database shall include the data necessary to rank potential storage sites—

(i) for capacity and risk;

(ii) across the United States;

(iii) within each State;

(iv) by formation; and

(v) within each basin.

(5) REPORT.—Not later than 180 days after the date on which the assessment is completed, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science and Technology of the House of Representatives a report describing the results of the assessment.

(6) PERIODIC UPDATES.—The assessment shall be updated periodically (including not less frequently than once every 5 years) as necessary to support public and private sector decisionmaking, as determined by the Secretary.

SEC. 1023. STUDY OF FEASIBILITY RELATING TO CONSTRUCTION AND OPERATION OF PIPELINES AND GEOLOGICAL CARBON DIOXIDE SEQUESTRATION ACTIVITIES.

(a) IN GENERAL.—The Secretary of Energy, in coordination with the Administrator, the Chairman of the Federal Energy Regulatory Commission, the Secretary of Transportation, and the Secretary of the Interior, and in consultation with representatives of industry, financial institutions, investors, owners and operators of applicable facilities, regulators, institutions of higher education, and other stakeholders, shall conduct a study to assess the feasibility of the construction of—

(1) pipelines to be used for the transportation of carbon dioxide for the purpose of sequestration or enhanced oil recovery; and

(2) geological carbon dioxide sequestration facilities.

(b) SCOPE.—The study shall consider—

(1) any barrier or potential barrier in existence as of the date of enactment of this Act, including any technical, siting, financing, or regulatory barrier, relating to—

(A) the construction and operation of pipelines to be used for the transportation of carbon dioxide for the purpose of sequestration or enhanced oil recovery; or

(B) the construction and operation of facilities for the geological sequestration of carbon dioxide;

(2) any market risk (including throughput risk) relating to—

(A) the construction and operation of pipelines to be used for the transportation of carbon dioxide for the purpose of sequestration or enhanced oil recovery; or

(B) the construction and operation of facilities for the geological sequestration of carbon dioxide;

(3) any regulatory, financing, or siting option that, as determined by the Secretary of Energy, would—

(A) mitigate any market risk described in paragraph (2); or

(B) help ensure the construction and operation of pipelines dedicated to the transportation of carbon dioxide for the purpose of sequestration or enhanced oil recovery;

(4) the means by which to ensure the safe handling, transportation, and sequestration of carbon dioxide;

(5) any preventive measure to ensure the integrity of pipelines to be used for the transportation of carbon dioxide for the purpose of sequestration or enhanced oil recovery;

(6) any other appropriate use, as determined by the Secretary of Energy, in coordination with the Administrator, the Chairman of the Federal Energy Regulatory Commission, the Secretary of Transportation, and the Secretary of the Interior;

(7) the means by which to ensure that siting is carried out in a manner that is socioeconomically just and environmentally and ecologically sound; and

(8) the findings of the task force established under section 1024, in consultation with industry, financial institutions, investors, owners and operators, regulators, academic experts, and stakeholders.

(c) REPORT.—Not later than 180 days after the date of enactment of this Act, the Secretary of Energy shall submit to Congress a report describing the results of the study.

SEC. 1024. LIABILITIES FOR CLOSED GEOLOGICAL STORAGE SITES.

(a) ESTABLISHMENT OF TASK FORCE.—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, with equal representation from the public, academic subject matter experts, and industry, to conduct a study of the statutory framework, environmental and safety considerations, and financial implications of potential Federal assumption of liabilities with respect to closed geological sites.

(b) CHARGE OF TASK FORCE.—At a minimum, the task force shall consider—

(1) procedures for the certification and approval of geological storage sites and projects, including siting, monitoring, and closure standards;

(2) existing statutory authority under the Safe Drinking Water Act (42 U.S.C. 300f et seq.) and the Clean Air Act (42 U.S.C. 7401 et seq.) to address issues relating to long-term financial responsibility and long-term liabilities; and

(3) successorship of closed geological storage sites used to sequester carbon dioxide, including possible transfer of title and liabilities from the private sector to the public sector and conditions that might be placed on such a transfer, transfer of financial responsibility to the public sector or within the private sector, and possible indemnity from long-term liabilities.

TITLE XI—FUTURE OF TRANSPORTATION

Subtitle A—Kick-Start for Clean Commercial Fleets

SEC. 1101. PURPOSE.

The purpose of this subtitle is to accelerate the commercialization and diffusion of fuel-efficient medium- and heavy-duty hybrid commercial trucks, buses, and vans in the United States.

SEC. 1102. ALLOCATION.

Not later than 2 years after the date of enactment of this Act, the Administrator shall allocate to the program established under section 1103 0.5 percent of the aggregate quantity of emission allowances established pursuant to section 201(a) for calendar years 2012 through 2017.

SEC. 1103. CLEAN MEDIUM- AND HEAVY-DUTY HYBRID FLEETS PROGRAM.

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall—

(1) review and revise, as necessary, regulations promulgated under section 113; and

(2) promulgate regulations for a program for distributing emission allowances allocated pursuant to section 1102 to entities in

the United States as an immediate reward for purchase by the entities of advanced medium- and heavy-duty hybrid commercial vehicles, based on demonstrated increases in fuel efficiency.

(b) REQUIREMENTS.—The regulations promulgated pursuant to subsection (a) shall require that—

(1) only purchasers of commercial vehicles weighing at least 8,500 pounds are eligible for receipt of emission allowances under the program;

(2) the purchasers of qualifying vehicles are provided certainty of the magnitude and timeliness of delivery of the reward at the time at which the purchasers purchase the vehicles;

(3) rewards increase commensurately with fuel efficiency of qualifying vehicles;

(4) qualifying vehicles shall be categorized into not fewer than 3 classes of vehicle weight, in order to ensure—

(A) adequate availability of rewards for different categories of commercial vehicles; and

(B) that the rewards for heavier, more expensive vehicles are proportional to the rewards for lighter, less expensive vehicles;

(5) rewards decrease over time, in order to encourage early purchases of hybrid vehicles; and

(6) to the maximum extent practicable, all emission allowances allocated to the program shall have been distributed as rewards by not later than 5 years after the date of enactment of this Act.

Subtitle B—Advanced Vehicle Manufacturers

SEC. 1111. CLIMATE CHANGE TRANSPORTATION ENERGY TECHNOLOGY FUND.

There is established in the Treasury of the United States a fund, to be known as the ''Climate Change Transportation Energy Technology Fund'' (referred to in this subtitle as the ''Fund'').

SEC. 1112. AUCTIONS.

(a) IN GENERAL.—For each of calendar years 2012 through 2050, the Administrator shall, in accordance with subsection (b), auction 1 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year in order to raise funds for deposit in the Fund.

(b) NUMBER; FREQUENCY.—For each calendar year during the period described in subsection (a), the Administrator shall—

(1) conduct not fewer than 4 auctions; and

(2) schedule the auctions in a manner to ensure that—

(A) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(B) the interval between each auction is of equal duration.

SEC. 1113. DEPOSITS.

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 1112, immediately on receipt of those proceeds, into the Fund.

SEC. 1114. USE OF FUNDS.

For each of calendar years 2012 through 2050, all funds deposited into the Fund during the preceding year pursuant to section 1113 shall be made available, without further appropriation or fiscal year limitation, to the Climate Change Technology Board established by section 431 for making manufacturer facility conversion awards under section 1115.

SEC. 1115. MANUFACTURER FACILITY CONVERSION PROGRAM.

(a) IN GENERAL.—The Climate Change Technology Board established by section 431 shall use all amounts in the Fund to provide facility funding awards under this section to manufacturers to pay not more than 30 percent of the cost of—

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

(A) qualifying advanced technology vehicles; or

(B) qualifying components; and

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

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

(1) facilities and equipment placed in service during the period beginning on the date of enactment of this Act and ending on December 31, 2029; and

(2) engineering integration costs incurred after the date of enactment of this Act.

(c) CAFE REQUIREMENTS.—The Climate Change Technology Board shall not make an award under this section to an automobile manufacturer or component supplier that, directly or through a parent, subsidiary, or affiliated entity, is not in compliance with each corporate average fuel economy standard under section 32902 of title 49, United States Code, in effect on the date of the award.

(d) ADDITIONAL REQUIREMENTS.—

(1) DEFINITION OF PROSPECTIVE RECIPIENT.—In this subsection, the term ''prospective recipient'' means an automobile manufacturer or component supplier (including any parent, subsidiary, or affiliated entity) that seeks to receive an award under this section.

(2) CERTIFICATION.—To be eligible to receive an award under this section, a prospective recipient shall certify to the Climate Change Technology Board that, for the 7-calendar year period beginning on the date of receipt of the award, the prospective recipient will maintain in the United States a number of full-time or full-time-equivalent employees that is—

(A) equal to 90 percent of the monthly average number of full-time or full-time-equivalent employees maintained by the prospective recipient for the 12-month period ending on the date of receipt of the award;

(B) sufficient to ensure that the proportion that the workforce of the prospective recipient in the United States bears to the global workforce of the prospective recipient is equal to or greater than the average monthly proportion that the workforce of the prospective recipient in the United States bears to the global workforce of the prospective recipient for the 12-month period ending on the date of receipt of the award; or

(C) sufficient to ensure that any percentage decrease in the hourly workforce of the prospective recipient in the United States is not greater than the aggregate of the percentage decrease in the market share of the prospective recipient in the United States and the increase in the productivity of the prospective recipient, calculated during the period beginning on the date of receipt of the award and ending on the date of certification under this paragraph.

(3) RECERTIFICATION.—Not later than 1 year after the date of receipt of an award under this section, and annually thereafter, a prospective recipient shall—

(A) recertify to the Climate Change Technology Board that, during the preceding calendar year, the prospective recipient has achieved compliance with an applicable requirement described in paragraph (2); and

(B) provide to the Climate Change Technology Board sufficient data for verification of the recertification.

(4) REPAYMENT.—A prospective recipient that fails to make the recertification required by paragraph (3) shall pay to the Climate Change Technology Board an amount equal to the difference between—

(A) the amount of the original award to the prospective recipient; and

(B) the product obtained by multiplying—

(i) an amount equal to 1/7 of that original amount; and

(ii) the number of years during which the prospective recipient—

(I) received an award under this section; and

(II) made the recertification required by paragraph (3).

(e) ADMINISTRATION.—The terms and conditions established for applicants under section 136(d)(2) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17013(d)) shall apply to prospective recipients under this section.

Subtitle C—Cellulosic Biofuel

SEC. 1121. CELLULOSIC BIOFUEL PROGRAM.

(a) ALLOCATION.—

(1) FIRST PERIOD.—Not later than 330 days before the beginning of each of calendar years 2012 and 2013, the Administrator shall allocate to the program established under subsection (b) 1 percent of the emission allowances established pursuant to section 201(a) for that calendar year.

(2) SECOND PERIOD.—Not later than 330 days before the beginning of each of calendar years 2014 through 2017, the Administrator shall allocate to the program established under subsection (b) 0.75 percent of the emission allowances established pursuant to section 201(a) for that calendar year.

(3) THIRD PERIOD.—Not later than 330 days before the beginning of each of calendar years 2018 through 2030, the Administrator shall allocate to the program established under subsection (b) 1 percent of the emission allowances established pursuant to section 201(a) for that calendar year.

(b) PROGRAM.—

(1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations to establish a program for distributing emission allowances allocated under subsection (a) to entities in the United States as a reward for production in the United States of fuel from cellulosic biomass grown in the United States.

(2) REQUIREMENTS.—The regulations promulgated pursuant to paragraph (1) shall require that emission allowances shall be distributed under the program—

(A) among a variety of feedstocks and a variety of regions of the United States;

(B) on a competitive basis for projects that have produced in the United States fuels that—

(i) meet United States fuel and emissions specifications;

(ii) help diversify domestic transportation energy supplies;

(iii) improve or maintain air, water, soil, and habitat quality and protect scarce water supplies; and

(iv) are cellulosic biofuel (as defined in section 211(o)(1) of the Clean Air Act (42 U.S.C. 7545(o)(1))); and

(C) in a manner that provides priority to projects that achieve—

(i) low costs to consumers over the medium- and long-terms;

(ii) demonstrably low lifecycle greenhouse gas emissions, taking into account direct and indirect land-use changes;

(iii) high long-term technological potential, taking into consideration production volume, feedstock availability, and process efficiency;

(iv) low environmental impacts, taking into consideration air, water, and habitat quality; and

(v) fuels with the ability to serve multiple economic segments of the transportation sector, including the aviation and marine segments.

Subtitle D—Low-Carbon Fuel Standard

SEC. 1131. FINDINGS.

Congress finds that—

(1) oil used for transportation contributes significantly to air pollution, including greenhouse gases, water pollution, and other adverse impacts on the environment; and

(2) to reduce greenhouse gas emissions, the United States should rely increasingly on advanced, clean, low-carbon fuels for transportation.

SEC. 1132. DEFINITIONS.

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

(1) by redesignating subparagraphs (G) through (L) as subparagraphs (J) through (O), respectively;

(2) by inserting after subparagraph (F) the following:

''(G) CULTIVATED NOXIOUS PLANT.—The term 'cultivated noxious plant' means a plant that is included on—

''(i) the Federal noxious weed list maintained by the Animal and Plant Health Inspection Service; or

''(ii) any comparable State list.

''(H) FUEL EMISSION BASELINE.—The term 'fuel emission baseline' means the average lifecycle greenhouse gas emissions per unit of energy of the aggregate of all transportation fuels sold or introduced into commerce in calendar year 2005, as determined by the Administrator under paragraph (13).

''(I) FUEL PROVIDER.—The term 'fuel provider' includes, as the Administrator determines to be appropriate, any individual or entity that produces, refines, blends, or imports any transportation fuel in commerce in, or into, the United States.''; and

(3) by striking subparagraph (O) (as redesignated by paragraph (1)) and inserting the following:

''(O) TRANSPORTATION FUEL.—The term 'transportation fuel' means fuel for use in motor vehicles, nonroad vehicles, nonroad engines, or aircraft.''.

SEC. 1133. ESTABLISHMENT.

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

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

''(A) STANDARD.—

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

''(I) establish a methodology for use in determining the lifecycle greenhouse gas emissions per unit of energy of all transportation fuels in commerce for which the Administrator has not already established such a methodology;

''(II) determine the fuel emission baseline; and

''(III) in accordance with clause (ii), establish a requirement applicable to transportation fuel providers to reduce, on an annual average basis, the average lifecycle greenhouse gas emissions per unit of energy of the aggregate quantity of transportation fuel produced, refined, blended, or imported by the fuel provider to a level that is, to the maximum extent practicable—

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

''(bb) by not later than calendar year 2012, equivalent to the difference between the fuel emission baseline and the lifecycle greenhouse gas emissions per unit of energy reduced by the volumetric renewable fuel requirements of paragraph (2)(B);

''(cc) by not later than calendar year 2023, at least 5 percent less than the fuel emission baseline; and

''(dd) by not later than calendar year 2028, at least 10 percent less than the fuel emission baseline.

''(ii) PREVENTION OF AIR QUALITY DETERIORATION.—

''(I) STUDY.—Not later than 18 months after the date of enactment of this paragraph, the Administrator shall complete a study to determine whether the greenhouse gas emission reductions required under clause (i)(III) will adversely impact air quality as a result of changes in vehicle and engine emissions of air pollutants regulated under this Act.

''(II) CONSIDERATIONS.—The study shall include consideration of—

''(aa) different blend levels, types of transportation fuels, and available vehicle technologies; and

''(bb) appropriate national, regional, and local air quality control measures.

''(III) REGULATIONS.—Not later than 3 years after the date of enactment of this paragraph, the Administrator shall—

''(aa) promulgate fuel regulations to implement appropriate measures to mitigate, to the maximum extent practicable and taking into consideration the results of the study conducted under this clause, any adverse impacts on air quality as a result of the greenhouse gas emission reductions required by this subsection; or

''(bb) make a determination that no such measures are necessary.

''(iii) CALENDAR YEAR 2033 AND THEREAFTER.—For calendar year 2033, and every 5 years thereafter, the Administrator, in consultation with the Secretary of Agriculture and the Secretary of Energy, shall revise the applicable performance standard under clause (i)(III) to reduce, to the maximum extent practicable, the average lifecycle greenhouse gas emissions per unit of energy of the aggregate quantity of transportation fuel sold or introduced into commerce in the United States.

''(iv) REVISION OF REGULATIONS.—In accordance with the purposes of the Lieberman-Warner Climate Security Act of 2008, the Administrator may, as appropriate, revise the regulations promulgated under clause (i) as necessary to reflect or respond to changes in the transportation fuel market or other relevant circumstances.

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

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

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

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

''(bb) 32 standard cubic feet of hydrogen; or

''(cc) 1.25 gallons of liquid hydrogen.

''(vi) DETERMINATION OF LIFECYCLE GREENHOUSE GAS EMISSIONS.—In carrying out this subparagraph, the Administrator shall use the best available scientific and technical information to determine the lifecycle greenhouse gas emissions per unit of energy of transportation fuels derived from—

''(I) renewable biomass;

''(II) electricity, including the entire lifecycle of the fuel;

''(III) 1 or more fossil fuels, including the entire lifecycle of the fuels; and

''(IV) hydrogen, including the entire lifecycle of the fuel.

''(vii) EQUIVALENT EMISSIONS.—In carrying out this subparagraph, the Administrator shall consider transportation fuel derived from cultivated noxious plants, and transportation fuel derived from biomass sources other than renewable biomass, to have emissions equivalent to the greater of—

''(I) the lifecycle greenhouse gas emissions; or

''(II) the fuel emission baseline.

''(B) ELECTION TO PARTICIPATE.—An electricity provider may elect to participate in the program under this subsection if the electricity provider provides and separately tracks electricity for transportation through a meter that—

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

''(ii) allows for load management and time-of-use rates.

''(C) CREDITS.—

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

''(ii) METHOD OF CALCULATION.—The number of credits received by a fuel provider under clause (i) for a calendar year shall be the product obtained by multiplying—

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

''(II) the difference between—

''(aa) the lifecycle greenhouse gas emissions per unit of energy of that quantity of fuel; and

''(bb) the maximum lifecycle greenhouse gas emissions per unit of energy of that quantity of fuel permitted for the calendar year under subparagraph (A)(i)(III).

''(D) COMPLIANCE.——

''(i) IN GENERAL.—Each fuel provider subject to this paragraph shall demonstrate compliance with this paragraph, including, as necessary, through the use of credits banked or purchased.

''(ii) NO LIMITATION ON TRADING OR BANKING.—There shall be no limit on the ability of any fuel provider to trade or bank credits pursuant to this subparagraph.

''(iii) USE OF BANKED CREDITS.—A fuel provider may use banked credits under this subparagraph with no discount or other adjustment to the credits.

''(iv) INABILITY TO GENERATE OR PURCHASE SUFFICIENT CREDITS.—A fuel provider that is unable to generate or purchase sufficient credits to meet the requirements of subparagraph (A)(i)(III) may carry the compliance deficit forward, subject to the condition that the fuel provider, for the calendar year following the year for which the deficit is created—

''(I) achieves compliance with subparagraph (A)(i)(III); and

''(II) generates or purchases additional credits to offset the deficit from the preceding calendar year.

''(v) TYPES OF CREDITS.—To encourage innovation in transportation fuels—

''(I) only credits created in the production of transportation fuels may be used for the purpose of compliance described in clause (i); and

''(II) credits created by or in other sectors, such as manufacturing, may not be used for that purpose.

''(E) IMPACT ON FOOD PRODUCTION.—Not later than 18 months after the date of enactment of this paragraph, the Administrator shall evaluate and consider promulgating regulations to address any significant impacts on access to, and production of, food due to the sourcing and production of fuels used to comply with this Act.

''(F) NO EFFECT ON STATE AUTHORITY.—Nothing in this paragraph affects the authority of any State to establish, or to maintain in effect, any transportation fuel standard that reduces greenhouse gas emissions.''.

TITLE XII—FEDERAL PROGRAM TO PROTECT NATURAL RESOURCES

Subtitle A—Auctions

SEC. 1201. DEFINITIONS.

In this subtitle:

(1) BUREAU OF LAND MANAGEMENT FUND.—The term ''Bureau of Land Management Fund'' means the Bureau of Land Management Emergency Firefighting Fund established by section 1211(a).

(2) FOREST SERVICE FUND.—The term ''Forest Service Fund'' means the Forest Service Emergency Firefighting Fund established by section 1212(a).

(3) WILDLIFE ADAPTATION FUND.—The term ''Wildlife Adaptation Fund'' means the National Wildlife Adaptation Fund established by section 1231(a).

SEC. 1202. AUCTIONS.

(a) IN GENERAL.—In accordance with subsections (b) and (c), to raise funds for deposit in the Bureau of Land Management Fund, the Forest Service Fund, and the Wildlife Adaptation Fund, for each of calendar years 2012 through 2050, the Administrator shall—

(1) auction a quantity of the emission allowances established pursuant to section 201(a) for each calendar year; and

(2) immediately on receipt of the auction proceeds—

(A) deposit in the Bureau of Land Management Fund the amount of those proceeds that is sufficient to ensure that the amount in the Bureau of Land Management Fund equals $300,000,000;

(B) deposit in the Forest Service Fund the amount of those proceeds that is sufficient to ensure that the amount in the Forest Service Fund equals $800,000,000; and

(C) deposit all remaining proceeds from the auctions conducted under this section in the Wildlife Adaptation Fund.

(b) NUMBER; FREQUENCY.—For each calendar year during the period described in subsection (a), the Administrator shall—

(1) conduct not fewer than 4 auctions; and

(2) schedule the actions in a manner to ensure that—

(A) each auction takes place during the period beginning on the date that is 35 days after January 1 of the calendar year and ending on the date that is 60 before December 31 of the calendar year; and

(B) the interval between each auction is of equal duration.

(c) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—For each calendar year of the period described in subsection (a), the Administrator shall auction a quantity of emission allowances in accordance with the applicable percentages described in the following table:

Calendar Year	Percentage for auction for funds
2012	3
2013	2.5
2014	2.5
2015	2.5
2016	2.5
2017	2.5
2018	2.5
2019	2.5
2020	2.5
2021	2.5
2022	2.5
2023	3
2024	3
2025	4
2026	4
2027	4
2028	4
2029	4
2030	4
2031	4
2032	5
2033	5
2034	5
2035	5
2036	5
2037	5
2038	5
2039	5
2040	5
2041	5
2042	5
2043	5
2044	5
2045	5
2046	5
2047	5
2048	5
2049	5
2050	5.

Subtitle B—Funds

SEC. 1211. BUREAU OF LAND MANAGEMENT EMERGENCY FIREFIGHTING FUND.

(a) ESTABLISHMENT.—There is established in the Treasury of the United States a fund, to be known as the ''Bureau of Land Management Emergency Firefighting Fund'', consisting of such amounts as are deposited in the Bureau of Land Management Fund under section 1202(a)(2)(A).

(b) USE AND AVAILABILITY OF FUNDS.—Amounts deposited in the Bureau of Land Management Fund under section 1202(a)(2)(A) shall be—

(1) used to pay for wildland fire suppression activities, the costs of which are in excess of amounts annually appropriated to the Secretary of the Interior (referred to in this section as the ''Secretary'') for normal, nonemergency wildland fire suppression activities; and

(2) made available without further appropriation or fiscal year limitation.

(c) ACCOUNTING AND REPORTING.—

(1) ESTABLISHMENT OF SYSTEM.—In accordance with paragraph (2), not later than 3 years after the date of enactment of this Act, the Secretary shall establish an accounting and reporting system for activities carried out under this section.

(2) REQUIREMENTS OF SYSTEM.—

(A) NATIONAL FIRE PLAN.—To ensure that the accounting and reporting system established by the Secretary under paragraph (1) is compatible with each reporting procedure of the National Fire Plan, the Secretary shall establish the accounting and reporting system in accordance with the National Fire Plan.

(B) MONTHLY AND ANNUAL REPORTS.—The accounting and reporting system under paragraph (1) shall include a requirement that the Secretary submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives—

(i) not later than the last day of each month, a report that contains a description of each expenditure made from the Bureau of Land Management Fund during the preceding month; and

(ii) not later than September 30 of each fiscal year, a report that contains a description of each expenditure made from the Bureau of Land Management Fund during the preceding fiscal year.

SEC. 1212. FOREST SERVICE EMERGENCY FIREFIGHTING FUND.

(a) ESTABLISHMENT.—There is established in the Treasury of the United States a fund, to be known as the ''Forest Service Emergency Firefighting Fund'', consisting of such amounts as are deposited in the Forest Service Fund under section 1202(a)(2)(B).

(b) USE AND AVAILABILITY OF FUNDS.—Amounts deposited in the Forest Service Fund under section 1202(a)(2)(B) shall be—

(1) used to pay for wildland fire suppression activities, the costs of which are in excess of amounts annually appropriated to the Secretary of Agriculture (referred to in this section as the ''Secretary'') for normal, nonemergency wildland fire suppression activities; and

(2) made available without further appropriation or fiscal year limitation.

(c) ACCOUNTING AND REPORTING.—

(1) ESTABLISHMENT OF SYSTEM.—In accordance with paragraph (2), not later than 3 years after the date of enactment of this Act, the Secretary shall establish an accounting and reporting system for activities carried out under this section.

(2) REQUIREMENTS OF SYSTEM.—

(A) NATIONAL FIRE PLAN.—To ensure that the accounting and reporting system established by the Secretary under paragraph (1) is compatible with each reporting procedure of the National Fire Plan, the Secretary shall establish the accounting and reporting system in accordance with the National Fire Plan.

(B) MONTHLY AND ANNUAL REPORTS.—The accounting and reporting system under paragraph (1) shall include a requirement that the Secretary submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives—

(i) not later than the last day of each month, a report that contains a description of each expenditure made from the Forest Service Fund during the preceding month; and

(ii) not later than September 30 of each fiscal year, a report that contains a description of each expenditure made from the Forest Service Fund during the preceding fiscal year.

Subtitle C—National Wildlife Adaptation Strategy

SEC. 1221. DEFINITIONS.

In this subtitle:

(1) ADVISORY BOARD.—The term ''Advisory Board'' means the Science Advisory Board established by the Secretary under section 1223(a).

(2) GREAT LAKE.—The term ''Great Lake'' means—

(A) Lake Erie;

(B) Lake Huron (including Lake Saint Clair);

(C) Lake Michigan;

(D) Lake Ontario;

(E) Lake Superior; and

(F) the connecting channels of those Lakes, including—

(i) the Saint Marys River;

(ii) the Saint Clair River;

(iii) the Detroit River;

(iv) the Niagara River; and

(v) the Saint Lawrence River to the Canadian border.

(3) NATIONAL STRATEGY.—The term ''national strategy'' means the National Wildlife Adaptation Strategy developed by the President under section 1222(a).

(4) SCIENCE CENTER.—The term ''Science Center'' means the Climate Change and Natural Resource Science Center established under section 1224(a).

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

SEC. 1222. NATIONAL STRATEGY.

(a) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, the President shall develop and implement a national strategy to be known as the ''National Wildlife Adaptation Strategy'' to assist fish and wildlife, fish and wildlife habitat, plants, aquatic and terrestrial ecosystems, and associated ecological processes—

(1) to become more resilient; and

(2) to adapt to the impacts of climate change and ocean acidification.

(b) ADMINISTRATION.—In establishing and revising the national strategy, the President shall—

(1) base the national strategy on the best available science, as provided by the Advisory Board;

(2) develop the national strategy in cooperation with—

(A) State fish and wildlife agencies;

(B) State coastal agencies;

(C) State environmental agencies;

(D) territories and possessions of the United States; and

(E) Indian tribes;

(3) coordinate with—

(A) the Secretary;

(B) the Secretary of Commerce;

(C) the Secretary of Agriculture;

(D) the Secretary of Defense;

(E) the Administrator; and

(F) the head of any other appropriate Federal agency, as determined by the President;

(4) consult with—

(A) local governments;

(B) conservation organizations;

(C) scientists; and

(D) any other interested stakeholder; and

(5) provide public notice and opportunity for comment.

(c) CONTENTS.—The President shall include in the national strategy, at a minimum, prioritized goals and measures and a schedule for implementation—

(1) to identify and monitor fish and wildlife, fish and wildlife habitat, plants, aquatic and terrestrial ecosystems, and associated ecological processes that—

(A) are particularly likely to be adversely affected by climate change and ocean acidification; and

(B) have the greatest need for protection, restoration, and conservation;

(2) to identify and monitor coastal, estuarine, marine, terrestrial, and freshwater habitats that are at the greatest risk of being damaged by climate change and ocean acidification;

(3) to assist species in adapting to the impacts of climate change and ocean acidification;

(4) to protect, acquire, maintain, and restore fish and wildlife habitat to build resilience to climate change and ocean acidification;

(5) to provide habitat linkages and corridors to facilitate fish, wildlife, and plant movement in response to climate change and ocean acidification;

(6) to restore and protect ecological processes that sustain fish, wildlife, and plant populations that are vulnerable to climate change and ocean acidification;

(7) to protect, maintain, and restore coastal, marine, and aquatic ecosystems to ensure that the ecosystems are more resilient and better able to withstand the additional stresses associated with climate change, including changes in—

(A) hydrology;

(B) relative sea level rise;

(C) ocean acidification; and

(D) water levels and temperatures of the Great Lakes;

(8) to protect ocean and coastal species from the impacts of climate change and ocean acidification;

(9) to incorporate adaptation strategies and activities to address relative sea level rise and changes in Great Lakes water levels in coastal zone planning;

(10) to protect, maintain, and restore ocean and coastal habitats to build healthy and resilient ecosystems (including through the purchase of aquatic and terrestrial ecosystems and coastal and island land);

(11) to protect, maintain, and restore floodplains to build healthy and resilient ecosystems (including through the purchase of land in floodplains);

(12) to protect, maintain, and restore aquatic and terrestrial ecosystems to ensure the long-term sustainability of the ecosystems for human and ecosystem use;

(13) to explore pollution prevention opportunities to reduce or eliminate the environmental impacts caused by climate change on aquatic and terrestrial ecosystems; and

(14) to incorporate consideration of climate change and ocean acidification, and to integrate adaptation strategies and activities for fish and wildlife, fish and wildlife habitat, plants, aquatic and terrestrial ecosystems, and associated ecological processes, in the planning and management of Federal land and water administered by the Federal agencies that receive funding under subtitle D.

(d) COORDINATION WITH OTHER PLANS.—In developing the national strategy, the President shall, to the maximum extent practicable—

(1) take into consideration research and information contained in—

(A) State comprehensive wildlife conservation plans;

(B) the North American Waterfowl Management Plan;

(C) the National Fish Habitat Action Plan;

(D) coastal zone management plans;

(E) reports published by the Pew Oceans Commission and the United States Commission on Ocean Policy;

(F) State or local integrated water resource management plans;

(G) watershed plans developed pursuant to section 208 or 319 of the Federal Water Pollution Control Act (33 U.S.C. 1288 and 1329);

(H) the Great Lakes Regional Collaboration Strategy; and

(I) other relevant plans; and

(2) coordinate and integrate the goals and measures identified in the national strategy with the goals and measures identified in those plans.

(e) REVISIONS.—Not later than 5 years after the date on which the national strategy is developed, and not less frequently than every 5 years thereafter, the President shall review and revise the national strategy in accordance with the procedures described in this section.

SEC. 1223. SCIENCE ADVISORY BOARD.

(a) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish and appoint the members of an Advisory Board that is composed of—

(1) not fewer than 10, and not more than 20, members who—

(A) are recommended by the President of the National Academy of Sciences;

(B) have expertise in fish, wildlife, plant, aquatic, and coastal and marine biology, hydrology, ecology, climate change, ocean acidification, and other relevant scientific disciplines; and

(C) represent a balanced membership between Federal, State, local, and tribal representatives, universities, and conservation organizations; and

(2) each Director of the Science Center, each of whom shall be an ex officio member of the Advisory Board.

(b) DUTIES.—The Advisory Board shall—

(1) advise the President, the Directors of the Science Center, and relevant Federal agencies and departments on—

(A) the best available science regarding the impacts of climate change and ocean acidification on fish and wildlife, habitat, plants, aquatic and terrestrial ecosystems, and associated ecological processes; and

(B) scientific strategies and mechanisms for adaptation;

(2) identify and recommend priorities for ongoing research needs regarding those issues; and

(3) review the quality of the research programs carried out by the Science Center.

(c) COLLABORATION.—The Advisory Board shall collaborate with any other climate change or ecosystem research entity of any other Federal agency.

(d) PUBLIC AVAILABILITY.—The advice and recommendations of the Advisory Board shall be made available to the public.

(e) NONAPPLICABILITY OF FACA.—The Advisory Board shall not be subject to the Federal Advisory Committee Act (5 U.S.C. App.).

SEC. 1224. CLIMATE CHANGE AND NATURAL RESOURCE SCIENCE CENTER.

(a) IN GENERAL.—The Secretary shall establish a Climate Change and Natural Resource Science Center within the Department of the Interior.

(b) FUNCTIONS.—In operating the Science Center, the Secretary, in coordination with the Secretaries of Agriculture, Commerce, and Defense, and the Administrator, and in consultation with State fish and wildlife management agencies, State coastal management agencies, territories or possessions of the United States, and Indian tribes, shall—

(1) conduct scientific research on national issues relating to the impacts of climate change on the respective authority of each Federal agency over, and mechanisms of each Federal agency for, adaptation, and avoidance and minimization of, the impacts on fish, wildlife, and plants, the habitats of fish, wildlife, and plants, and associated ecological processes;

(2) consult with and advise Federal land, water, and natural resource management and regulatory agencies and Federal fish and wildlife agencies on—

(A) the impacts of climate change on fish, wildlife, and plants, the habitats of fish, wildlife, and plants, and associated ecological processes; and

(B) mechanisms for addressing the impacts described in subparagraph (A);

(3) consult and, to the maximum extent practicable, collaborate with State and local agencies, territories or possessions of the United States, Indian tribes, universities, and other public and private entities regarding research, monitoring, and other efforts to address the impacts of climate change on fish, wildlife, and plants, the habitats of fish, wildlife, and plants, and associated ecological processes; and

(4) collaborate and, as appropriate, enter into contracts with Federal and non-Federal climate change research entities to ensure that the full array of ecosystem types are appropriately addressed.

Subtitle D—National Wildlife Adaptation Program

SEC. 1231. NATIONAL WILDLIFE ADAPTATION FUND.

(a) ESTABLISHMENT.—There is established in the Treasury of the United States a fund, to be known as the ''National Wildlife Adaptation Fund'', consisting of such amounts as are deposited in the Wildlife Adaptation Fund under section 1202(a)(2)(C).

(b) USE AND AVAILABILITY OF FUNDS.—Amounts deposited in the Wildlife Adaptation Fund under section 1202(a)(2)(C) shall be—

(1) used to carry out activities (including research and education activities) to assist fish and wildlife, fish and wildlife habitat, plants, aquatic and terrestrial ecosystems, and associated ecological processes in becoming more resilient, adapting to, and surviving the impacts of, climate change and ocean acidification (referred to in this subtitle as ''adaptation activities'') pursuant to this subtitle; and

(2) made available without further appropriation or fiscal year limitation.

(c) CONSISTENCY WITH NATIONAL STRATEGY.—

(1) IN GENERAL.—Subject to paragraph (2), effective beginning on the date on which the President establishes the national strategy under section 1222, funds made available under subsection (b) shall be used only for adaptation activities that are consistent with the national strategy.

(2) INITIAL PERIOD.—Until the date on which the President establishes the national strategy, funds made available under subsection (b) shall be used only for adaptation activities that are consistent with a workplan established by the President.

SEC. 1232. DEPARTMENT OF THE INTERIOR.

Of the amounts made available annually under section 1231(b)—

(1) 34 percent shall be allocated to the Secretary of the Interior for use in funding—

(A) adaptation activities carried out—

(i) under endangered species, migratory bird, and other fish and wildlife programs administered by the United States Fish and Wildlife Service;

(ii) on wildlife refuges and other public land under the jurisdiction of the United States Fish and Wildlife Service, the Bureau of Land Management, or the National Park Service;

(iii) within Federal water managed by the Bureau of Reclamation; or

(iv) to address the requirements of Federal and State natural resource agencies through coordination, dissemination, and augmentation of research regarding the impacts of climate change on fish, wildlife, and plants, the habitats of fish, wildlife, and plants, and ecological processes, and the mechanisms to adapt to, mitigate, or prevent those impacts by the Science Center within the United States Geological Survey—

(I) in coordination with the Secretaries of Agriculture, Commerce, and Defense, and the Administrator; and

(II) in consultation with State fish and wildlife management agencies, State environmental, coastal, and Great Lakes management agencies, territories or possessions of the United States, and Indian tribes;

(B) the Advisory Board; and

(C) the Science Center;

(2) 10 percent shall be allocated to the Secretary of the Interior for adaptation activities carried out under cooperative grant programs, including—

(A) the cooperative endangered species conservation fund authorized under section 6(i) of the Endangered Species Act of 1973 (16 U.S.C. 1535(i));

(B) programs under the North American Wetlands Conservation Act (16 U.S.C. 4401 et seq.);

(C) the multinational species conservation fund established under the heading ‘‘MULTINATIONAL SPECIES CONSERVATION FUND’’ of title I of the Department of the Interior and Related Agencies Appropriations Act, 1999 (16 U.S.C. 4246);

(D) the Neotropical Migratory Bird Conservation Fund established by section 9(a) of the Neotropical Migratory Bird Conservation Act (16 U.S.C. 6108(a));

(E) the Coastal Program of the United States Fish and Wildlife Service;

(F) the National Fish Habitat Action Plan;

(G) the Partners for Fish and Wildlife Program;

(H) the Landowner Incentive Program;

(I) the Wildlife Without Borders Program of the United States Fish and Wildlife Service; and

(J) the Park Flight Migratory Bird Program of the National Park Service; and

(3) 2 percent shall be allocated to the Secretary of the Interior and subsequently made available to Indian tribes to carry out adaptation activities through the tribal wildlife grants program of the United States Fish and Wildlife Service.

SEC. 1233. FOREST SERVICE.

Of the amounts made available annually under section 1231(b), 10 percent shall be allocated to the Secretary of Agriculture for use in funding adaptation activities carried out—

(1) on National Forests and National Grasslands under the jurisdiction of the Forest Service; or

(2) pursuant to the cooperative Wings Across the Americas Program.

SEC. 1234. ENVIRONMENTAL PROTECTION AGENCY.

Of the amounts made available annually under section 1231(b), 12 percent shall be allocated to the Administrator for use in adaptation activities for restoring and protecting—

(1) large-scale freshwater aquatic ecosystems, including 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, the Chattahoochee and Flint River System, the Connecticut River, and the Yellowstone River;

(2) large-scale estuarine ecosystems, including the Chesapeake Bay, Long Island Sound, Puget Sound, the Mississippi River Delta, San Francisco Bay Delta, Narragansett Bay, and Albemarle-Pamlico Sound; and

(3) other freshwater, estuarine, coastal, and marine ecosystems, watersheds, basins, and groundwater resources identified as priorities by the Administrator (including those identified in accordance with section 320 of the Federal Water Pollution Control Act (33 U.S.C. 1330)), working in cooperation with other Federal agencies, States, local governments, scientists, and other conservation partners.

SEC. 1235. CORPS OF ENGINEERS.

Of the amounts made available annually under section 1231(b), 15 percent shall be allocated to the Secretary of the Army for use by the Corps of Engineers to carry out adaptation activities for protecting and restoring—

(1) large-scale freshwater aquatic ecosystems, including the ecosystems described in section 1234(1);

(2) large-scale estuarine ecosystems, including the ecosystems described in section 1234(2);

(3) other freshwater, estuarine, coastal and marine ecosystems, watersheds, basins, and groundwater resources identified as priorities by the Corps of Engineers, working in cooperation with other Federal agencies, States, local governments, scientists, and other conservation partners; and

(4) habitats or ecosystems under programs such as—

(A) the Estuary Restoration Act of 2000 (33 U.S.C. 2901 et seq.);

(B) project modifications in accordance with section 1135 of the Water Resources Development Act of 1986 (33 U.S.C. 2309a) for improvement of the environment; and

(C) the program for aquatic restoration under section 206 of the Water Resources Development Act of 1996 (33 U.S.C. 2330).

SEC. 1236. DEPARTMENT OF COMMERCE.

Of the amounts made available annually under section 1231(b), 17 percent shall be allocated to the Secretary of Commerce for use in funding adaptation activities to protect, maintain, and restore coastal, estuarine, Great Lakes, and marine resources, habitats, and ecosystems, including activities carried out under—

(1) the coastal and estuarine land conservation program;

(2) the community-based restoration program;

(3) the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.), subject to the condition that State coastal agencies shall incorporate, and the Secretary of Commerce shall approve, coastal zone management plan elements that are—

(A) consistent with the National Wildlife Adaptation Strategy developed by the President under section 1222(a), as part of a coastal zone management program established under this Act; and

(B) specifically designed to strengthen the ability of coastal, estuarine, and marine resources, habitats, and ecosystems to adapt to and withstand the impacts of—

(i) global warming; and

(ii) where practicable, ocean acidification;

(4) the Open Rivers Initiative;

(5) the Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.);

(6) the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 et seq.);

(7) the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.);

(8) the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1401 et seq.); and

(9) the Coral Reef Conservation Act of 2000 (16 U.S.C. 6401 et seq.).

SEC. 1237. NATIONAL ACADEMY OF SCIENCES REPORT.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary of the Interior shall offer to enter into an arrangement with the National Academy of Sciences, under which the Academy shall establish a panel—

(1) to convene multiple regional scientific symposia to examine the ecological impact of climate change on imperiled species in each region of the United States; and

(2) to examine and analyze the reports, data, documents, and other information produced by the regional scientific symposia.

(b) REPORT.—

(1) IN GENERAL.—The National Academy of Sciences shall prepare and submit to the Secretary of the Interior a report that—

(A) incorporates the information produced through the symposia described in subsection (a)(1); and

(B) includes each component described in paragraph (2).

(2) CONTENTS.—The report under paragraph (1) shall include—

(A) an identification and assessment of the impacts of climate change and ocean acidification on imperiled species, ecosystems, and waters under the jurisdiction of the United States (including the possessions and territories of the United States);

(B) an identification and assessment of different ecological scenarios that may result from different intensities, rates, and other critical manifestations of climate change;

(C) recommendations for the responsibilities of the Federal Government, State, local, and tribal agencies, and private parties in assisting imperiled species in adapting to, and surviving the impacts of, climate change (including a recommended list of prioritized remediation actions by those agencies and parties); and

(D) other relevant ecological information.

(3) PUBLIC AVAILABILITY.—The report shall be made available to the public as soon as practicable after the date on which the report is completed.

(c) USE OF REPORT BY HEADS OF CERTAIN FEDERAL AGENCIES.—The Secretaries of Agriculture, Commerce, the Interior, and Defense, and the Administrator, shall take into account each recommendation contained in the report under subsection (b).

TITLE XIII—INTERNATIONAL PARTNERSHIPS TO REDUCE EMISSIONS AND ADAPT TO CLIMATE CHANGE

Subtitle A—Promoting Fairness While Reducing Emissions

SEC. 1301. DEFINITIONS.

In this subtitle:

(1) BASELINE EMISSION LEVEL.—

(A) COVERED GOODS.—With respect to a covered good of a foreign country, the term ''baseline emission level'' means, as determined by the Commission, the total annual greenhouse gas emissions attributed to the category of the covered good of the foreign country during calendar year 2005, based on the best available information.

(B) COUNTRIES.—With respect to the United States or a foreign country, the term ''baseline emission level'' means, as determined by the Commission, the total annual nationwide greenhouse gas emissions attributed to the country during calendar year 2005, based on the best available information.

(2) BEST AVAILABLE INFORMATION.—The term ''best available information'' means—

(A) all relevant data that are available for a particular period; and

(B) to the extent necessary—

(i) economic and engineering models;

(ii) best available information on technology performance levels; and

(iii) any other useful measure or technique for estimating the emissions from emissions activities.

(3) COMMISSION.—The term ''Commission'' means the International Climate Change Commission established by section 1304(a).

(4) COMPARABLE ACTION.—

(A) IN GENERAL.—The term ''comparable action'' means any greenhouse gas regulatory programs, requirements, and other measures adopted by a foreign country that, in combination, are comparable in effect to actions carried out by the United States through Federal, State, and local measures to limit greenhouse gas emissions, as determined by the Commission in accordance with subparagraph (B).

(B) REQUIREMENTS.—For purposes of subparagraph (A), the Commission shall make a determination on whether a foreign country has taken comparable action for a particular calendar year based on the best available information and in accordance with the following requirements:

(i) A foreign country shall be considered to have taken comparable action if the Commission determines that the percentage change in greenhouse gas emissions in the foreign country during the relevant period is equal to or greater than the percentage change in greenhouse emissions of the United States during that period.

(ii) In the case of a foreign country that is not considered to have taken comparable action under clause (i), the Commission shall take into consideration, in making a determination on comparable action for that foreign country, the extent to which, during the relevant period, the foreign country has implemented, verified, and enforced each of the following:

(I) The deployment and use of state-of-the-art technologies in industrial processes, equipment manufacturing facilities, power generation and other energy facilities, and consumer goods (such as automobiles and appliances), and implementation of other techniques or actions, that have the effect of limiting greenhouse gas emissions of the foreign country during the relevant period.

(II) Any regulatory programs, requirements, and other measures that the foreign country has implemented to limit greenhouse gas emissions during the relevant periods.

(iii) For determinations under clause (i), the Commission shall develop rules for taking into account net transfers to and from the United States and the other foreign country of greenhouse gas allowances and other emission credits.

(iv) Any determination on comparable action made by the Commission under this paragraph shall comply with applicable international agreements.

(5) COMPLIANCE YEAR.—The term ''compliance year'' means each calendar year for which the requirements of this title apply to a category of covered goods of a covered foreign country that is imported into the United States.

(6) COVERED FOREIGN COUNTRY.—The term ''covered foreign country'' means a foreign country that is included on the covered list prepared under section 1306(b)(3).

(7) COVERED GOOD.—The term ''covered good'' means a good that, as identified by the Administrator by regulation—

(A) is a primary product or manufactured item for consumption;

(B) generates, in the course of the manufacture of the good, a substantial quantity of direct greenhouse gas emissions or indirect greenhouse gas emissions; and

(C) is closely related to a good the cost of production of which in the United States is affected by a requirement of this Act.

(8) ENTER; ENTRY.—The terms ''enter'' and ''entry'' mean the point at which a covered good passes into, or is withdrawn from a warehouse for consumption in, the customs territory of the United States.

(9) FOREIGN COUNTRY.—The term ''foreign country'' means any country or separate customs territory other than the United States.

(10) INDIRECT GREENHOUSE GAS EMISSIONS.—The term ''indirect greenhouse gas emissions'' means greenhouse gas emissions resulting from the generation of electricity consumed in manufacturing a covered good.

(11) INTERNATIONAL AGREEMENT.—The term ''international agreement'' means any international agreement to which the United States is a party, including the Marrakesh agreement establishing the World Trade Organization, done at Marrakesh on April 15, 1994.

(12) INTERNATIONAL RESERVE ALLOWANCE.—The term ''international reserve allowance'' means an allowance (denominated in units of metric tons of carbon dioxide equivalent) that is—

(A) purchased from a special reserve of allowances pursuant to section 1306(a)(2); and

(B) used for purposes of meeting the requirements of section 1306.

(13) MANUFACTURED ITEM FOR CONSUMPTION.—The term ''manufactured item for consumption'' means any good or product—

(A) that is not a primary product;

(B) that generates, in the course of the manufacture, a substantial quantity of direct greenhouse gas emissions or indirect greenhouse gas emissions, including emissions attributable to the inclusion of a primary product in the manufactured item for consumption; and

(C) for which the Commission, in consultation with the Administrator, determines that the application of an international reserve allowance requirement under section 1306 to the particular category of goods or products is administratively feasible and necessary to achieve the purposes of this subtitle.

(14) PERCENTAGE CHANGE IN GREENHOUSE GAS EMISSIONS.—The term ''percentage change in greenhouse gas emissions'', with respect to a country, means, as determined by the Commission, the percentage by which greenhouse gas emissions, on a nationwide basis, have decreased or increased (as the case may be) as compared to the baseline emission level of the country, which percentage for the country shall be equal to the quotient obtained by dividing—

(A) the quantity of the decrease or increase in the total nationwide greenhouse gas emissions for the country, as compared to the baseline emission level for the country; by

(B) the baseline emission level for the country.

(15) PRIMARY PRODUCT.—The term ''primary product'' means—

(A) iron, steel, steel mill products (including pipe and tube), aluminum, cement, glass (including flat, container, and specialty glass and fiberglass), pulp, paper, chemicals, or industrial ceramics; and

(B) any other manufactured product that—

(i) is sold in bulk for purposes of further manufacture or inclusion in a finished product; and

(ii) generates, in the course of the manufacture of the product, direct greenhouse gas emissions or indirect greenhouse gas emissions that are comparable (on an emissions-per-output basis) to emissions generated in the manufacture of products by covered entities in the industrial sector.

SEC. 1302. PURPOSES.

The purposes of this subtitle are—

(1) to promote a strong global effort to significantly reduce greenhouse gas emissions;

(2) to ensure, to the maximum extent practicable, that greenhouse gas emissions occurring outside the United States do not undermine the objectives of the United States in addressing global climate change; and

(3) to encourage effective international action to achieve those objectives through—

(A) agreements negotiated between the United States and foreign countries; and

(B) measures carried out by the United States that comply with applicable international agreements.

SEC. 1303. INTERNATIONAL NEGOTIATIONS.

(a) FINDING.—Congress finds that the purposes described in section 1302 can be most effectively addressed and achieved through agreements negotiated between the United States and foreign countries.

(b) NEGOTIATING OBJECTIVE.—

(1) STATEMENT OF POLICY.—It is the policy of the United States to work proactively under the United Nations Framework Convention on Climate Change and, in other appropriate forums, to establish binding agreements committing all major greenhouse gas-emitting nations to contribute equitably to the reduction of global greenhouse gas emissions.

(2) INTENT OF CONGRESS REGARDING OBJECTIVE.—To the extent that the agreements described in subsection (a) involve measures that will affect international trade in any good or service, it is the intent of Congress that—

(A) the negotiating objective of the United States shall be to focus multilateral and bilateral international agreements on the reduction of greenhouse gas emissions to advance achievement of the purposes described in section 1302; and

(B) the United States should attempt to achieve that objective through the negotiation of international agreements that—

(i) with respect to foreign countries that are not taking comparable action, promote the adoption of regulatory programs, requirements, and other measures that are comparable in effect to the actions carried out by the United States to limit greenhouse gas emissions on a nationwide basis; and

(ii) with respect to foreign countries that are taking comparable action, promote the adoption of requirements similar in effect to the requirements of this subtitle to advance the achievement of the purposes described in section 1302.

(c) NOTIFICATION TO FOREIGN COUNTRIES.—As soon as practicable after the date of enactment of this Act, the President shall provide to each applicable foreign country a notification of the negotiating objective of United States described in subsection (b), including—

(1) a request that the foreign country take comparable action to limit the greenhouse gas emissions of the foreign country, unless that foreign country would otherwise be excluded under clause (ii) or (iii) of section 1306(b)(2)(A); and

(2) an estimate of the percentage change in greenhouse gas emissions that the United States expects to achieve annually through Federal, State, and local measures during the 10-year period beginning on January 1, 2012.

(d) REPORT TO CONGRESS.—Not later than 2 years after the date of enactment of this Act, and every 3 years thereafter, the President shall submit to Congress a report describing the progress made by the United States in achieving the negotiating objective described in subsection (b).

SEC. 1304. INTERNATIONAL CLIMATE CHANGE COMMISSION.

(a) ESTABLISHMENT.—There is established a commission, to be known as the ''International Climate Change Commission''.

(b) ORGANIZATION.—

(1) MEMBERSHIP.—

(A) IN GENERAL.—The Commission shall be composed of 6 commissioners to be appointed by the President, by and with the advice and consent of the Senate.

(B) REQUIREMENTS.—Each commissioner shall—

(i) be a citizen of the United States; and

(ii) have the required qualifications for developing knowledge and expertise relating to international climate change matters, as the President determines to be necessary for performing the duties of the Commission under this subtitle.

(2) APPOINTMENT OF COMMISSIONERS.—

(A) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the President shall appoint the commissioners to the Commission in accordance with this subsection.

(B) FAILURE TO APPOINT.—

(i) IN GENERAL.—If the President fails to appoint 1 or more commissioners by the deadline described in subparagraph (A), the International Trade Commission shall appoint the remaining commissioners by not later than 180 days after the date of enactment of this Act.

(ii) TERMINATION OF AUTHORITY.—On appointment of a commissioner by the International Trade Commission under clause (i), the authority of the President to appoint commissioners under this subsection shall terminate.

(3) POLITICAL AFFILIATION.—

(A) IN GENERAL.—Not more than 3 commissioners serving at any time shall be affiliated with the same political party.

(B) REQUIREMENT.—In appointing commissioners to the Commission, the President or the International Trade Commission, as applicable, shall alternately appoint commissioners from each political party, to the maximum extent practicable.

(4) TERM OF COMMISSIONERS; REAPPOINTMENT.—

(A) IN GENERAL.—The term of a commissioner shall be 12 years, except that the commissioners first appointed under paragraph (2) shall be appointed to the Commission in a manner that ensures that—

(i) the term of not more than 1 commissioner shall expire during any 2-year period; and

(ii) no commissioner serves a term of more than 12 years.

(B) SERVICE UNTIL NEW APPOINTMENT.—The term of a commissioner shall continue after the expiration of the term of the commissioner until the date on which a replacement is appointed by the President and confirmed by the Senate.

(C) VACANCY.—Any commissioner appointed to fill a vacancy occurring before the expiration of the term for which the predecessor was appointed shall be appointed for the remainder of the term.

(D) REAPPOINTMENT.—An individual who has served as a commissioner for a term of more than 7 years shall not be eligible for reappointment.

(5) CHAIRPERSON AND VICE-CHAIRPERSON.—

(A) DESIGNATION.—

(i) IN GENERAL.—The President shall designate a Chairperson and Vice Chairperson of the Commission from the commissioners that are eligible for designation under subparagraph (C).

(ii) FAILURE TO DESIGNATE.—If the President fails to designate a Chairperson under clause (i), the commissioner with the longest period of continuous service on the Commission shall serve as Chairperson.

(B) TERM OF SERVICE.—The Chairperson and Vice-Chairperson shall each serve for a term of 4 years.

(C) ELIGIBILITY REQUIREMENTS.—

(i) CHAIRPERSON.—The President may designate as Chairperson of the Commission any commissioner who—

(I) is not affiliated with the political party with which the Chairperson of the Commission for the immediately preceding year was affiliated; and

(II) except in the case of the first commissioners appointed to the Commission, has served on the Commission for not less than 1 year.

(ii) VICE-CHAIRPERSON.—The President may designate as the Vice Chairperson of the Commission any commissioner who is not affiliated with the political party with which the Chairperson is affiliated.

(6) QUORUM.—A majority of commissioners shall constitute a quorum.

(7) VOTING.—

(A) REQUIREMENT.—The Commission shall not carry out any duty or power of the Commission unless—

(i) a quorum is present at the relevant public meeting of the Commission; and

(ii) a majority of commissioners comprising the quorum, and any commissioner voting by proxy, votes to carry out the duty or function.

(B) EQUALLY DIVIDED VOTES.—With respect to a determination of the Commission regarding whether a foreign country has taken comparable action under section 1305, if the votes of the commissioners are equally divided, the foreign country shall be considered not to have taken comparable action.

(c) DUTIES.—The Commission shall—

(1) determine whether foreign countries are taking comparable action under section 1305;

(2) establish foreign country lists under section 1306(b);

(3) classify categories of goods and products as manufactured items for consumption in accordance with the requirements of section 1301(13);

(4) determine the economic adjustment ratio that applies to covered goods of covered foreign countries under section 1306(d)(4);

(5) adjust the international reserve allowance requirements pursuant to section 1307; and

(6) carry out such other activities as the Commission determines to be appropriate to implement this subtitle.

(d) POWERS.—

(1) PENALTY FOR NONCOMPLIANCE.—The Commission may impose an excess emissions penalty on a United States importer of covered goods if that importer fails to submit the required number of international reserve allowances, as specified in section 1306, in an amount equal to the excess emissions penalty that an owner or operator of a covered entity would be required to submit for noncompliance under section 203.

(2) PROHIBITION ON IMPORTERS.—The Commission may prohibit a United States importer from entering covered goods for a period not to exceed 5 years, if the importer—

(A) fails to pay a penalty for noncompliance imposed under paragraph (1); or

(B) submits a written declaration under section 1306(c) that provides false or misleading information for the purpose of circumventing the international reserve requirements of this subtitle.

(3) DELEGATION TO BICE.—

(A) IN GENERAL.—The Commission, as appropriate, may delegate to the Bureau of Immigration and Customs Enforcement any power of the Commission under this subsection.

(B) ENFORCEMENT.—On delegation by the Commission of a power under subparagraph (A), the Bureau of Immigration and Customs Enforcement shall carry out the power in accordance with such procedures and requirements as the Commission may establish.

SEC. 1305. DETERMINATIONS ON COMPARABLE ACTION.

(a) IN GENERAL.—Not later than July 1, 2013, and annually thereafter, the Commission shall determine whether, and the extent to which, each foreign country that is not exempted under subsection (b) has taken comparable action to limit the greenhouse gas emissions of the foreign country, based on best available information and a comparison between actions that—

(1) the foreign country carried out during the calendar year immediately preceding the calendar year in which the Commission is making a determination under this subsection; and

(2) the United States carried out during the calendar year immediately preceding the calendar year referred to in paragraph (1).

(b) EXEMPTION.—The Commission shall exempt from a determination under subsection (a) for a calendar year any foreign country that is placed on the excluded list pursuant to clause (ii) or (iii) of section 1306(b)(2)(A) for that calendar year.

(c) REPORTS.—The Commission shall, as expeditiously as practicable—

(1) submit to the President and Congress an annual report describing the determinations of the Commission under subsection (a) for the most recent calendar year; and

(2) publish a description of the determinations in the Federal Register.

SEC. 1306. INTERNATIONAL RESERVE ALLOWANCE PROGRAM.

(a) ESTABLISHMENT.—

(1) IN GENERAL.—The Administrator shall establish a program under which the Administrator shall offer for sale to United States importers international reserve allowances in accordance with this subsection.

(2) SOURCE.—International reserve allowances under paragraph (1) shall be issued from a special reserve of allowances that is separate from, and established in addition to, the quantity of allowances established pursuant to section 201(a).

(3) DATE OF SALE.—A United States importer shall be able to purchase international reserve allowances under this subsection by not later than the earliest date on which the Administrator distributes allowances under any of titles V through XI.

(4) PRICE.—

(A) IN GENERAL.—The Administrator shall establish, by regulation, a methodology for

determining the daily price of international reserve allowances for sale under paragraph (1).

(B) REQUIREMENT.—The methodology under subparagraph (A) shall require the Administrator—

(i) not later than the date on which importers may first purchase international allowances under paragraph (3), and annually thereafter, to identify 3 leading publicly reported daily price indices for the sale of emission allowances established pursuant to section 201(a); and

(ii) for each day on which international reserve allowances are offered for sale under this subsection, to establish the price of the allowances in an amount equal to the arithmetic mean of the market clearing price for an allowance for the preceding day pursuant to section 201(a) on the indices identified under clause (i).

(5) SERIAL NUMBER.—The Administrator shall assign a unique serial number to each international reserve allowance issued under this subsection.

(6) TRADING SYSTEM.—The Administrator may establish, by regulation, a system for the sale, exchange, purchase, transfer, and banking of international reserve allowances.

(7) COVERED ENTITIES.—International reserve allowances may not be submitted by covered entities to comply with the allowance submission requirements of section 202.

(8) PROCEEDS.—Subject to appropriation, all proceeds from the sale of international reserve allowances under this subsection shall be allocated to carry out a program that the Administrator, in coordination with the Secretary of State, shall establish to mitigate negative impacts of climate change on disadvantaged communities in foreign countries.

(b) FOREIGN COUNTRY LISTS.—

(1) IN GENERAL.—Not later than January 1 of the third calendar year for which emission allowances are required to be submitted under section 202, and annually thereafter, the Commission shall develop and publish in the Federal Register 2 lists of foreign countries, in accordance with this subsection.

(2) EXCLUDED LIST.—

(A) IN GENERAL.—The Commission shall identify and publish in a list, to be known as the ''excluded list'' the name of—

(i) each foreign country determined by the Commission under section 1305(a) to have taken action comparable to that taken by the United States to limit the greenhouse gas emissions of the foreign country;

(ii) each foreign country identified by the United Nations as among the least-developed developing countries; and

(iii) each foreign country the share of total global greenhouse gas emissions of which is below the de minimis percentage described in subparagraph (B).

(B) DE MINIMIS PERCENTAGE.—

(i) IN GENERAL.—The de minimis percentage referred to in subparagraph (A)(iii) shall be a percentage of total global greenhouse gas emissions of not more than 0.5, as determined by the Commission, for the most recent calendar year for which emissions and other relevant data are available.

(ii) REQUIREMENT.—The Commission shall place a foreign country on the excluded list under subparagraph (A)(iii) only if the de minimis percentage is not exceeded in 2 distinct determinations of the Commission—

(I) 1 of which reflects the annual average deforestation rate during a representative period for the United States and each foreign country; and

(II) 1 of which does not reflect that annual average deforestation rate.

(3) COVERED LIST.—

(A) IN GENERAL.—The Commission shall identify and publish in a list, to be known as the ''covered list'', the name of each foreign country the covered goods of which are subject to the requirements of this section.

(B) REQUIREMENT.—The covered list shall include each foreign country that is not included on the excluded list under paragraph (2).

(c) WRITTEN DECLARATIONS.—

(1) IN GENERAL.—Effective beginning January 1, 2014, a United States importer of any covered good shall, as a condition of entry of the covered good into the United States, submit to the Administrator and the Bureau of Immigration and Customs Enforcement a written declaration with respect to the entry of such good, including a compliance statement, supporting documentation, and deposit in accordance with this subsection.

(2) COMPLIANCE STATEMENT.—A written declaration under paragraph (1) shall include a statement certifying that the applicable covered good is—

(A) subject to the international reserve allowance requirements of this section and accompanied by the appropriate supporting documentation and deposit, as required under paragraph (3); or

(B) exempted from the international reserve allowance requirements of this section and accompanied by a certification that the good was not manufactured or processed in any foreign country that is on the covered list under subsection (b)(3).

(3) DOCUMENTATION AND DEPOSIT.—If an importer cannot certify that a covered good is exempted under paragraph (2)(B), the written declaration for the covered good shall include—

(A) an identification of each foreign country in which the covered good was manufactured or processed;

(B) a brief description of the extent to which the covered good was manufactured or processed in each foreign country identified under subparagraph (A);

(C) an estimate of the number of international reserve allowances that are required for entry of the covered good into the United States under subsection (d); and

(D) at the election of the importer, the deposit of —

(i) international reserve allowances in a quantity equal to the estimated number required for entry under subparagraph (C); or

(ii) a bond, other security, or cash in an amount sufficient to cover the purchase of the estimated number of international reserve allowances under subparagraph (C).

(4) FINAL ASSESSMENT.—

(A) IN GENERAL.—Not later than 180 days after the date of submission of the written declaration and entry of a covered good under paragraph (1), the Administrator shall make a final assessment of the international reserve allowance requirement for the covered good under this section.

(B) REQUIREMENT.—A final assessment under subparagraph (A) with respect to a covered good shall specify—

(i) the total number of international reserve allowances that are required for entry of the covered good; and

(ii) the difference between—

(I) the amount of the deposit under paragraph (3)(D); and

(II) the final assessment.

(C) RECONCILIATION.—

(i) ALLOWANCE DEPOSIT.—

(I) IN GENERAL.—The Bureau of Immigration and Customs Enforcement shall—

(aa) promptly reconcile the final assessment under subparagraph (A) with the quantity of international reserve allowances deposited under paragraph (3)(D)(i); and

(bb) provide a notification of the reconciliation to the Administrator and each affected importer.

(II) EXCESS ALLOWANCES.—If the quantity of international reserve allowances deposited under paragraph (3)(D)(i) exceed the quantity described in the final assessment, the Bureau of Immigration and Customs Enforcement shall refund the excess quantity of allowances.

(III) INSUFFICIENT ALLOWANCES.—If the quantity of international reserve allowances described in the final assessment exceeds the quantity of allowances deposited under paragraph (3)(D)(i), the applicable importer shall submit to the Administrator international reserve allowances sufficient to satisfy the final assessment by not later than 14 days after the date on which the notice under subclause (I)(bb) is provided.

(ii) BOND, SECURITY, OR CASH DEPOSIT.—

(I) IN GENERAL.—If an importer has submitted a bond, security, or cash deposit under paragraph (3)(D)(ii), the Bureau of Immigration and Customs Enforcement shall use the deposit to purchase a sufficient number of international reserve allowances, as determined in the final assessment under subparagraph (A).

(II) INSUFFICIENT DEPOSIT.—To the extent that the amount of the deposit fails to cover the purchase of sufficient international reserve allowances under subclause (I), the importer shall submit such additional allowances as are necessary to cover the shortage.

(III) EXCESS DEPOSIT.—To the extent that the amount of the deposit exceeds the price of international reserve allowances required under the final assessment, the Bureau of Immigration and Customs Enforcement shall refund to the importer the unused portion of the deposit.

(5) INCLUSION.—A written declaration required under this subsection shall include the unique serial number of each emission allowance associated with the entry of the applicable covered good.

(6) FAILURE TO DECLARE.—A covered good that is not accompanied by a written declaration that meets the requirements of this subsection shall not be permitted to enter the United States.

(7) CORRECTED DECLARATION.—

(A) IN GENERAL.—If, after making a declaration required under this subsection, an importer has reason to believe that the declaration contains information that is not correct, the importer shall provide a corrected declaration by not later than 30 days after the date of discovery of the error, in accordance with subparagraph (B).

(B) METHOD.—A corrected declaration under subparagraph (A) shall be in the form of a letter or other written statement to the Administrator and the office of the Bureau of Immigration and Customs Enforcement to which the original declaration was submitted.

(d) QUANTITY OF ALLOWANCES REQUIRED.—

(1) METHODOLOGY.—

(A) IN GENERAL.—The Administrator shall establish, by regulation, a method for calculating the required number of international reserve allowances that a United States importer is required to submit, together with a written declaration under subsection (c), for each category of covered goods of each covered foreign country.

(B) REQUIREMENTS.—The method shall—

(i) apply to covered goods that are manufactured and processed entirely in a single covered foreign country; and

(ii) require submission for a compliance year of the quantity of international reserve allowances described in paragraph (2) for calculating the international reserve allowance requirement on a per-unit basis for each category of covered goods that are entered into the United States from that covered foreign country during each compliance year.

(2) GENERAL FORMULA.—The quantity of international reserve allowances required to be submitted for a compliance year referred to in paragraph (1) shall be the product obtained by multiplying—

(A) the national greenhouse gas intensity rate for each category of covered goods of each covered foreign country for the compliance year, as determined by the Administrator under paragraph (3);

(B) the allowance adjustment factor for the industry sector of the covered foreign country that manufactured the covered goods entered into the United States, as determined by the Administrator under paragraph (4); and

(C) the economic adjustment ratio for the covered foreign country, as determined by the Commission under paragraph (5).

(3) NATIONAL GREENHOUSE GAS INTENSITY RATE.—The national greenhouse gas intensity rate for a covered foreign country under paragraph (2)(A), on a per-unit basis, shall be the quotient obtained by dividing—

(A) the total quantity of direct greenhouse gas emissions and indirect greenhouse gas emissions that are attributable to a category of covered goods of a covered foreign country during the most recent calendar year (as adjusted to exclude those emissions that would not be subject to the allowance submission requirements of section 202 for the category of covered goods if manufactured in the United States); by

(B) total number of units of the covered good that are produced in the covered foreign country during that calendar year.

(4) ALLOWANCE ADJUSTMENT FACTOR.—

(A) GENERAL FORMULA.—The allowance adjustment factor for a covered foreign country under paragraph (2)(B) shall be equal to 1 minus the ratio that—

(i) the number of allowances, as determined by the Administrator under subparagraph (B), that an industry sector of the covered foreign country would have received at no cost if the allowances were allocated in the same manner in which allowances are allocated at no cost under titles V through XI to that industry sector of the United States; bears to

(ii) the total quantity of direct greenhouse gas emissions and indirect greenhouse gas emissions that are attributable to a category of covered goods of a covered foreign country during a particular compliance year.

(B) ALLOWANCES ALLOCATED AT NO COST.—For purposes of subparagraph (A)(i), the number of allowances that would have been allocated at no cost to an industry sector of a covered foreign country shall be equal to the product obtained by multiplying—

(i) the baseline emission level that the Commission has attributed to a category of covered goods of the covered foreign country; and

(ii) the ratio that—

(I) the quantity of allowances that are allocated at no cost under titles V through XI to entities in the industry sector that manufactures the covered goods for the compliance year during which the covered goods were entered into the United States; bears to

(II) the total quantity of direct greenhouse gas emissions and indirect greenhouse gas emissions of that sector during the same compliance year.

(5) ECONOMIC ADJUSTMENT RATIO.—The economic adjustment ratio for a covered foreign country under paragraph (2)(C) shall be 1, except in any case in which the Commission determines to decrease the ratio in order to account for the extent to which, during the relevant period, the foreign country has implemented, verified, and enforced each of the following:

(A) The deployment and use of state-of-the-art technologies in industrial processes, equipment manufacturing facilities, power generation and other energy facilities, consumer goods (such as automobiles and appliances) and other techniques or actions that limit the greenhouse gas emissions of the covered foreign country during the relevant period.

(B) Any regulatory programs, requirements, and other measures that the foreign country has implemented to limit greenhouse gas emissions during the relevant period.

(6) ANNUAL CALCULATION.—The Administrator shall—

(A) calculate the international reserve allowance requirements for each compliance year based on the best available information; and

(B) annually revise the applicable international reserve allowance requirements to reflect changes in the variables of the formulas described in this subsection.

(7) PUBLICATION.—Not later than 90 days before the beginning of each compliance year, the Administrator shall publish in the Federal Register a schedule describing the required number of international reserve allowances for each category of imported covered goods of each covered foreign country, as calculated under this subsection.

(8) COVERED GOODS FROM MULTIPLE COUNTRIES.—

(A) IN GENERAL.—The Administrator shall establish, by regulation, procedures for determining the number of the international reserve allowances that a United States importer is required to submit under this section for a category of covered goods that are—

(i) primary products; and

(ii) manufactured or processed in more than 1 foreign country.

(B) REQUIREMENTS.—

(i) IN GENERAL.—Except as provided in clause (ii), the procedures established under subparagraph (A) shall require an importer—

(I) to determine, for each covered foreign country listed in the written declaration of the importer under subsection (c)(2)(B), the number of international reserve allowances required under this subsection for the category of covered goods manufactured and processed entirely in that covered foreign country for the compliance year; and

(II) of the international reserve allowance requirements applicable to each relevant covered foreign country, to apply the requirement that requires the highest number of international reserve allowances for the category of covered goods.

(C) EXCEPTION.—

(i) IN GENERAL.—The requirements of clause (i) shall not apply if, on request by an importer, the Administrator applies an alternate method for establishing the requirement.

(ii) REQUIREMENT FOR APPLICATION.—The Administrator shall apply an alternate method for establishing a requirement under clause (i) only if the applicable importer demonstrates in an administrative hearing by a preponderance of evidence that the alternate method will establish an international reserve allowance requirement that is more representative than the requirement that would otherwise apply under clause (i).

(D) ADMINISTRATIVE HEARING.—The Administrator shall establish procedures for administrative hearings under subparagraph (C)(ii) to ensure that—

(i) all evidence submitted by an importer will be subject to verification by the Administrator;

(ii) domestic manufactures of the category of covered goods subject to the administrative hearing will have an opportunity to review and comment on evidence submitted by the importer; and

(iii) appropriate penalties will be assessed in cases in which the importer has submitted information that is false or misleading.

(e) FOREIGN ALLOWANCES AND CREDITS.—

(1) FOREIGN ALLOWANCES.—

(A) IN GENERAL.—A United States importer may submit, in lieu of an international reserve allowance issued under this section, a foreign allowance or similar compliance instrument distributed by a foreign country pursuant to a cap-and-trade program that constitutes comparable action.

(B) COMMENSURATE CAP-AND-TRADE PROGRAM.—For purposes of subparagraph (A), a cap-and-trade program that constitutes comparable action shall include any greenhouse gas regulatory program adopted by a covered foreign country to limit the greenhouse gas emissions of the covered foreign country, if the Administrator certifies that the program—

(i)(I) places a quantitative limitation on the total quantity of greenhouse gas emissions of the covered foreign country (expressed in terms of tons emitted per calendar year); and

(II) achieves that limitation through an allowance trading system;

(ii) satisfies such criteria as the Administrator may establish for requirements relating to the enforceability of the cap-and-trade program, including requirements for monitoring, reporting, verification procedures, and allowance tracking; and

(iii) is a comparable action.

(2) FOREIGN CREDITS.—

(A) IN GENERAL.—A United States importer may submit, in lieu of an international reserve allowance issued under this section, an international offset that the Administrator has authorized for use under subtitle B of title III or subtitle B of this title.

(B) APPLICATION.—The limitation on the use of international reserve allowances by covered entities under subsection (a)(7) shall not apply to a United States importer for purposes of this paragraph.

(f) RETIREMENT OF ALLOWANCES.—The Administrator shall retire each international reserve allowance, foreign allowance, and international offset submitted to achieve compliance with this section.

(g) TERMINATION.—The international reserve allowance requirements of this section shall cease to apply to a covered good of a covered foreign country if the Commission places the covered foreign country on the excluded list under subsection (b)(2).

(h) FINAL REGULATIONS.—Not later than January 1, 2013, the Administrator, in consultation with the Commission, shall promulgate such regulations as the Administrator determines to be necessary to carry out this section.

SEC. 1307. ADJUSTMENT OF INTERNATIONAL RESERVE ALLOWANCE REQUIREMENTS.

(a) IN GENERAL.—Not later than January 1, 2017, and annually thereafter, the Commission shall prepare and submit to the President and Congress a report that assesses the effectiveness of the international reserve allowance requirements under section 1306 with respect to—

(1) covered goods entered into the United States from each foreign country included on the covered list under section 1306(b)(3); and

(2) the production of covered goods in those foreign countries that are incorporated into manufactured goods that are subsequently entered into the United States.

(b) INADEQUATE REQUIREMENTS.—If the Commission determines that an applicable international reserve allowance requirement is not adequate to achieve the purposes of this subtitle, the Commission shall include in the report under subsection (a) recommendations—

(1) to increase the stringency or otherwise improve the effectiveness of the applicable requirements in a manner that ensures compliance with all applicable international agreements;

(2) to address greenhouse gas emissions attributable to the production of manufactured items for consumption that are not subject to the international reserve allowance requirements under section 1306; or

(3) to take such other action as the Commission determines to be necessary to address greenhouse gas emissions attributable to the production of covered goods in covered foreign countries, in compliance with all applicable international agreements.

(c) REVISED REGULATIONS.—The Administrator, in consultation with the Commission, shall promulgate revised regulations to implement the recommended changes to improve the effectiveness of the international reserve allowance requirements under subsection (b).

(d) EFFECTIVE DATE.—Any revisions made pursuant to subsection (c) shall take effect on January 1 of the compliance year immediately following the date on which the revision is made.

Subtitle B—International Partnerships to Reduce Deforestation and Forest Degradation

SEC. 1311. FINDINGS; PURPOSE.

(a) FINDINGS.—Congress finds that—

(1) changes in land use patterns and forest sector emissions account for approximately 20 percent of global greenhouse gas emissions;

(2) land conversion and deforestation are 2 of the largest sources of greenhouse gas emissions in the developing world, comprising approximately 40 percent of the total greenhouse gas emissions of the developing world;

(3) with sufficient data, deforestation and forest degradation rates and forest carbon stocks can be measured with an acceptable degree of uncertainty;

(4) encouraging reduced deforestation and reduced forest degradation in foreign countries could—

(A) provide critical leverage to encourage voluntary participation by developing countries in emission limitation regimes;

(B) facilitate greater overall reductions in greenhouse gas emissions than otherwise would be practicable; and

(C) substantially benefit biodiversity, conservation, and indigenous and other forest-dependent people in developing countries;

(5) in addition to forest carbon activities that can be readily measured, monitored, and verified through national-scale programs and projects, there is great value in reducing emissions and sequestering carbon through forest carbon projects in countries that lack the institutional arrangements to support national-scale accounting of forest carbon stocks; and

(6) providing emission allowances in support of projects in countries that lack fully developed institutions for national-scale accounting could help to build capacity in those countries, sequester additional carbon, and increase participation by developing countries in international climate agreements.

(b) PURPOSE.—The purpose of this subtitle is to reduce greenhouse gas emissions by reducing deforestation and forest degradation in foreign countries in a manner that reduces the costs imposed by this Act on covered entities in the United States.

SEC. 1312. CAPACITY BUILDING PROGRAM.

(a) ESTABLISHMENT.—Not later than 2 years after the date of enactment of this Act, the Administrator, in consultation with the Secretary of the Interior, the Secretary of State, and the Secretary of Agriculture, shall promulgate regulations to establish programs under which the Administrator shall provide emission allowances allocated pursuant to subsection (b) to individuals and entities (including foreign governments) carrying out projects in foreign countries as described in sections 1313 and 1314.

(b) ALLOCATION.—Not later than 330 days before January 1 of each of calendar years 2012 through 2050, the Administrator shall allocate for distribution under this section 1 percent of the aggregate quantity of emission allowances established for the applicable calendar year pursuant to section 201(a).

SEC. 1313. FOREST CARBON ACTIVITIES.

(a) ELIGIBILITY REQUIREMENTS.—

(1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator, in consultation with the Secretary of the Interior, the Secretary of State, and the Secretary of Agriculture, shall promulgate regulations establishing eligibility requirements for the allocation of emission allowances under this subsection for forest carbon activities directed at sequestration of carbon through restoration of forests and degraded land, afforestation, and improved forest management in countries other than the United States, including requirements that those activities shall be—

(A) carried out and managed in accordance with widely-accepted environmentally sustainable forestry practices; and

(B) designed—

(i) to promote native species and restoration of native forests, where practicable;

(ii) to avoid the introduction of invasive nonnative species;

(iii) so as not to adversely impact or undermine the rights (including internationally recognized rights) of indigenous and other forest-dependent individuals residing in the affected areas; and

(iv) in a manner that ensures that local communities—

(I) are provided the right of free, prior, informed consent regarding projects or other activities;

(II) are able to share equitably in profits or other benefits of the activities; and

(III) receive fair compensation for any damages resulting from the activities.

(2) QUALITY CRITERIA FOR FOREST CARBON ALLOCATIONS.—The regulations promulgated pursuant to paragraph (1) shall include requirements to ensure that the emission reductions or sequestrations of a forest carbon activity that receives emission allowances under this section are real, permanent, additional, verifiable, and enforceable, with reliable measuring and monitoring and appropriate accounting for leakage.

(b) PEATLAND AND OTHER NATURAL LAND THAT SEQUESTER CARBON.—The Administrator may provide emission allowances under this section for a project for storage of carbon in peatland or other natural land if the Administrator—

(1) determines that—

(A) the peatland or other natural land is capable of storing carbon; and

(B) the project for storage of carbon in the peatland or other natural land is capable of meeting the quality criteria described in subsection (a); and

(2) provides notice and an opportunity for public comment regarding the project.

(c) RECOGNITION OF FOREST CARBON ACTIVITIES.—With respect to foreign countries other than the foreign countries described in subsection (a) or (b), the Administrator—

(1) shall recognize any forest carbon activities of the foreign country, subject to the quality criteria for forest carbon activities described in subsection (b); and

(2) is encouraged to identify other incentives, including economic and market-based incentives, to encourage developing countries with largely intact native forests to protect those forests.

(d) OTHER FOREST CARBON ACTIVITIES.—A forest carbon activity other than a reduction in deforestation or forest degradation shall be eligible for a distribution of emission allowances under this section, subject to the eligibility requirements and quality criteria for forest carbon activities described in subsection (a) or other regulations promulgated pursuant to this Act.

SEC. 1314. ESTABLISHING AND DISTRIBUTING OFFSET ALLOWANCES.

(a) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator, in consultation with the Secretary of the Interior, the Secretary of State, and the Secretary of Agriculture, shall promulgate regulations, including quality and eligibility requirements, for the distribution of offset allowances for international forest carbon activities.

(b) QUALITY AND ELIGIBILITY REQUIREMENTS.—The regulations promulgated pursuant to subsection (a) shall require that, in order to be approved for use under this section, offset allowances distributed for an international forest carbon activity shall meet such quality and eligibility requirements as the Administrator may establish, including a requirement that—

(1) the activity shall be designed, carried out, and managed —

(A) in accordance with widely-accepted, environmentally sustainable forestry practices;

(B) to promote native species and conservation or restoration of native forests, where practicable, and to avoid the introduction of invasive nonnative species;

(C) in a manner that does not adversely impact or undermine the rights (including internationally recognized rights) of indigenous and other forest-dependent individuals residing in affected areas; and

(D) in a manner that ensures that local communities—

(i) are provided the right of free, prior, informed consent regarding projects or other activities;

(ii) are able to share equitably in profits or other benefits of the activities; and

(iii) receive fair compensation for any damages resulting from the activities;

(2) the emission reductions or sequestrations are real, permanent, additional, verifiable, and enforceable, with reliable measuring and monitoring and appropriate accounting for leakage; and

(3) eligible offset allowances are provided only from countries on a list described in subsection (c).

(c) LISTS.—

(1) IN GENERAL.—The Administrator, in consultation with the Secretary of State, shall identify and periodically update a list of the names of countries that have—

(A) demonstrated capacity to participate in international forest carbon activities, including—

(i) sufficient historical data on changes in national forest carbon stocks;

(ii) technical capacity to monitor and measure forest carbon fluxes with an acceptable level of uncertainty; and

(iii) institutional capacity to reduce emissions from deforestation and degradation;

(B) capped greenhouse gas emissions or otherwise established a credible national baseline or emission reference scenario that is—

(i) consistent with nationally appropriate mitigation commitments or actions, taking into consideration the average annual deforestation and degradation rates of the country during a period of at least 5 years; and

(ii) projected to result in zero-net deforestation by not later than 2050; and

(C)(i) implemented an emission reduction program for the forest sector; and

(ii) demonstrated those reductions using remote sensing technology, taking into consideration relevant international standards.

(2) PERIODIC REVIEW OF NATIONAL-LEVEL REDUCTIONS IN DEFORESTATION AND DEGRADATION.—The Administrator, in consultation with the Secretary of State, shall identify and periodically update a list of the names of countries included in the list under paragraph (1) that have—

(A) achieved national-level reductions of deforestation and degradation below a historical reference scenario, taking into consideration the average annual deforestation and degradation rates of the country, and of all countries, during a period of at least 5 years; and

(B) demonstrated those reductions using remote sensing technology, taking into consideration relevant international standards.

(3) CREDITING AND ADDITIONALITY.—A verified reduction in greenhouse gas emissions from deforestation and forest degradation under a cap or resulting from a nationwide emissions reference scenario described in paragraph (1)(B) shall be—

(A) eligible for crediting; and

(B) considered to satisfy the additionality criterion.

(d) FACILITY CERTIFICATION.—The owner or operator of a covered entity that submits an offset allowance generated under this section shall certify that the offset allowance has not been retired from use in a registry of the applicable foreign country.

(e) USE.—

(1) IN GENERAL.—Subject to paragraph (3), the quantity of offset allowances distributed pursuant to this section in a calendar year shall not exceed 10 percent of the quantity of emission allowances established for that year pursuant to section 201(a).

(2) USE OF INTERNATIONAL ALLOWANCES.—

(A) IN GENERAL.—If the quantity of offset allowances distributed in a calendar year pursuant to this section is less than 10 percent of the quantity of emission allowances established for that calendar year pursuant to section 201(a), the Administrator shall allow the use, by covered entities during that year, of international allowances under section 322.

(B) QUANTITY.—The aggregate quantity of international allowances the use of which is permitted under subparagraph (A) for a calendar year shall be equal to the difference between—

(i) the quantity of offset allowances distributed during that calendar year pursuant to this section; and

(ii) a value equal to 10 percent of the quantity of emission allowances established for that year pursuant to section 201(a).

(3) CARRYOVER.—Notwithstanding paragraph (1), if the sum of the quantity of offset allowances distributed for a calendar year pursuant to this section and the quantity of international allowances permitted to be used during that year under paragraph (2)(B) is less than a value equal to 10 percent of the quantity of emission allowances established for that year pursuant to section 201(a), the quantity of offset allowances distributed pursuant to this section for the following calendar year shall not exceed a value equal to the sum of—

(A) 10 percent of the quantity of emission allowances established for that calendar year pursuant to section 201(a); and

(B) the difference between—

(i) a value equal to the sum of—

(I) the quantity of offset allowances distributed during the preceding calendar year pursuant to this section; and

(II) the quantity of international allowances used during that year pursuant to paragraph (2); and

(ii) 10 percent of the quantity of emission allowances established for that year pursuant to section 201(a).

(f) LIMITATIONS.—

(1) MAXIMUM QUANTITY.—The Administrator shall not distribute to the government of a foreign country a quantity of offset allowances that exceeds the quantity of metric tons of carbon dioxide that have been biologically sequestered or prevented from being emitted as a result of country-wide reductions in deforestation and forest degradation by the foreign country.

(2) MAXIMUM USE.—The regulations promulgated pursuant to this section shall ensure that offset allowances are not issued for sequestration or emission reductions that have been used or will be used by any other country for compliance with a domestic or international obligation to limit or reduce greenhouse gas emissions.

(g) REVIEWS.—Not later than 3 years after the date of enactment of this Act, and 5 years thereafter, the Administrator shall conduct a review of the program under this section.

(h) DISCOUNT.—If, after the date that is 10 years after the date of enactment of this Act, the Administrator determines that foreign countries that, in the aggregate, generate greenhouse gas emissions accounting for more than 0.5 percent of global greenhouse gas emissions have not capped those emissions, established emissions reference scenarios based on historical data, or otherwise reduced total forest emissions of the foreign countries, the Administrator may apply a discount to distributions of emission allowances to those countries under this section.

SEC. 1315. LIMITATION ON DOUBLE COUNTING.

Notwithstanding any other provision of this Act, activities that receive credit under subtitle E of title II shall not be eligible to receive emission allowances under this subtitle.

SEC. 1316. EFFECT OF SUBTITLE.

Nothing in this subtitle supersedes, limits, or otherwise affects any restriction imposed by Federal law (including regulations) on any interaction between an entity located in the United States and an entity located in a foreign country.

Subtitle C—International Partnerships to Deploy Clean Energy Technology

SEC. 1321. INTERNATIONAL CLEAN ENERGY DEPLOYMENT.

(a) PURPOSE.—The purpose of this section is to promote and leverage private financing for the development and international deployment of technologies that will contribute to sustainable economic growth and the stabilization of greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous anthropogenic interference with the climate system.

(b) DEFINITIONS.—In this section:

(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term ''appropriate committees of Congress'' means

(A) in the Senate—

(i) the Committee on Foreign Relations;

(ii) the Committee on Finance;

(iii) the Committee on Energy and Natural Resources;

(iv) the Committee on Environment and Public Works; and

(v) the Committee on Appropriations; and

(B) in the House of Representatives—

(i) the Committee on Foreign Affairs;

(ii) the Committee on Ways and Means;

(iii) the Committee on Energy and Commerce;

(iv) the Committee on Natural Resources; and

(v) the Committee on Appropriations.

(2) ELIGIBLE COUNTRY.—The term ''eligible country'' means a foreign country that, as determined by the President—

(A) is not a member of the Organization for Economic Cooperation and Development; and

(B)(i) has made a binding commitment, pursuant to an international agreement to which the United States is a party, to carry out actions to produce measurable, reportable, and verifiable greenhouse gas emission mitigations; or

(ii) as certified by the President to the appropriate committees of Congress, has in force binding national policies and measures that are capable of producing measurable, reportable, and verifiable greenhouse gas emission mitigations.

(3) FUND.—The term ''Fund'' means the International Clean Energy Deployment Fund established by subsection (c)(1).

(4) QUALIFIED ENTITY.—The term '' qualified entity'' means—

(A) the national government of an eligible country;

(B) a regional or local governmental unit of an eligible country; and

(C) a nongovernmental organization or a private entity located or operating in an eligible country.

(c) INTERNATIONAL CLEAN ENERGY DEPLOYMENT FUND.—

(1) ESTABLISHMENT.—There is established in the Treasury of the United States a fund, to be known as the ''International Clean Energy Deployment Fund''.

(2) AUCTIONS.—

(A) IN GENERAL.—In accordance with subparagraph (B), to raise funds for deposit in the Fund, for each of calendar years 2012 through 2017, the Administrator shall auction 0.5 percent of the emission allowances established pursuant to section 201(a) for the calendar year.

(B) NUMBER; FREQUENCY.—For each calendar year during the period described in subparagraph (A), the Administrator shall—

(i) conduct not fewer than 4 auctions; and

(ii) schedule the auctions in a manner to ensure that—

(I) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(II) the interval between each auction is of equal duration.

(C) DEPOSIT OF PROCEEDS.—As soon as practicable after conducting an auction under subparagraph (A), the Administrator shall deposit the proceeds of the auction in the Fund.

(d) USE OF FUNDS.—All amounts in the Fund shall be made available, without further appropriation or fiscal year limitation, to carry out the International Clean Energy Deployment Program established by section 114.

Subtitle D—International Partnerships to Adapt to Climate Change and Protect National Security

SEC. 1331. INTERNATIONAL CLIMATE CHANGE ADAPTATION AND NATIONAL SECURITY FUND.

(a) ESTABLISHMENT.—There is established in the Treasury of the United States a fund, to be known as the ''International Climate Change Adaptation and National Security Fund'' (referred to in this subtitle as the ''Fund'').

(b) AUCTIONS.—

(1) IN GENERAL.—In accordance with paragraph (2) and subsection (c), to raise funds for deposit in the Fund, for each of calendar years 2012 through 2050, the Administrator shall auction a certain percentage of the emission allowances established pursuant to section 201(a) for the calendar year.

(2) NUMBER; FREQUENCY.—For each calendar year during the period described in paragraph (1), the Administrator shall—

(A) conduct not fewer than 4 auctions; and

(B) schedule the auctions in a manner to ensure that—

(i) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(ii) the interval between each auction is of equal duration.

(3) DEPOSIT OF PROCEEDS.—As soon as practicable after conducting an auction under paragraph (1), the Administrator shall deposit the proceeds of the auction in the Fund.

(c) PERCENTAGE FOR AUCTION.—For each of calendar years 2012 through 2050, the Administrator shall auction in accordance with subsection (b) the percentage of emission allowances specified in the following table:

Calendar year	Percentage for auction for Fund
2012	1
2013	1
2014	1.25
2015	1.25
2016	1.25
2017	1.25
2018	2
2019	2
2020	2
2021	2
2022	3
2023	3
2024	3
2025	3
2026	4
2027	4
2028	4
2029	4
2030	4
2031	6
2032	6
2033	6
2034	6
2035	6
2036	6
2037	6
2038	6
2039	7
2040	7
2041	7
2042	7
2043	7
2044	7
2045	7
2046	7
2047	7
2048	7
2049	7
2050	7.

SEC. 1332. INTERNATIONAL CLIMATE CHANGE ADAPTATION AND NATIONAL SECURITY PROGRAM.

(a) ESTABLISHMENT OF PROGRAM.—Not later than 2 years after the date of enactment of this Act, the Secretary of State, in consultation with the Administrator of the United States Agency for International Development (referred to in this subtitle as the ''Administrator of the Agency'') and the Administrator, shall establish within the Agency a program, to be known as the '' International Climate Change Adaptation and National Security Program'' (referred to in this subtitle as the ''Program'').

(b) PURPOSES.—The purposes of the Program shall be—

(1) to protect the economic and national security of the United States by minimizing, averting, or increasing resilience to potentially destabilizing global climate change impacts;

(2) to support the development of national and regional climate change adaptation plans in the most vulnerable developing countries, including the planning, financing, and execution of adaptation projects;

(3) to support the identification and deployment of technologies that would help the most vulnerable developing countries respond to destabilizing impacts of climate change, including appropriate low-carbon and energy-efficient technologies that help reduce greenhouse gas and black carbon emissions of those countries;

(4) to support investments, capacity-building activities, and other assistance to reduce vulnerability and promote community-level resilience relating to climate change and the impacts of climate change on the most vulnerable developing countries, including impacts such as—

(A) water scarcity (including drought and reductions in access to safe drinking water);

(B) reductions in agricultural productivity;

(C) floods;

(D) sea level rise;

(E) shifts in agricultural zones or seasons;

(F) shifts in biodiversity; or

(G) other impacts that—

(i) affect economic livelihoods;

(ii) result in increases in refugees and internally displaced individuals; or

(iii) otherwise increase social, economic, political, cultural, or environmental vulnerability;

(5) to support climate change adaptation research in or for the most vulnerable developing countries; and

(6) to encourage the enhancement and diversification of agricultural, fishery, and other livelihoods, the reduction of disaster risk, and the protection and rehabilitation of natural systems in order to reduce vulnerability and provide increased resilience to climate change for local communities and livelihoods in the most vulnerable developing countries.

(c) DUTIES.—The director of the Program shall—

(1) submit to the President, the Committees on Environment and Public Works and Foreign Relations of the Senate, the Committees on Energy and Commerce and Foreign Relations of the House of Representatives, and any other relevant congressional committees with national security jurisdiction, annual reports on the economy and foreign policy that describe, with respect to the preceding calendar year—

(A) the extent to which other countries are committed to reducing greenhouse gas emissions through mandatory programs;

(B) the extent to which global climate change, through the potential negative impacts of climate change on sensitive populations and natural resources in the most vulnerable developed countries, might threaten, cause, or exacerbate political, economic, environmental, cultural, or social instability or international conflict in those regions;

(C) the ramifications of any potentially destabilizing impacts climate change might have on the economic and national security of the United States, including—

(i) the creation of refugees and internally displaced individuals;

(ii) national or international armed conflicts over water, food, land, or other resources;

(iii) loss of agricultural and other livelihoods, cultural stability, and other causes of increased poverty and economic destabilization;

(iv) decline in availability of resources needed for survival, including water;

(v) increased impact of natural disasters, including severe weather events, droughts, and flooding;

(vi) increased prevalence or virulence of climate-related diseases; and

(vii) intensified urban migration;

(D) the means by which funds derived from proceeds of auctions under section 1331 were expended to enhance the economic and national security of the United States and assist in avoiding the economically, politically, environmentally, culturally, and socially destabilizing impacts of climate change in volatile regions of the world, particularly least-developed countries; and

(E) cooperative activities carried out by the United States and foreign countries and international organizations to carry out this subtitle; and

(2) identify and make recommendations regarding the developing countries—

(A) that are most vulnerable to climate change impacts; and

(B) in which Federal assistance could have the greatest and most sustainable benefits with respect to reducing vulnerability to climate change, including in the form of deploying technologies, investments, capacity-building activities, and other types of assistance for adaptation to climate change impacts and approaches to reduce emissions of greenhouse gases in ways that could also provide community-level resilience to climate change impacts.

(d) IMPLEMENTATION OF PROGRAM.—

(1) RECOMMENDATIONS.—Amounts deposited in the Fund under section 1331(b)(3) shall be made available, without further appropriation or fiscal year limitation, to carry out—

(A) the Program; and

(B) international activities that meet the requirements described in paragraph (8).

(2) OVERSIGHT.—The Administrator of the Agency shall have oversight authority with respect to the expenditures of the Program.

(3) MOST VULNERABLE DEVELOPING COUNTRIES.—The director of the Program shall use amounts in the Fund to carry out project and programs in the most vulnerable developing countries, as determined by the Administrator of the Agency, including—

(A) least-developed countries;

(B) low-lying and other small island developing countries;

(C) developing countries with low-lying coastal, arid, and semi-arid areas or areas prone to floods, drought, and desertification; and

(D) developing countries with fragile, mountainous ecosystems.

(4) LIMITATION.—Not more than 10 percent of amounts made available to carry out this subtitle shall be spent in any single country in any calendar year.

(5) CONSULTATION WITH LOCAL COMMUNITIES AND STAKEHOLDERS.—The Administrator of the Agency shall ensure that local communities in areas in which a project is proposed to be carried out under the Program are involved in the project through—

(A) full disclosure of information;

(B) consultation with the communities and stakeholders at international, national, and local levels; and

(C) informed participation.

(6) DEVELOPMENT OBJECTIVES.—The Administrator of the Agency shall, to the maximum extent practicable, ensure that projects proposed to be carried out under the Program are carried out in accordance with broader development, poverty alleviation, or natural resource management objectives and initiatives in the countries served by the projects.

(7) INTERNATIONAL FUNDS.—

(A) IN GENERAL.—The Secretary of State may distribute not more than 60 percent of amounts made available to carry out the

Program to an international fund that meets the requirements of paragraph (8).

(B) NOTIFICATION.—Not later than 15 days before the date on which the Secretary of State distributes funds to an international fund under subparagraph (A), the Secretary of State shall submit to the appropriate congressional committees a notification of the distribution.

(8) REQUIREMENTS.—To be eligible to receive funds under paragraph (7), an international fund shall be established pursuant to the Convention (or an agreement negotiated under the Convention) that—

(A) specifies the terms and conditions under which—

(i) the United States will provide amounts to the fund; and

(ii) the international fund will distribute the amounts to recipient countries;

(B) ensures that United States assistance to the international fund and the principal and income of the fund are disbursed only for purposes that are consistent with subsection (b);

(C) requires a regular meeting of a governing body of the international fund that provides full public access and includes members representing the most vulnerable developing countries;

(D) requires that not more than 10 percent of the amounts available to the international fund shall be spent for any single country in any calendar year; and

(E) requires the international fund to prepare and make public an annual report that—

(i) identifies and recommends the developing countries—

(I) that are most vulnerable to climate change impacts; and

(II) in which assistance can have the greatest and most sustainable benefit to reducing vulnerability to climate change;

(ii) describes the process and methodology for selecting the recipients of assistance or grants from the fund;

(iii) describes specific programs and projects funded by the international fund and the extent to which the assistance is addressing the adaptation needs of the most vulnerable developing countries;

(iv) describes the performance goals for assistance under the fund and expresses those goals in an objective and quantifiable form, to the maximum extent practicable;

(v) describes the performance indicators to be used in measuring or assessing the achievement of the performance goals described in clause (iv);

(vi) provides a basis for recommendations for adjustments to assistance under this subtitle to enhance the impact of the assistance; and

(vii) describes the participation of other countries and international organizations in funding and administering the international fund.

SEC. 1333. MONITORING AND EVALUATION OF PROGRAMS.

(a) IN GENERAL.—The Administrator of the Agency shall establish and implement a system to monitor and evaluate the effectiveness and efficiency of assistance provided under this subtitle on a program-by-program basis in order to maximize the long-term sustainable developmental impact of the assistance, including the extent to which the assistance is—

(1) meeting the purposes of this subtitle in addressing the climate change adaptation needs of developing countries; and

(2) enhancing the national security of the United States.

(b) REQUIREMENTS.—In carrying out subsection (a), the Administrator of the Agency shall—

(1) in consultation with heads of government of recipient foreign countries—

(A) establish performance goals for assistance under this subtitle; and

(B) expresses those goals in an objective and quantifiable form, to the maximum extent practicable;

(2) establish performance indicators for use in assessing the achievement of the performance goals described in paragraph (1);

(3) provide a basis for recommendations for adjustments to assistance under this subtitle to enhance the impact of the assistance; and

(4) include in the report to Congress under section 1332(c)(1) a description of the results of the monitoring and evaluation of programs under this section.

(c) REVIEWS.—Not later than 3 years after the date of enactment of this Act, and every 3 years thereafter, the Administrator of the Agency, in cooperation with the National Academy of Sciences and other research and development institutions, as appropriate, shall conduct a review of—

(1) the global needs and opportunities for, and costs of, adaptation assistance in developing countries, especially least-developed developing countries;

(2) the progress of international adaptation among developing countries, including an evaluation of—

(A) the impact of expenditures by the Secretary under this subtitle; and

(B) the extent to which adaptation needs are addressed;

(3) the best practices for adapting to climate change in terms of promoting community-level resilience and social, economic, political, environmental, and cultural stability; and

(4) any guidelines or regulations established by the Administrator of the Agency to carry out this subtitle.

TITLE XIV—REDUCING THE DEFICIT

SEC. 1401. DEFICIT REDUCTION FUND.

There is established in the Treasury of the United States a fund, to be known as the ‘‘Deficit Reduction Fund’’.

SEC. 1402. AUCTIONS.

(a) IN GENERAL.—For each of calendar years 2012 through 2050, the Administrator shall auction, in accordance with subsections (b) and (c), a certain percentage of the emission allowances established pursuant to section 201(a) for the calendar year to raise funds for deposit in the Deficit Reduction Fund.

(b) NUMBER; FREQUENCY.—For each calendar year during the period described in subsection (a), the Administrator shall—

(1) conduct not fewer than 4 auctions; and

(2) schedule the auctions in a manner to ensure that—

(A) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(B) the interval between each auction is of equal duration.

(c) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—For each of calendar years 2012 through 2050, the quantity of emission allowances auctioned pursuant to subsection (a) shall be the quantity represented by the percentages specified in the following table:

Calendar year	Percentage for auction for Deficit Reduction Fund
2012	5.75
2013	5.75
2014	5.75
2015	6.50
2016	6.75
2017	6.75
2018	7.25
2019	7
2020	8
2021	9.5
2022	8.75
2023	9.75
2024	10.75
2025	10.75
2026	12.75
2027	12.75
2028	12.75
2029	13.75
2030	13.75
2031	19.75
2032	17.75
2033	17.75
2034	16.75
2035	16.75
2036	16.75
2037	16.75
2038	16.75
2039	16.75
2040	16.75
2041	16.75
2042	16.75
2043	16.75
2044	16.75
2045	16.75
2046	16.75
2047	16.75
2048	16.75
2049	16.75
2050	16.75.

SEC. 1403. DEPOSITS.

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 1402, immediately on receipt of those proceeds, in the Deficit Reduction Fund.

SEC. 1404. DISBURSEMENTS FROM FUND.

No disbursement shall be made from the Deficit Reduction Fund, except pursuant to an appropriation Act.

TITLE XV—CAPPING HYDROFLUOROCARBON EMISSIONS

SEC. 1501. REGULATIONS.

(a) IN GENERAL .—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations establishing a program requiring reductions in hydrofluorocarbons consumed in the United States by entities that—

(1) manufacture HFCs in the United States; or

(2) import HFCs into the United States.

(b) DEFINITION OF HFC CONSUMED.—The regulations promulgated pursuant to subsection (a) shall provide that the term ‘‘HFC consumed’’—

(1) means—

(A) in the case of an HFC producer, a value equal to the difference between—

(i) the sum of—

(I) the quantity of HFC produced in the United States; and

(II) the quantity of HFC imported from any source into the United States, including quantities contained in products or equipment, or acquired in the United States from another HFC producer through sale or other transaction; and

(ii) the quantity of HFC exported or transferred to another HFC producer in the United States through sale or other transaction; and

(B) in the case of an HFC importer for resale, a value equal to the difference between—

(i) the quantity of HFC imported for resale from any source into the United States; and

(ii) the quantity of HFC exported; and

(2) shall not include the consumption of any quantity of HFC that is recycled.

(c) REQUIREMENTS.—The program established under subsection (a) shall—

(1) be based on, and parallel the major regulatory structure of, the program established under this Act for requiring reductions of emissions in the United States of non-HFC greenhouse gases;

(2) provide that the compliance obligation under this section shall require the submission of HFC allowances for any HFC consumed or imported in products or equipment;

(3) provide that the compliance obligation under the program shall not be satisfied, in whole or in part, by the submission of any emission allowances or offset allowances established pursuant to titles II, III, or XIII;

(4) establish annual HFC limitations in accordance with subsection (d);

(5) take into consideration, in establishing the limitations, whether the automobile manufacturing industry will begin selling, before 2012, automobiles the air conditioning systems of which use a refrigerant with a lower global warming potential than HFCs currently in use;

(6) require the auction of—

(A) not more than 10 percent of the quantity of HFC allowances established for calendar year 2012;

(B) for each of calendar years 2013 through 2030, a percentage of the quantity of HFC allowances established for the applicable calendar year that is greater than the percentage auctioned under this section for the preceding calendar year; and

(C) 100 percent of the quantity of HFC allowances established for calendar years 2031 through 2050;

(7) for each of calendar years 2012 through 2030, require the allocation, at no charge, to entities that manufacture HFCs in the United States and import HFCs into the United States of—

(A) subject to subparagraph (B), not less than 80 percent of the HFC allowances established for the applicable calendar year and not auctioned in accordance with paragraph (6), with the allocation being based on 100 percent of the HFCs and 60 percent of the hydrochlorofluorocarbons consumed by an HFC producer or importer for resale during—

(i) a base period covering calendar years 2004 through 2006; or

(ii) as the Secretary determines to be appropriate, an extended base period covering calendar years 2004 through 2008 with respect to an HFC producer or importer for resale that commenced operation of a new manufacturing facility in the United States after 2006; and

(B) not less than 10 percent of the emission allowances established for the applicable calendar year and not auctioned to a class of entities, to be defined by the Administrator, that manufacture in the United States commercial products containing HFCs, including, at a minimum, entities that manufactured in the United States during calendar year 2005 commercial or residential air conditioning, heat pump, commercial, or residential refrigeration products or plastic foam products (including formulated systems) containing HFC or hydrochlorofluorocarbon, if the HFC or hydrochlorofluorocarbon was included in the products at the time of sale;

(8) establish a system under which—

(A) a manufacturer or importer of HFCs may reduce a compliance obligation under this section for a calendar year by demonstrating to the Administrator the quantity of HFCs the manufacturer or importer destroyed during that calendar year; and

(B) the Administrator establishes and distributes HFC allowances, on a discounted basis, to entities for destruction of chlorofluorocarbons or hydrochlorofluorocarbons; and

(9) require the use of all proceeds from the auction of HFC allowances under this section to support—

(A) research into commercial alternatives with lower global warming potential than HFCs currently in use;

(B) the recovery, reclamation, and destruction of HFCs;

(C) manufacturers in the United States the products of which contain HFCs to transition to manufacturing products that contain refrigerants or blowing agents with lower global warming potential than HFCs currently in use; and

(D) the promotion of energy-efficient manufactured products that contain refrigerants or blowing agents with low global warming potential.

(d) ANNUAL LIMITATIONS.—The Administrator shall establish HFC allowances for each calendar year in a manner that establishes limitations on annual consumption of HFCs pursuant to the program under this section of—

(1) for calendar year 2012, not more than 289,000,000 carbon dioxide equivalents of HFCs;

(2) for each of calendar years 2013 through 2019, a quantity of carbon dioxide equivalents of HFCs that is less than the quantity of carbon dioxide equivalents of HFCs established for the preceding calendar year;

(3) for calendar year 2020, a quantity of carbon dioxide equivalents of HFCs equal to not more than the product obtained by multiplying—

(A) 289,000,000; and

(B) 0.85;

(4) for each of calendar years 2021 through 2029, a quantity of carbon dioxide equivalents of HFCs that is less than the quantity of carbon dioxide equivalents of HFCs established for the preceding calendar year;

(5) for calendar year 2030, a quantity of carbon dioxide equivalents of HFCs equal to not more than the product obtained by multiplying—

(A) 289,000,000; and

(B) 0.55;

(6) for each of calendar years 2031 through 2036, a quantity of carbon dioxide equivalents of HFCs that is less than the quantity of carbon dioxide equivalents of HFCs established for the preceding calendar year;

(7) for each of calendar years 2037 through 2039, a quantity of carbon dioxide equivalents of HFCs that does not exceed the quantity of carbon dioxide equivalents of HFCs established for the preceding calendar year; and

(8) for each of calendar years 2040 through 2050, a quantity of carbon dioxide equivalents of HFCs that does not exceed the product obtained by multiplying—

(A) 289,000,000; and

(B) 0.30.

SEC. 1502. NATIONAL RECYCLING AND EMISSION REDUCTION PROGRAM.

Section 608 of the Clean Air Act (42 U.S.C. 7671g) is amended—

(1) by redesignating subsections (a) through (c) as subsections (b) through (d), respectively;

(2) by inserting before subsection (b) (as so redesignated) the following:

''(a) DEFINITION OF HYDROFLUOROCARBON SUBSTITUTE.—In this section, the term 'hydrofluorocarbon substitute' means a hydrofluorocarbon—

''(1) with a global warming potential of more than 150; and

''(2) that is used in or for types of equipment, appliances, or processes that previously relied on a class I or class II substance.'';

(3) in subsection (b) (as redesignated by paragraph (1))—

(A) in the matter following paragraph (3), by striking ''Such regulations'' and inserting the following:

''(5) The regulations'';

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

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

''(3)(A) Not later than 1 year after date of enactment of the Lieberman-Warner Climate Security Act of 2008, the Administrator shall promulgate regulations establishing standards and requirements regarding the sale or distribution, or offer for sale and distribution in interstate commerce, use, and disposal of hydrofluorocarbon substitutes for class I substances and class II substances not covered by paragraph (1), including the use, recycling, and disposal of those hydrofluorocarbon substitutes during the maintenance, service, repair, or disposal of appliances and industrial process refrigeration equipment.

''(B) The standards and requirements established under subparagraph (A) shall take effect not later than 1 year after the date of promulgation of the regulations.'';

(4) in subsection (c) (as redesignated by paragraph (1))—

(A) by redesignating paragraphs (1) through (3) as subparagraphs (A) through (C), respectively, and indenting the subparagraphs appropriately;

(B) by striking the subsection designation and heading and all that follows through ''following—'' and inserting the following:

''(c) SAFE DISPOSAL.—The regulations under subsection (b) shall—

''(1) establish standards and requirements for the safe disposal of class I substances and class II substances and hydrofluorocarbon substitutes for those substances; and

''(2) include each of the following:''; and

(C) in subparagraph (A) (as redesignated by subparagraph (A)), by inserting ''(or hydrofluorocarbon substitutes for those substances)'' after ''class I or class II substances''.

SEC. 1503. FIRE SUPPRESSION AGENTS.

Section 605(a) of the Clean Air Act (42 U.S.C. 7671d(a)) is amended—

(1) by redesignating paragraphs (1) through (3) as subparagraphs (A) through (C), respectively, and indenting the subparagraphs appropriately;

(2) in the matter preceding subparagraph (A) (as so redesignated), by striking ''Effective'' and inserting the following:

''(1) IN GENERAL.—Effective'';

(3) in paragraph (1) (as redesignated by paragraphs (1) and (2))—

(A) in subparagraph (B) (as so redesignated), by striking ''or'' at the end;

(B) in subparagraph (C) (as so redesignated), by striking the period at the end and inserting ''; or''; and

(C) by inserting after subparagraph (C) the following:

''(D) the Administrator determines that the substance—

''(i) is used as a fire suppression agent for military, commercial aviation, industrial, space, or national security applications; and

''(ii) reduces overall risk to human health and the environment, as compared to alternative substances.''; and

(4) in the second sentence, by striking ''As used in'' and inserting the following:

''(2) DEFINITION OF REFRIGERANT.—In''.

TITLE XVI—PERIODIC REPORTS AND RECOMMENDATIONS

SEC. 1601. NATIONAL ACADEMY OF SCIENCES REPORTS.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the

Administrator shall offer to enter into an arrangement with the National Academy of Sciences, under which the Academy shall, by not later than January 1, 2012, and every 3 years thereafter, make public and submit to the Administrator a report in accordance with this section.

(b) LATEST SCIENTIFIC INFORMATION.—Each report submitted pursuant to subsection (a) shall—

(1) address recent scientific reports on climate change, including the most recent assessment by the Intergovernmental Panel on Climate Change; and

(2) include a description of—

(A) trends in, and projections for, total United States greenhouse gas emissions, including the Inventory of United States Greenhouse Gas Emissions and Sinks;

(B) trends in, and projections for, total worldwide greenhouse gas emissions;

(C) current and projected future atmospheric concentrations of greenhouse gases;

(D) current and projected future global average temperature, including an analysis of whether an increase of global average temperature in excess of 3.6 degrees Fahrenheit (2 degrees Celsius) above the preindustrial average has occurred or is more likely than not to occur in the foreseeable future;

(E) current and projected future adverse impacts of global climate change on human populations, wildlife, and natural resources; and

(F) trends in, and projections for, the health of the oceans and ocean ecosystems, including predicted changes in ocean acidity, temperatures, extent of coral reefs, and other indicators of ocean ecosystem health, resulting from anthropogenic carbon dioxide emissions and climate change.

(c) PERFORMANCE OF THIS ACT.—In addition to information required to be included under subsection (b), each report submitted pursuant to subsection (a) shall include an assessment of—

(1) the extent to which this Act, in concert with other policies, will prevent a dangerous increase in global average temperature;

(2) the extent to which this Act, in concert with other policies, will prevent dangerous atmospheric concentrations of greenhouse gases;

(3) the current and future projected deployment of technologies and practices that reduce or limit greenhouse gas emissions, including—

(A) technologies for capturing, transporting, and sequestering carbon dioxide;

(B) efficiency improvement technologies;

(C) zero- and low-greenhouse gas-emitting energy technologies, including solar, wind, geothermal, and nuclear technologies; and

(D) above- and below-ground biological sequestration technologies;

(4) the extent to which this Act and other policies are accelerating the development and commercial deployment of technologies and practices that reduce and limit greenhouse gas emissions;

(5) the extent to which the allocations and distributions of emission allowances and auction proceeds under this Act are advancing the purposes of this Act;

(6) the feasibility of retiring quantities of the emission allowances established pursuant to section 201(a);

(7) the feasibility of establishing policies for reducing greenhouse gas emissions in addition to the policies established by this Act;

(8) whether the use and trading of emission allowances is resulting in increases in pollutants that are listed as criteria pollutants under section 108(a)(1) of the Clean Air Act (42 U.S.C. 7408(a)(1)), defined as toxic air pollutants in section 211(k)(10)(C) of that Act (42 U.S.C. 7545(k)(10)(C)), or listed as hazardous air pollutants in section 112(a) of that Act (42 U.S.C. 7412(a)) (referred to collectively in this title as ''covered pollutants'');

(9) whether the transformation of the market and technologies deployed in response to carbon controls and reductions are resulting in increases in covered pollutants;

(10) whether the use and trading of emission allowances and the transformation of the market and technologies deployed in response to carbon controls and reductions are resulting in an increase in covered pollutants in environmental justice communities, specifically; and

(11) with respect to the offset programs established under this Act—

(A) the uncertainty and additionality of domestic offsets, international offsets, and international markets;

(B) the impacts of changing the restrictions on the market and the economic costs of the offset programs;

(C) the interaction with the cost management efforts of the Board;

(D) the impacts on deforestation in foreign countries; and

(E) the progress covered entities are making in reducing emissions from covered activities of the covered entities.

SEC. 1602. ENVIRONMENTAL PROTECTION AGENCY RECOMMENDATIONS.

(a) IN GENERAL.—Not later than January 1, 2013, and every 3 years thereafter, the Administrator shall submit to Congress legislative recommendations based in part on the most recent report submitted by the National Academy of Sciences pursuant to section 1601.

(b) CATEGORIES OF LEGISLATION.—The legislative measures eligible for inclusion in the recommendations required by subsection (a) shall include measures that would—

(1) expand the definition of the term ''covered entity'' under this Act;

(2) expand the scope of the compliance obligation established by section 202;

(3) adjust quantities of emission allowances available in 1 or more calendar years;

(4) establish other policies for reducing greenhouse gas emissions in addition to the policies established by this Act;

(5) establish policies for reducing nationwide emissions into the atmosphere of sulfur dioxide, nitrogen oxides, and mercury in excess of the reductions resulting from the implementation of this Act; and

(6) prevent or abate any direct, indirect, or cumulative increases in covered pollutants resulting from the use and trading of emission allowances or from transformations in technologies or markets.

(c) CONSISTENCY WITH REPORTS.—The Administrator shall include with each submission of recommendations made pursuant to subsection (a) an explanation for each significant inconsistency between the recommendations and the reports submitted by the National Academies of Sciences pursuant to section 1601.

(d) ONGOING EVALUATION OF IMPACTS.—Not later than 90 days after the date of enactment of this Act, the Administrator shall establish an advisory committee that includes representatives of impacted communities to advise the Administrator on the implementation of Executive Order No. 12898 (59 Fed. Reg. 7629) in implementing this Act.

(e) EFFECT ON OTHER AUTHORITY.—Nothing in this title limits the authority of the Administrator, a State, or any person to use any authority under this Act or any other law to promulgate, adopt, or enforce any regulation.

SEC. 1603. PRESIDENTIAL RECOMMENDATIONS.

(a) ESTABLISHMENT OF TASK FORCE.—Not later than January 1, 2018, the President shall establish a task force, to be known as the ''Interagency Climate Change Task Force''.

(b) COMPOSITION.—The members of the Interagency Climate Change Task Force shall be—

(1) the Administrator;

(2) the Secretary of Energy;

(3) the Secretary of the Treasury;

(4) the Secretary of Commerce; and

(5) such other Cabinet Secretaries as the President may name to the membership of the Interagency Climate Change Task Force.

(c) CHAIRMAN.—The Administrator shall act as Chairperson of the Interagency Climate Change Task Force.

(d) REPORT TO PRESIDENT.—

(1) IN GENERAL.—Not later than April 1, 2019, the Interagency Climate Change Task Force shall make public and submit to the President a consensus report making recommendations, including for specific legislation for the President to recommend to Congress.

(2) BASIS.—The report submitted pursuant to paragraph (1) shall be based on the third set of recommendations submitted by the Administrator to Congress under section 1602.

(3) INCLUSIONS.—The Interagency Climate Change Task Force shall include with the consensus report an explanation for each significant inconsistency between the consensus report and the third set of recommendations submitted by the Administrator to Congress pursuant to section 1602.

(e) PRESIDENTIAL RECOMMENDATION TO CONGRESS.—Not later than July 1, 2020, the President shall submit to Congress the text of a proposed Act based upon the consensus report submitted to the President pursuant to subsection (d).

TITLE XVII—MISCELLANEOUS

Subtitle A—Climate Security Act Administrative Fund

SEC. 1701. ESTABLISHMENT.

There is established in the Treasury of the United States a fund, to be known as the ''Climate Security Act Administrative Fund'' (referred to in this subtitle as the ''Fund'').

SEC. 1702. AUCTIONS.

(a) FIRST PERIOD.—Not later than 120 days after the date of enactment of this Act, and annually thereafter through 2027, the Administrator shall auction, to raise funds for deposit in the Fund, 0.75 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year that is 3 years after the calendar year during which the auction is conducted.

(b) SECOND PERIOD.—

(1) IN GENERAL.—For each of calendar years 2031 through 2050, the Administrator shall auction, in accordance with paragraph (2), 1 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year, to raise funds for deposit in the Fund.

(2) NUMBER; FREQUENCY.—For each calendar year during the period described in paragraph (1), the Administrator shall—

(A) conduct not fewer than 4 auctions; and

(B) schedule the auctions in a manner to ensure that—

(i) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of the calendar year; and

(ii) the interval between each auction is of equal duration.

SEC. 1703. DEPOSITS.

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 1702, immediately on receipt of those proceeds, in the Fund.

SEC. 1704. DISBURSEMENTS FROM FUND.

No disbursements shall be made from the Fund, except pursuant to an appropriation Act.

SEC. 1705. USE OF FUNDS.

(a) IN GENERAL.—For each of calendar years 2012 through 2050, the amounts deposited into the Fund during the preceding calendar year under section 1703 shall be made available to pay the administrative costs of carrying out this Act.

(b) TREATMENT OF AMOUNTS IN FUND.—Amounts in the Fund—

(1) may be used as an offsetting collection available to the Administrator, the Secretary of Agriculture, the Secretary of Labor, the Secretary of the Interior, the Secretary of Energy, the heads of other Federal departments or agencies required to carry out activities under this Act, the Board, or the Climate Change Technology Board to offset expenses incurred, or amounts made available through an appropriation Act for use, in carrying out this Act; and

(2) shall remain available until expended.

Subtitle B—Presidential Emergency Declarations and Proclamations

SEC. 1711. EMERGENCY DECLARATION.

(a) IN GENERAL.—If the President determines that a national security, energy security, or economic security emergency exists, and that it is in the paramount interest of the United States to modify any requirement under this Act to minimize the effects of the emergency, the President may make an emergency declaration.

(b) CONSULTATION.—In making an emergency declaration under subsection (a), the President shall, to the maximum extent practicable, consult with and take into consideration any advice received from—

(1) the National Security Advisor;

(2) the Secretary of the Treasury;

(3) the Secretary of Energy;

(4) the Administrator;

(5) relevant committees of Congress; and

(6) the Board.

SEC. 1712. PRESIDENTIAL PROCLAMATION.

After making an emergency declaration under section 1711, the President shall declare by proclamation each action required to minimize the emergency.

SEC. 1713. CONGRESSIONAL RESCISSION OR MODIFICATION.

(a) TREATMENT OF PROCLAMATION.—A proclamation issued pursuant to section 1712 shall be considered to be a final action by the President.

(b) ACTION BY CONGRESS.—Congress shall rescind or modify a proclamation issued pursuant to section 1712, if necessary, not later than 30 days after the date of issuance of the proclamation.

SEC. 1714. REPORT TO FEDERAL AGENCIES.

Not later than 30 days after the date on which a proclamation issued pursuant to section 1712 takes effect, and every 30 days thereafter during the effective period of the proclamation, the President shall submit to the head of each appropriate Federal agency a report describing the actions required to be carried out by the proclamation.

SEC. 1715. TERMINATION.

(a) IN GENERAL.—Subject to subsection (b), a proclamation issued pursuant to section 1712 shall terminate on the date that is 180 days after the date on which the proclamation takes effect.

(b) EXTENSION.—The President may request an extension of a proclamation terminated under subsection (a), in accordance with the requirements of this subtitle.

(c) CONGRESSIONAL APPROVAL.—Congress shall approve or disapprove a request of the President under subsection (b) not later than 30 days after the date of receipt of the request.

SEC. 1716. PUBLIC COMMENT.

(a) IN GENERAL.—During the 30-day period beginning on the date on which a proclamation is issued pursuant to section 1712, the President shall accept public comments relating to the proclamation.

(b) RESPONSE.—Not later than 60 days after the date on which a proclamation is issued, the President shall respond to public comments received under subsection (a), including by providing an explanation of—

(1) the reasons for the relevant emergency declaration; and

(2) the actions required by the proclamation.

(c) NO IMPACT ON EFFECTIVE DATE.—Notwithstanding subsections (a) and (b), a proclamation under section 1712 shall take effect on the date on which the proclamation is issued.

SEC. 1717. PROHIBITION ON DELEGATION.

The President shall not delegate to any individual or entity the authority—

(1) to make a declaration under section 1711; or

(2) to issue a proclamation under section 1712.

Subtitle C—Administrative Procedure and Judicial Review

SEC. 1721. REGULATORY PROCEDURES.

(a) IN GENERAL.—Except as provided in subsection (b), any rule, requirement, regulation, method, standard, program, determination, or final agency action made or promulgated pursuant to this Act shall be subject to the regulatory procedures described in subchapter II of chapter 5 of title 5, United States Code.

(b) EXCEPTION.—Subsection (a) does not apply to the establishment or any allocation of emission allowances under this Act by the Administrator.

SEC. 1722. ENFORCEMENT.

(a) VIOLATIONS.—

(1) IN GENERAL.—It shall be unlawful for any owner or operator of a covered entity to violate any prohibition, requirement, or other provision of this Act (including a regulation promulgated pursuant to this Act).

(2) OPERATION OF COVERED ENTITIES.—The operation of any covered entity in a manner that results in emissions of greenhouse gas in excess of the number of emission allowances submitted for compliance with section 202 by the covered entity shall be considered to be a violation of this Act.

(3) TREATMENT.—Each carbon dioxide equivalent of greenhouse gas emitted by a covered entity in excess of the number of emission allowances held by the covered entity shall be considered to be a separate violation of this Act.

(b) ENFORCEMENT.—

(1) IN GENERAL.—Each provision of this Act, and any regulation promulgated pursuant to this Act, shall be fully enforceable in accordance with sections 113, 303, and 304 of the Clean Air Act (42 U.S.C. 7413, 7603, 7604).

(2) TREATMENT.—For purposes of enforcement under this subsection, all requirements under this Act shall be considered to be requirements of the Clean Air Act (42 U.S.C. 7401 et seq.), and, for purposes of enforcement under section 304 of that Act (42 U.S.C. 7604), all requirements of this Act shall be considered to be emission standards or limitations under that Act (42 U.S.C. 7401 et seq.).

(3) MANDATORY DUTIES.—Any provision of this Act relating to a mandatory duty of the Administrator or any other Federal official shall be fully enforceable in accordance with section 304 of the Clean Air Act (42 U.S.C. 7604).

(4) JURISDICTION OF UNITED STATES DISTRICT COURTS.—Each United States district court shall have jurisdiction to compel agency action (including discretionary agency action) required under this Act that, as determined by the United States district court, has been unreasonably delayed.

(c) JUDICIAL REVIEW.—

(1) IN GENERAL.—Any individual or entity may submit a petition for judicial review of any regulation promulgated, or final action carried out, by the Administrator or any other Federal official pursuant to this Act.

(2) COURT JURISDICTION.—

(A) IN GENERAL.—Subject to subparagraph (B), a petition under paragraph (1) may be filed in the United States court of appeals for the appropriate circuit.

(B) PETITIONS AGAINST ADMINISTRATOR.—A petition under paragraph (1) relating to a regulation promulgated, or final action carried out, by the Administrator shall be filed only in the United States Court of Appeals for the District of Columbia Circuit, in accordance with section 307(b) of the Clean Air Act (42 U.S.C. 7607(b)).

(3) REMEDY.—

(A) CORRECTION OF DEFICIENCIES.—Subject to subparagraph (B), on a determination by the reviewing court that a final agency action under this Act is arbitrary, capricious, or unlawful, the court shall require the agency to correct each deficiency identified by the court—

(i) as expeditiously as practicable; and

(ii) in no case later than the earlier of—

(I) the date that is 1 year after the date on which the court makes the determination; and

(II) the applicable deadline under this Act for the relevant original agency action.

(B) REQUIREMENT.—In selecting a remedy for an arbitrary, capricious, or unlawful action by the agency in carrying out this Act, the reviewing court shall avoid vacating the action if vacating the action could jeopardize the full and timely achievement of the emission reductions required by this Act.

(d) LITIGATION COSTS.—A court of competent jurisdiction may award costs of litigation (including reasonable attorney and expert witness fees) for a civil action filed pursuant to this section in accordance with section 307(f) of the Clean Air Act (42 U.S.C. 7607(f)).

SEC. 1723. POWERS OF ADMINISTRATOR.

The Administrator shall have the same powers and authorities provided under sections 114 and 307(a) of the Clean Air Act (42 U.S.C. 7414, 7607(a)) in carrying out, administering, and enforcing this Act.

Subtitle D—State Authority

SEC. 1731. RETENTION OF STATE AUTHORITY.

(a) IN GENERAL.—Except as provided in subsection (b), nothing in this Act precludes, diminishes, or abrogates the right of any State to adopt or enforce—

(1) any standard, limitation, or prohibition, or cap relating to emissions of greenhouse gas; or

(2) any requirement relating to control, abatement, mitigation, or avoidance of emissions of greenhouse gas.

(b) EXCEPTION.—Notwithstanding subsection (a), no State may adopt a standard, limitation, prohibition, cap, or requirement that is less stringent than the applicable standard, limitation, prohibition, or requirements under this Act.

Subtitle E—Tribal Authority

SEC. 1741. TRIBAL AUTHORITY.

For the purposes of this Act, the Administrator may treat any Indian tribe as a State in accordance with section 301(d) of the Clean Air Act (42 U.S.C. 7601(d)).

Subtitle F—Clean Air Act

SEC. 1751. INTEGRATION.

(a) REPORT.—Not later than 2 years after the date of enactment of this Act, the President shall submit to Congress a report describing any direct regulation of carbon dioxide emissions that has occurred or may occur under the Clean Air Act (42 U.S.C. 7401 et seq.).

(b) RECOMMENDATIONS.—The report shall include recommendations of the President to ensure efficiency and certainty in the regulation of carbon dioxide emissions by the Federal Government.

Subtitle G—State–Federal Interaction and Research

SEC. 1761. STUDY AND RESEARCH.

(a) IN GENERAL.—The Administrator shall enter into an arrangement with the National Academy of Sciences or an institution of higher education or collaborative of such institutions under which the National Academy of Sciences or institutions shall conduct a study of—

(1) the reasonably foreseeable economic and environmental benefits and costs to a State and the United States as a result of the operation by the State of a cap-and-trade program for greenhouse gases, in addition to the Federal programs under this Act;

(2) the reasonably foreseeable economic and environmental benefits and costs to a State and the United States as a result of the operation by the State, in addition to the Federal programs under this Act, of a program that achieves greenhouse gas reductions through mechanisms other than a cap-and-trade program, including—

(A) efficiency standards for vehicles, buildings, and appliances;

(B) renewable electricity standards;

(C) land use planning and transportation policy; and

(D) fuel carbon intensity standards; and

(3) the reasonably foreseeable effect on emission allowance prices and price volatility, costs to businesses and consumers (including low-income consumers), economic growth, and total cumulative emissions associated with each State program described in paragraphs (1) and (2), as compared to a national greenhouse gas control policy limited to the Federal programs under this Act.

(b) GREAT LAKES CENTER FOR GREEN TECHNOLOGY MANUFACTURING.—

(1) DESIGNATION.—The Administrator, in cooperation with the Secretary of Commerce and the Secretary of Energy, shall designate the University of Toledo as the ''Great Lakes Center for Green Technology Manufacturing'', to recognize the importance of research, development, and deployment of manufacturing technology needed to reduce worldwide greenhouse gas emissions.

(2) PURPOSES.—The purposes of the Great Lakes Center for Green Technology Manufacturing shall be—

(A) to carry out activities to increase domestic production of renewable energy technology and components;

(B) to develop, or assist in the development and commercialization of, advanced manufacturing processes, materials, and infrastructure for a low-carbon economy; and

(C) to assist the transition of historically manufacturing-based economies to the production of renewable energy technologies.

(3) FUNDING.—There are authorized to be appropriated such sums as are necessary to carry out this subsection.

(c) PROCEEDS FROM AUCTIONS.—None of the proceeds from any auction conducted under this Act may be obligated after fiscal year 2047 except as provided in an appropriations Act.

SA 4826. Mr. REID (for Mr. BIDEN) proposed an amendment to amendment SA 4825 proposed by Mrs. BOXER (for herself, Mr. WARNER, and Mr. LIEBERMAN) to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; as follows:

At the end of title XIII, insert the following:

SEC. 1334. SENSE OF SENATE REGARDING INTERNATIONAL NEGOTIATIONS TO ADDRESS GLOBAL CLIMATE CHANGE.

(a) FINDINGS.—The Senate makes the following findings:

(1) There is a scientific consensus, as established by the Intergovernmental Panel on Climate Change and confirmed by the National Academy of Sciences, that the continued buildup of anthropogenic greenhouse gases in the atmosphere threatens the stability of the global climate.

(2) The 2007 Fourth Assessment Report of the Intergovernmental Panel on Climate Change concluded that most of the global warming observed since the mid-20th century is very likely due to anthropogenic greenhouse gas emissions and that anthropogenic warming is strongly linked to many observed physical and biological impacts.

(3) There are significant long-term risks to the economy and the environment of the United States from the temperature increases and climatic disruptions that are projected to result from increased greenhouse gas concentrations.

(4) The potential impacts of global climate change, including long-term drought, famine, mass migration, and abrupt climatic shifts, may lead to international tensions and instability in regions affected and, therefore, have implications for the national security interests of the United States.

(5) The United States has the largest economy in the world and is also the largest historical emitter of greenhouse gases.

(6) The greenhouse gas emissions of the United States are projected to continue to rise.

(7) The greenhouse gas emissions of some developing countries are rising more rapidly than the emissions of the United States and will soon surpass the greenhouse gas emissions of the United States and other developed countries.

(8) Reducing greenhouse gas emissions to the levels necessary to avoid serious climatic disruption requires the introduction of new energy technologies and other climate-friendly technologies, the use of which results in low or no emissions of greenhouse gases or in the capture and storage of greenhouse gases.

(9) The 2006 Stern Review on the Economics of Climate Change commissioned by the United Kingdom and the 2008 World Economic Outlook from the International Monetary Fund each concluded that the economic costs of addressing climate change are limited.

(10) The development and sale of climate-friendly technologies in the United States and internationally present economic opportunities for workers and businesses in the United States.

(11) Climate-friendly technologies can improve air quality by reducing harmful pollutants from stationary and mobile sources and can enhance energy security by reducing reliance on imported oil, diversifying energy sources, and reducing the vulnerability of energy delivery infrastructure.

(12) Other industrialized countries are undertaking measures to reduce greenhouse gas emissions, which provides the industries in those countries with a competitive advantage in the growing global market for climate-friendly technologies.

(13) Efforts to limit emissions growth in developing countries in a manner that is consistent with the development needs of those countries could establish significant markets for climate-friendly technologies and contribute to international efforts to address climate change.

(14) The national security of the United States will increasingly depend on the deployment of diplomatic, military, scientific, and economic resources for solving the problem of the overreliance of the United States and the world on high-carbon energy.

(15) The United States is a party to the United Nations Framework Convention on Climate Change, done at New York May 9, 1992, and entered into force March 21, 1994 (in this preamble referred to as the ''Convention'').

(16) The Convention sets a long-term objective of stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

(17) The Convention establishes that parties bear ''common but differentiated responsibilities'' for efforts to achieve the objective of stabilizing greenhouse gas concentrations.

(18) At the December 2007 United Nations Climate Change Conference in Bali, the United States and other parties to the Convention adopted the Bali Action Plan with the aim of reaching a new global agreement in 2009.

(19) The Bali Action Plan calls for a shared vision on long-term cooperative action, increased mitigation efforts from developed and developing countries that are measurable, reportable, and verifiable, and support for developing countries in addressing technology transfers, adaptation, financing, deforestation, and capacity-building.

(20) The Major Economies Process on Energy Security and Climate Change, initiated by President George W. Bush, seeks a consensus among the countries with the world's major economies on how those countries can contribute to a new agreement under the Convention.

(21) In April 2008, President Bush called for a ''binding international agreement'' with participation by all countries with major economies in ''goals and policies that reflect their unique energy resources and economic circumstances''.

(22) An effective global effort to address climate change must provide for commitments and actions by all countries that are major emitters of greenhouse gases, developed and developing alike, and the widely varying circumstances among developed and developing countries may require that such commitments and actions vary.

(23) The latest scientific evidence suggests that anthropogenic climate change is increasing and the United States has supported the goal of achieving a new international agreement during 2009, both lending urgency to the need for renewed United States leadership in the effort to counter global climate change.

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

(1) the United States should act to reduce the health, environmental, economic, and national security risks posed by global climate change and to foster sustained economic growth through a new generation of technologies by participating in negotiations under the United Nations Framework Convention on Climate Change, done at New York May 9, 1992, and entered into force March 21, 1994, and leading efforts in other international fora, with the objective of securing United States participation in binding agreements, consistent with the Bali Action Plan, that—

(A) advance and protect the economic and national security interests of the United States;

(B) establish mitigation commitments by all countries that are major emitters of greenhouse gases, consistent with the principle of common but differentiated responsibilities;

(C) establish flexible international mechanisms to minimize the cost of efforts by participating countries; and

(D) achieve a significant long-term reduction in global greenhouse gas emissions; and

(2) the President should support the establishment of a bipartisan Senate observer group, the members of which should be designated by the chairman and ranking member of the Committee on Foreign Relations of the Senate, to—

(A) monitor any international negotiations on climate change; and

(B) ensure that the responsibility of the Senate under article II, section 2 of the Constitution of the United States to provide advice and consent to the President with respect to treaties be carried out in a manner to facilitate timely consideration of any applicable treaty submitted to the Senate.

SA 4827. Mr. REID (for Mr. BIDEN) proposed an amendment to amendment SA 4826 proposed by Mr. REID (for Mr. BIDEN) to the amendment SA 4825 proposed by Mrs. BOXER (for herself, Mr. WARNER, and Mr. LIEBERMAN) to the bill S. 3036, to direct the Administrator of the Environment Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; as follows:

In the amendment, strike all after the word "SEC" on line 2 and insert the following:

1334. SENSE OF SENATE REGARDING INTERNATIONAL NEGOTIATIONS TO ADDRESS GLOBAL CLIMATE CHANGE.

(a) FINDINGS.—The Senate makes the following findings:

(1) There is a scientific consensus, as established by the Intergovernmental Panel on Climate Change and confirmed by the National Academy of Sciences, that the continued buildup of anthropogenic greenhouse gases in the atmosphere threatens the stability of the global climate.

(2) The 2007 Fourth Assessment Report of the Intergovernmental Panel on Climate Change concluded that most of the global warming observed since the mid-20th century is very likely due to anthropogenic greenhouse gas emissions and that anthropogenic warming is strongly linked to many observed physical and biological impacts.

(3) There are significant long-term risks to the economy and the environment of the United States from the temperature increases and climatic disruptions that are projected to result from increased greenhouse gas concentrations.

(4) The potential impacts of global climate change, including long-term drought, famine, mass migration, and abrupt climatic shifts, may lead to international tensions and instability in regions affected and, therefore, have implications for the national security interests of the United States.

(5) The United States has the largest economy in the world and is also the largest historical emitter of greenhouse gases.

(6) The greenhouse gas emissions of the United States are projected to continue to rise.

(7) The greenhouse gas emissions of some developing countries are rising more rapidly than the emissions of the United States and will soon surpass the greenhouse gas emissions of the United States and other developed countries.

(8) Reducing greenhouse gas emissions to the levels necessary to avoid serious climatic disruption requires the introduction of new energy technologies and other climate-friendly technologies, the use of which results in low or no emissions of greenhouse gases or in the capture and storage of greenhouse gases.

(9) The 2006 Stern Review on the Economics of Climate Change commissioned by the United Kingdom and the 2008 World Economic Outlook from the International Monetary Fund each concluded that the economic costs of addressing climate change are limited.

(10) The development and sale of climate-friendly technologies in the United States and internationally present economic opportunities for workers and businesses in the United States.

(11) Climate-friendly technologies can improve air quality by reducing harmful pollutants from stationary and mobile sources and can enhance energy security by reducing reliance on imported oil, diversifying energy sources, and reducing the vulnerability of energy delivery infrastructure.

(12) Other industrialized countries are undertaking measures to reduce greenhouse gas emissions, which provides the industries in those countries with a competitive advantage in the growing global market for climate-friendly technologies.

(13) Efforts to limit emissions growth in developing countries in a manner that is consistent with the development needs of those countries could establish significant markets for climate-friendly technologies and contribute to international efforts to address climate change.

(14) The national security of the United States will increasingly depend on the deployment of diplomatic, military, scientific, and economic resources for solving the problem of the overreliance of the United States and the world on high-carbon energy.

(15) The United States is a party to the United Nations Framework Convention on Climate Change, done at New York May 9, 1992, and entered into force March 21, 1994 (in this preamble referred to as the "Convention").

(16) The Convention sets a long-term objective of stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

(17) The Convention establishes that parties bear "common but differentiated responsibilities" for efforts to achieve the objective of stabilizing greenhouse gas concentrations.

(18) At the December 2007 United Nations Climate Change Conference in Bali, the United States and other parties to the Convention adopted the Bali Action Plan with the aim of reaching a new global agreement in 2009.

(19) The Bali Action Plan calls for a shared vision on long-term cooperative action, increased mitigation efforts from developed and developing countries that are measurable, reportable, and verifiable, and support for developing countries in addressing technology transfers, adaptation, financing, deforestation, and capacity-building.

(20) The Major Economies Process on Energy Security and Climate Change, initiated by President George W. Bush, seeks a consensus among the countries with the world's major economies on how those countries can contribute to a new agreement under the Convention.

(21) In April 2008, President Bush called for a "binding international agreement" with participation by all countries with major economies in "goals and policies that reflect their unique energy resources and economic circumstances".

(22) An effective global effort to address climate change must provide for commitments and actions by all countries that are major emitters of greenhouse gases, developed and developing alike, and the widely varying circumstances among developed and developing countries may require that such commitments and actions vary.

(23) The latest scientific evidence suggests that anthropogenic climate change is increasing and the United States has supported the goal of achieving a new international agreement during 2009, both lending urgency to the need for renewed United States leadership in the effort to counter global climate change.

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

(1) the United States should act to reduce the health, environmental, economic, and national security risks posed by global climate change and to foster sustained economic growth through a new generation of technologies by participating in negotiations under the United Nations Framework Convention on Climate Change, done at New York May 9, 1992, and entered into force March 21, 1994, and leading efforts in other international fora, with the objective of securing United States participation in binding agreements, consistent with the Bali Action Plan, that—

(A) advance and protect the economic and national security interests of the United States;

(B) establish mitigation commitments by all countries that are major emitters of greenhouse gases, consistent with the principle of common but differentiated responsibilities;

(C) establish flexible international mechanisms to minimize the cost of efforts by participating countries; and

(D) achieve a significant long-term reduction in global greenhouse gas emissions; and

(2) the President should support the establishment of a bipartisan Senate observer group, the members of which should be designated by the chairman and ranking member of the Committee on Foreign Relations of the Senate, to—

(A) monitor any international negotiations on climate change; and

(B) ensure that the responsibility of the Senate under article II, section 2 of the Constitution of the United States to provide advice and consent to the President with respect to treaties be carried out in a manner to facilitate timely consideration of any applicable treaty submitted to the Senate.

The provisions of this section shall become effective in 7 days after enactment.

SA 4828. Mr. REID proposed an amendment to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; as follows:

At the end of the bill, add the following:

The provision of this Act shall become effective 5 days after enactment.

SA 4829. Mr. REID proposed an amendment to amendment SA 4828 proposed by Mr. REID to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; as follows:

In the amendment, strike "5" and insert "4".

SA 4830. Mr. REID proposed an amendment to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; as follows:

At the end, insert the following:

This section shall become effective 3 days after enactment of the bill.

SA 4831. Mr. REID proposed an amendment to amendment SA 4830 proposed by Mr. REID to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; as follows:

On line 2, strike ''3'' and insert ''2''.

SA 4832. Mr. REID proposed an amendment to amendment SA 4831 proposed by Mr. REID to the amendment SA 4830 proposed by Mr. REID to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; as follows:

In the amendment strike ''2'' and insert ''1''.

SA 4833. Mr. KERRY (for himself, Mrs. FEINSTEIN, and Ms. SNOWE) submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

On page 15, line 2, strike ''and''.

On page 15, line 12, strike the period and insert ''; and''.

On page 15, between lines 12 and 13, insert the following:

(25) a Federal climate program for the United States must respond in a timely fashion to the most up-to-date science on climate change, including scientific findings on the reductions in United States greenhouse gas emissions needed to avert the worst effects of climate change.

On page 471, strike lines 3 through 5 and insert the following:

(1) consider and incorporate existing findings and reports, including the most recent assessments from the U.S. Global Change Research Program and the Intergovernmental Panel on Climate Change; and

On page 471, line 24, strike ''and'' at the end.

On page 472, line 7, strike the period at the end and insert ''; and''.

On page 472, between lines 7 and 8, insert the following:

(G) the potential for abrupt changes in climate that occur so rapidly or unexpectedly that human or natural systems have difficulty adapting.

On page 475, between lines 5 and 6, insert the following:

(d) RECOMMENDATIONS ON GLOBAL AND UNITED STATES EMISSION BUDGETS.—In addition to and taking into account the information required to be included under subsections (b) and (c), each report required to be submitted under subsection (a) shall include recommendations regarding—

(1) a global cumulative emission budget for the period beginning on the date of submission of the first report under subsection (a) and ending on December 31, 2050, that would likely achieve the goals of—

(A) preventing an increase in global average temperature of more than 2 degrees Celsius above the preindustrial average; or

(B) preventing an alternate temperature increase above the preindustrial average, if the Academy finds that such an alternate average temperature is the threshold above which warming is likely to cause dangerous interference with the climate system; and

(2) a range for the emission budget of the United States, for the period described in paragraph (1), that—

(A) is realistically consistent with remaining within the global cumulative emission budget recommended under paragraph (1); and

(B) takes into consideration emission reductions and other commitments by industrialized and developing nations under the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992.

Beginning on page 475, strike line 6 and all that follows through page 478, line 17, and insert the following:

SEC. 1602. PRESIDENTIAL RECOMMENDATIONS.

(a) IN GENERAL.—Not later than September 30, 2018, and every 3 years thereafter, the Administrator shall make public and submit to the President a report making legislative recommendations to achieve cumulative United States emission reductions through calendar year 2050 for the President to transmit to Congress.

(b) COORDINATION WITH OTHER AGENCIES.—In developing those recommendations, the Administrator shall coordinate with—

(1) the Secretary of Energy;

(2) the Secretary of the Treasury;

(3) the Secretary of Commerce;

(4) the Secretary of the Interior; and

(5) other relevant Federal officials, as determined by the Administrator, appointed to a position at level I of the Executive Schedule and listed in section 5312 of title 5, United States Code.

(c) BASIS.—The recommendations submitted pursuant to subsection (a) shall be based on the most recent reports submitted by the National Academy of Sciences pursuant to section 1601.

(d) INCLUSIONS.—The report shall include—

(1) recommendations for amendments to this Act to achieve cumulative United States emission reductions through calendar year 2050 that are realistically consistent with remaining within the global cumulative emission budget described in section 1601(d)(1), including measures that would—

(A) adjust the definition of the term ''covered entity'' under this Act;

(B) adjust the scope of the compliance obligation established by section 202;

(C) adjust quantities of emission allowances available in 1 or more calendar years;

(D) establish other policies for reducing greenhouse gas emissions in addition to the policies established by this Act;

(E) establish policies for reducing nationwide emissions into the atmosphere of sulfur dioxide, nitrogen oxides, and mercury in excess of the reductions resulting from the implementation of this Act; and

(F) prevent or abate any direct, indirect, or cumulative increases in covered pollutants resulting from the use and trading of emission allowances or from transformations in technologies or markets; and

(2) safeguards to achieve all the purposes of this Act in accordance with paragraph (1), including—

(A) the accomplishment of robust growth and the creation of new jobs in the United States economy; and

(B) the protection of United States consumers, especially consumers in greatest need, from hardship.

(e) CONSISTENCY WITH REPORTS.—The Administrator shall include with each submission of recommendations made pursuant to subsection (a) an explanation for each significant inconsistency between the recommendations and the most recent reports submitted by the National Academy of Sciences pursuant to section 1601.

(f) PRESIDENTIAL RECOMMENDATION TO CONGRESS.—Not later than January 1, 2019, and every 3 years thereafter, the President shall submit to Congress the text of proposed legislation based on the recommendations submitted to the President pursuant to subsection (a).

(g) ONGOING EVALUATION OF IMPACTS.—Not later than 90 days after the date of enactment of this Act, the Administrator shall establish an advisory committee that includes representatives of affected communities to advise the Administrator on the implementation of Executive Order No. 12898 (59 Fed. Reg. 7629; relating to Federal actions to address environmental justice in minority populations and low-income populations) in implementing this Act.

(h) EFFECT ON OTHER AUTHORITY.—Nothing in this title limits the authority of the Administrator, a State, or any person to use any authority under this Act or any other law to promulgate, adopt, or enforce any regulation.

SEC. 1603. CONGRESSIONAL REVIEW OF PRESIDENTIAL RECOMMENDATIONS.

(a) DEFINITION OF IMPLEMENTING LEGISLATION.—In this section, the term ''implementing legislation'' means only legislation introduced in the period beginning on the date on which recommendations for legislation are submitted to Congress under section 1602(f), and every third year thereafter, and ending 60 days after such submission (excluding days either House of Congress is adjourned for more than 3 days during a session of Congress), which proposes the legislative changes recommended by the President under section 1602.

(b) REFERRAL.—Implementing legislation described in subsection (a) shall be referred immediately to the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works of the Senate.

(c) CONSIDERATION.—

(1) IN GENERAL.—Implementing legislation shall be considered by the committee to which the legislation is referred under subsection (b).

(2) SENATE PROCEDURE.—In the Senate—

(A) a committee to which legislation is referred under subsection (b) may be discharged from further consideration of the implementing legislation at the end of the period of 30 calendar days after the introduction of the legislation, upon a petition supported in writing by 30 Members of the Senate; and

(B) after that 30-calendar-day period, the legislation shall be placed on the calendar.

(d) MOTION TO PROCEED IN SENATE.—

(1) IN GENERAL.—In the Senate, after the committee to which implementing legislation is referred under subsection (b) has reported the legislation or been discharged under subsection (c)(2)(A) from further consideration of the legislation, it shall be at any time thereafter in order (even though a previous motion to the same effect has been disagreed to) for a motion to proceed to the consideration of the implementing legislation.

(2) DEBATE AND POSTPONEMENT.—A motion to proceed described in paragraph (1) shall not be debatable or subject to a motion to postpone, or to a motion to proceed to the consideration of other business.

(3) MOTION TO RECONSIDER.—A motion to reconsider the vote by which a motion to proceed under paragraph (1) is agreed to or disagreed to shall not be in order.

(4) AGREEMENT.—If a motion to proceed to the consideration of the implementing legislation is agreed to, the implementing legislation shall remain the unfinished business of the Senate until disposed of.

(e) PROCEDURE IN HOUSE OF REPRESENTATIVES.—In the House of Representatives—

(1) the committee to which implementing legislation is referred under subsection (b) may be discharged from further consideration of the implementing legislation—

(A) at the end of the 60-calendar-day period beginning on the date of introduction of the legislation in the House of Representatives; and

(B) upon a petition supported in writing by 130 Members of the House of Representatives; and

(C) the implementing legislation shall be placed on the calendar, and called up on the floor of the House of Representatives, subject to the rules of the House of Representatives.

(f) EFFECT OF SECTION ON CONGRESSIONAL RULES.—This section—

(1) is enacted by Congress as an exercise of the rulemaking power of the Senate and House of Representatives, respectively;

(2) as such rulemaking power—

(A) is deemed to be part of the rules of each of the Senate and House of Representatives, respectively;

(B) shall be applicable only with respect to the procedure to be followed in the Senate or House of Representatives, respectively, in the case of implementing legislation described in subsection (a); and

(C) supersedes other rules only to the extent that the section is inconsistent with those other rules; and

(3) is enacted by Congress with full recognition of the constitutional right of either the Senate or House of Representatives to change the rules (so far as relating to the procedure of that House) at any time, in the same manner, and to the same extent as in the case of any other rule of that House.

SA 4834. Mr. DURBIN submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

On page 63, between lines 7 and 8, insert the following:

SEC. 127. FUTUREGEN COOPERATIVE AGREEMENT.

(a) IN GENERAL.—Subject to subsection (b), the Secretary of Energy shall continue the cooperative agreement numbered DE-FC 26-06NT42073, as in effect on the date of enactment of this Act, through March 30, 2009.

(b) ADMINISTRATION.—During the period beginning on the date of enactment of this Act and ending on March 30, 2009—

(1) the agreement described in subsection (a) may not be terminated except by the mutual consent of the parties to the agreement; and

(2) funds may be expended under the agreement only to complete and provide information and documentation to the Department of Energy.

SA 4835. Mr. LAUTENBERG submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

SEC. _____. PROTECTION OF SCIENTIFIC CREDIBILITY, INTEGRITY, AND COMMUNICATION.

(a) SHORT TITLE.—This section may be cited as the ''Protect Science Act of 2008''.

(b) DEFINITIONS.—In this section:

(1) AGENCY.—The term ''agency'' has the meaning given under section 551(1) of title 5, United States Code.

(2) SCIENTIFIC.—The term ''scientific'' means relating to the natural, physical, environmental, earth, ocean, climate, atmospheric, mathematical, medical, or social sciences or engineering.

(c) FINDINGS AND PURPOSE.—

(1) FINDINGS.—Congress finds the following:

(A) Scientific research and innovation is a principal component to American prosperity.

(B) There have been numerous cases where Federal scientific studies and reports have been altered by political appointees and Federal employees to misrepresent or omit information.

(C) Political interference has also resulted in—

(i) the censorship of scientific information and documents requested by Congress;

(ii) the delayed release of Government science reports; and

(iii) the denial of media access to scientific researchers.

(D) Such political interference with science in the Federal agencies undermines the credibility, integrity, and consistency of the United States Government.

(2) PURPOSE.—The purpose of this section is to protect scientific credibility, integrity, and communication in research and policymaking.

(d) PROHIBITION OF POLITICAL INTERFERENCE WITH SCIENCE.—

(1) IN GENERAL.—Subchapter V of chapter 73 of title 5, United States Code, is amended by adding at the end the following:

''§ 7354. Interference with science

''(a) DEFINITIONS.—In this section—

''(1) the term 'censorship' means improper prevention of the dissemination of valid and nonclassified scientific findings;

''(2) the term 'scientific' means relating to the natural, physical, environmental, earth, ocean, climate, atmospheric, mathematical, medical, or social sciences or engineering; and

''(3) the term 'tampering' means improperly altering or obstructing so as to substantially distort, or directing others to do so.

''(b) IN GENERAL.—An employee may not engage in any of the following:

''(1) Tampering with the conduct or findings of federally funded scientific research or analysis.

''(2) Censorship of findings of federally funded scientific research or analysis.

''(3) Directing the dissemination of scientific information known by the directing employee to be false or misleading.''.

(2) TECHNICAL AND CONFORMING AMENDMENT.—The table of sections for chapter 73 of title 5, is amended by inserting after the item relating to section 7353 the following:

''7354. Interference with science.''.

(e) PUBLICATION REQUIREMENT RELATING TO SCIENTIFIC STUDIES AND REPORTS.—

(1) DEFINITION.—In this subsection, the term ''political appointee'' means an individual who holds a position that—

(A) requires appointment by the President, by and with the advice and consent of the Senate;

(B) is within the Executive Office of the President;

(C) is on the Executive Schedule under subchapter II of chapter 53 of title 5, United States Code;

(D) is a Senior Executive Service position as defined under section 3132 (2) of title 5, United States Code, and not a career reserved position as defined under paragraph (8) of that section; or

(E) is in the executive branch of the Government of a confidential or policy-determining character under schedule C of subpart C of part 213 of title 5 of the Code of Federal Regulations.

(2) REQUIREMENTS.—

(A) IN GENERAL.—Not later than 48 hours after an agency publishes a scientific study or report, including a summary, synthesis, or analysis of a scientific study or report, that has been modified to incorporate oral or written comments by a political appointee that change the force, meaning, emphasis, conclusions, findings, or recommendations of the scientific or technical component of the study or report, the head of that agency shall—

(i) make available on a departmental or agency website, and on a public docket, if any, that is accessible by the public—

(I) the final version by the principal scientific investigators before review;

(II) the final version as published by the agency; and

(III) a version making a comparison of the versions described under subclauses (I) and (II), that identifies—

(aa) any modifications; and

(bb) the text making those modifications;

(ii) identify any political appointee who made those comments; and

(iii) provide uniform resource locator links on that website to both versions and related publications.

(B) PRINTED PUBLICATIONS.—The head of each agency shall ensure that the printed publication of any summary, synthesis, or analysis of a scientific study or report described under subparagraph (A) shall include a reference to the website described under that paragraph.

(3) FORMAT AND EASE OF COMPARISON.—The versions of any study or report described under paragraph (2) shall be made available—

(A) in a format that is generally available to the public; and

(B) in the same format and accessible on the same page with equal prominence, or in any other manner that facilitates comparison of the 2 versions.

(f) STATE OF SCIENTIFIC INTEGRITY REPORT.—Not later than 1 year after the date of enactment of this Act, and each year thereafter, the Comptroller General shall submit a report to Congress on compliance with the requirements of section 7354 of title 5, United States Code, (as added by subsection (d) of this section) and section (e) of this section.

SA 4836. Mr. BIDEN (for himself, Mr. LUGAR, Mr. KERRY, Mr. WARNER, Mr. MENENDEZ, Ms. SNOWE, Mr. CARDIN, Mr. CASEY, Mr. BAYH, Ms. COLLINS, Mr. OBAMA, Mr. WEBB, Mr. FEINGOLD, Mr. WHITEHOUSE, Mr. NELSON, of Florida, Mr. BINGAMAN, and Mr. MCCAIN) submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title XIII, insert the following:

SEC. 1334. SENSE OF SENATE REGARDING INTERNATIONAL NEGOTIATIONS TO ADDRESS GLOBAL CLIMATE CHANGE.

(a) FINDINGS.—The Senate makes the following findings:

(1) There is a scientific consensus, as established by the Intergovernmental Panel on Climate Change and confirmed by the National Academy of Sciences, that the continued buildup of anthropogenic greenhouse gases in the atmosphere threatens the stability of the global climate.

(2) The 2007 Fourth Assessment Report of the Intergovernmental Panel on Climate Change concluded that most of the global warming observed since the mid-20th century is very likely due to anthropogenic greenhouse gas emissions and that anthropogenic warming is strongly linked to many observed physical and biological impacts.

(3) There are significant long-term risks to the economy and the environment of the United States from the temperature increases and climatic disruptions that are projected to result from increased greenhouse gas concentrations.

(4) The potential impacts of global climate change, including long-term drought, famine, mass migration, and abrupt climatic shifts, may lead to international tensions and instability in regions affected and, therefore, have implications for the national security interests of the United States.

(5) The United States has the largest economy in the world and is also the largest historical emitter of greenhouse gases.

(6) The greenhouse gas emissions of the United States are projected to continue to rise.

(7) The greenhouse gas emissions of some developing countries are rising more rapidly than the emissions of the United States and will soon surpass the greenhouse gas emissions of the United States and other developed countries.

(8) Reducing greenhouse gas emissions to the levels necessary to avoid serious climatic disruption requires the introduction of new energy technologies and other climate-friendly technologies, the use of which results in low or no emissions of greenhouse gases or in the capture and storage of greenhouse gases.

(9) The 2006 Stern Review on the Economics of Climate Change commissioned by the United Kingdom and the 2008 World Economic Outlook from the International Monetary Fund each concluded that the economic costs of addressing climate change are limited.

(10) The development and sale of climate-friendly technologies in the United States and internationally present economic opportunities for workers and businesses in the United States.

(11) Climate-friendly technologies can improve air quality by reducing harmful pollutants from stationary and mobile sources and can enhance energy security by reducing reliance on imported oil, diversifying energy sources, and reducing the vulnerability of energy delivery infrastructure.

(12) Other industrialized countries are undertaking measures to reduce greenhouse gas emissions, which provides the industries in those countries with a competitive advantage in the growing global market for climate-friendly technologies.

(13) Efforts to limit emissions growth in developing countries in a manner that is consistent with the development needs of those countries could establish significant markets for climate-friendly technologies and contribute to international efforts to address climate change.

(14) The national security of the United States will increasingly depend on the deployment of diplomatic, military, scientific, and economic resources for solving the problem of the overreliance of the United States and the world on high-carbon energy.

(15) The United States is a party to the United Nations Framework Convention on Climate Change, done at New York May 9, 1992, and entered into force March 21, 1994 (in this preamble referred to as the ''Convention'').

(16) The Convention sets a long-term objective of stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

(17) The Convention establishes that parties bear ''common but differentiated responsibilities'' for efforts to achieve the objective of stabilizing greenhouse gas concentrations.

(18) At the December 2007 United Nations Climate Change Conference in Bali, the United States and other parties to the Convention adopted the Bali Action Plan with the aim of reaching a new global agreement in 2009.

(19) The Bali Action Plan calls for a shared vision on long-term cooperative action, increased mitigation efforts from developed and developing countries that are measurable, reportable, and verifiable, and support for developing countries in addressing technology transfers, adaptation, financing, deforestation, and capacity-building.

(20) The Major Economies Process on Energy Security and Climate Change, initiated by President George W. Bush, seeks a consensus among the countries with the world's major economies on how those countries can contribute to a new agreement under the Convention.

(21) In April 2008, President Bush called for a ''binding international agreement'' with participation by all countries with major economies in ''goals and policies that reflect their unique energy resources and economic circumstances''.

(22) An effective global effort to address climate change must provide for commitments and actions by all countries that are major emitters of greenhouse gases, developed and developing alike, and the widely varying circumstances among developed and developing countries may require that such commitments and actions vary.

(23) The latest scientific evidence suggests that anthropogenic climate change is increasing and the United States has supported the goal of achieving a new international agreement during 2009, both lending urgency to the need for renewed United States leadership in the effort to counter global climate change.

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

(1) the United States should act to reduce the health, environmental, economic, and national security risks posed by global climate change and to foster sustained economic growth through a new generation of technologies by participating in negotiations under the United Nations Framework Convention on Climate Change, done at New York May 9, 1992, and entered into force March 21, 1994, and leading efforts in other international fora, with the objective of securing United States participation in binding agreements, consistent with the Bali Action Plan, that—

(A) advance and protect the economic and national security interests of the United States;

(B) establish mitigation commitments by all countries that are major emitters of greenhouse gases, consistent with the principle of common but differentiated responsibilities;

(C) establish flexible international mechanisms to minimize the cost of efforts by participating countries; and

(D) achieve a significant long-term reduction in global greenhouse gas emissions; and

(2) the President should support the establishment of a bipartisan Senate observer group, the members of which should be designated by the chairman and ranking member of the Committee on Foreign Relations of the Senate, to—

(A) monitor any international negotiations on climate change; and

(B) ensure that the responsibility of the Senate under article II, section 2 of the Constitution of the United States to provide advice and consent to the President with respect to treaties be carried out in a manner to facilitate timely consideration of any applicable treaty submitted to the Senate.

SA 4837. Mr. SANDERS submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle F of title V, add the following:

SEC. 553. EXCLUSION OF NEW FOSSIL FUEL-FIRED ELECTRICITY GENERATORS.

Notwithstanding any other provision of this subtitle shall not apply to fossil fuel-fired electricity generators (including fossil fuel-fired electricity generators owned or operated by a rural electric cooperative) for 2 which construction began after January 19, 2007.

At the end of section 614(d), add the following:

(2) EXCLUSION OF FOSSIL FUEL-FIRED ELECTRICITY GENERATORS.—Notwithstanding paragraph (1), a State shall not use any emission allowance (or proceeds of sale of an emission allowance) to mitigate obstacles to investment by fossil fuel-fired electricity generators (including fossil fuel-fired electricity generators owned or operated by a rural electric cooperative) or fossil fuel-fired electricity generation markets.

SA 4837. Mr. SANDERS (for himself, Mr. MENENDEZ, and Mr. KERRY) submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

On page 65, between lines 2 and 3, insert the following:

(d) NATIONAL EMISSION REDUCTION MILESTONES FOR 2050.—Not later than January 1, 2012, after an opportunity for public notice and comment, the Administrator shall promulgate rules and take any other actions necessary (including revising the post-2020 emission allowances in the chart in subsection (a)) to achieve an 80 percent reduction in all United States global warming emissions by calendar year 2050, as compared to calendar year 1990.

SA 4839. Mr. SANDERS (for himself, Mr. MENENDEZ, and Mr. KERRY) submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle D of title VIII, add the following:

SEC. 833. REBATES FOR PURCHASE AND INSTALLATION OF PHOTOVOLTAIC SYSTEMS FOR 10 MILLION-SOLAR ROOFS.

(a) FINDINGS.—Congress finds that—

(1)(A) there is huge potential for increasing the quantity of electricity produced in the United States from distributed solar photovoltaics; and

(B) the use of photovoltaics on the roofs of 10 percent of existing buildings could meet 70 percent of peak electric demand;

(2) investment in solar photovoltaics technology will create economies of scale that will allow the technology to deliver electricity at prices that are competitive with electricity from fossil fuels;

(3) electricity produced from distributed solar photovoltaics helps to reduce greenhouse gas emissions and does not emit harmful air pollutants, such as mercury, sulfur dioxide, and nitrogen oxides;

(4) electricity produced from distributed solar photovoltaics enhances national energy security;

(5) investments in renewable energy stimulate the development of green jobs that provide substantial economic benefits;

(6)(A) rebate programs in several States have been successful in increasing the quantity of solar energy from distributed photovoltaics;

(B) the State of California has used rebate programs to install nearly 190 megawatts of grid-connected photovoltaics since 2000; and

(C) the State of New Jersey has installed nearly 50 megawatts of grid-connected photovoltaics since 2001, including 20 megawatts in 2007 alone; and

(7) Germany has installed nearly 4,000 megawatts of distributed solar photovoltaics and sustained an annual growth rate approaching 67 percent since enacting aggressive laws to encourage photovoltaic installations

(b) PROGRAM.—The Secretary of Energy (referred to in this section as the ''Secretary'') shall establish a program under which the Secretary shall provide rebates to eligible individuals or entities for the purchase and installation of photovoltaic systems for residential and commercial properties in order to install, over the 10-year period beginning on the date of enactment of this Act, at least an additional 10,000,000 solar systems in the United States (as compared to the number of solar systems installed in the United States as of the date of enactment of this Act) with a cumulative capacity of at least 30,000 megawatts.

(c) ELIGIBILITY.—

(1) IN GENERAL.—Subject to paragraph (2), to be eligible for a rebate under this section—

(A) the recipient of the rebate shall be a homeowner, business, nonprofit entity, or State or local government that purchased and installed a photovoltaic system for a property located in the United States;

(B) the total capacity of the photovoltaic system for the property shall not exceed 4 megawatts;

(C) the buildings on the property for which the photovoltaic system is installed shall—

(i) in the case of a new or renovated building, achieve a rating of not less than 75 under the Energy Star program established by section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a) (or an equivalent rating under an established benchmarking metric); and

(ii) in the case of any building not described in clause (i), be retrofitted to achieve a rating improvement of not less than 30 points under the Energy Star program (or an equivalent improvement under an established benchmarking metric); and

(D) the recipient of the rebate shall meet such other eligibility criteria as are determined to be appropriate by the Secretary.

(2) OTHER ENTITIES.—After public review and comment, the Secretary may identify other individuals or entities located in the United States that qualify for a rebate under this section.

(d) AMOUNT.—

(1) IN GENERAL.—Subject to paragraph (2), the amount of a rebate provided to an eligible individual or entity for the purchase and installation of a photovoltaic system for a property under this section shall be at least $3 for each watt of installed capacity.

(2) MAXIMUM AMOUNT.—The total amount of a rebate provided to an eligible individual or entity for the purchase and installation of a photovoltaic system for a property under this section shall not exceed 50 percent of the cost of the purchase and installation of the system.

(e) RELATIONSHIP TO OTHER LAW.—The authority provided under this section shall be in addition to any other authority under which credits or other types of financial assistance are provided for installation of a photovoltaic system for a property.

(f) ALLOCATION.—

(1) IN GENERAL.—Notwithstanding section 551, not later than 330 days before the beginning of each of calendar years 2012 through 2021, of the quantity of emission allowances established pursuant to section 201(a) that are made available under section 551 for each of those calendar years, the Administrator shall allocate a percentage to provide rebates under this section.

(2) QUANTITIES OF EMISSION ALLOWANCES ALLOCATED.—The quantities of emission allowances allocated pursuant to paragraph (1) shall be the quantities represented by the percentages in the following table:

Calendar year	Percentage for rebates under 10-million solar roofs program
2012	9.73
2013	9.19
2014	8.73
2015	8.33
2016	8.06
2017	7.82
2018	7.60
2019	7.42
2020	7.25
2021	7.01

SA 4840. Mr. SANDERS (for himself, Mr. MENENDEZ, and Mr. KERRY) submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title IX, add the following:

Subtitle C—Renewable Energy Standard

SEC. 921. RENEWABLE PORTFOLIO STANDARD.

(a) IN GENERAL.—Title VI of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.) is amended by adding at the end the following:

''SEC. 610. FEDERAL RENEWABLE PORTFOLIO STANDARD.

''(a) DEFINITIONS.—In this section:

''(1) BASE AMOUNT OF ELECTRICITY.—The term 'base amount of electricity' means the total amount of electricity sold by an electric utility to electric consumers in a calendar year, excluding municipal waste and electricity generated by a hydroelectric facility (including a pumped storage facility, but excluding incremental hydropower).

''(2) BIOMASS.—

''(A) IN GENERAL.—Except as otherwise provided in this paragraph, the term 'biomass' means—

''(i) cellulosic (plant fiber) organic materials from a plant that is planted for the purpose of being used to produce energy; or

''(ii) nonhazardous, plant or algal matter that is derived from any of—

''(I) an agricultural crop, crop byproduct or residue resource;

''(II) waste such as landscape or right-of-way trimmings (but not including municipal solid waste, recyclable postconsumer waste paper, painted, treated, or pressurized wood, or wood contaminated with plastic or metals);

''(III) gasified animal waste; or

''(IV) landfill methane.

''(B) NATIONAL FOREST LAND AND CERTAIN OTHER PUBLIC LAND.—With respect to organic material removed from National Forest System land or from public land administered by the Secretary of the Interior, the term 'biomass' means only organic material from—

''(i) ecological forest restoration;

''(ii) pre-commercial thinnings;

''(iii) brush;

''(iv) mill residues; and

''(v) slash.

''(C) EXCLUSION OF CERTAIN FEDERAL LAND.—Notwithstanding subparagraph (B), material or matter that would otherwise qualify as biomass shall not be included in the term 'biomass' if the material or matter is located on—

''(i) Federal land containing old growth forest or late successional forest, unless the Secretary of the Interior or the Secretary of Agriculture determines that the removal of organic material from the Federal land—

''(I) is appropriate for the applicable forest type; and

''(II) maximizes the retention of late-successional and large and old growth trees, late-successional and old growth forest structure, and late-successional and old growth forest composition;

''(ii) Federal land on which the removal of vegetation is prohibited, including components of the National Wilderness Preservation System;

''(iii) a Wilderness Study Area;

''(iv) an inventoried roadless area of Federal land;

''(v) any part of the National Landscape Conservation System; or

''(vi) a National Monument.

''(3) DISTRIBUTED GENERATION FACILITY.—The term 'distributed generation facility' means a facility at a customer site.

''(4) EXISTING RENEWABLE ENERGY.—The term 'existing renewable energy' means, except as provided in paragraph (8)(B), electric energy generated at a facility (including a distributed generation facility) placed in service prior to January 1, 2001, from solar, wind, or geothermal energy, ocean energy, biomass, or landfill gas.

''(5) GEOTHERMAL ENERGY.—The term 'geothermal energy' means energy derived from a geothermal deposit (within the meaning of section 613(e)(2) of the Internal Revenue Code of 1986).

''(6) INCREMENTAL GEOTHERMAL PRODUCTION.—

''(A) IN GENERAL.—The term 'incremental geothermal production' means for any year the excess of—

''(i) the total kilowatt hours of electricity produced from a facility (including a distributed generation facility) using geothermal energy; over

''(ii) the average annual kilowatt hours produced at such facility for 5 of the previous 7 calendar years before the date of enactment of this section after eliminating the highest and the lowest kilowatt hour production years in such 7-year period.

''(B) SPECIAL RULE.—A facility described in subparagraph (A) that was placed in service at least 7 years before the date of enactment of this section shall, commencing with the year in which such date of enactment occurs, reduce the amount calculated under subparagraph (A)(ii) each year, on a cumulative basis, by the average percentage decrease in the annual kilowatt hour production for the 7-year period described in subparagraph (A)(ii) with such cumulative sum not to exceed 30 percent.

''(7) INCREMENTAL HYDROPOWER.—

''(A) IN GENERAL.—The term 'incremental hydropower' means additional energy generated as a result of efficiency improvements or capacity additions made on or after January 1, 2001, or the effective date of an existing applicable State renewable portfolio standard program at a hydroelectric facility that was placed in service before that date.

''(B) EXCLUSION.—The term 'incremental hydropower' does not include additional energy generated as a result of operational changes not directly associated with efficiency improvements or capacity additions.

''(C) MEASUREMENT.—Efficiency improvements and capacity additions shall be measured on the basis of the same water flow information used to determine a historic average annual generation baseline for the hydroelectric facility and certified by the Secretary or the Federal Energy Regulatory Commission.

''(8) NEW RENEWABLE ENERGY.—The term 'new renewable energy' means—

''(A) electric energy generated at a facility (including a distributed generation facility) placed in service on or after January 1, 2001, from—

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

''(ii) biomass;

''(iii) landfill gas; or

''(iv) incremental hydropower; and

''(B) for electric energy generated at a facility (including a distributed generation facility) placed in service prior to the date of enactment of this section—

''(i) the additional energy above the average generation during the 3-year period ending on the date of enactment of this section at the facility from—

''(I) solar or wind energy or ocean energy;

''(II) biomass;

''(III) landfill gas; or

''(IV) incremental hydropower; and

''(ii) incremental geothermal production.

''(9) OCEAN ENERGY.—The term 'ocean energy' includes current, wave, tidal, and thermal energy.

''(b) RENEWABLE ENERGY REQUIREMENT.—

''(1) IN GENERAL.—Each electric utility that sells electricity to electric consumers shall obtain a percentage of the base amount of electricity the electric utility sells to electric consumers in any calendar year from new renewable energy or existing renewable energy.

''(2) MINIMUM ANNUAL PERCENTAGE.—The percentage obtained in a calendar year shall not be less than the amount specified in the following table:

''Calendar year:	Minimum annual percentage:
2010	1
2011	2
2012	4
2013	6
2014	8
2015	10
2016	12
2017	14
2018	16
2019	18
2020	20

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''(3) MEANS OF COMPLIANCE.—An electric utility shall meet the requirements of this subsection by—

''(A) submitting to the Secretary renewable energy credits issued under subsection (c);

''(B) making alternative compliance payments to the Secretary at the rate of 2 cents per kilowatt hour (as adjusted for inflation under subsection (h)); or

''(C) conducting a combination of activities described in subparagraphs (A) and (B).

''(c) RENEWABLE ENERGY CREDIT TRADING PROGRAM.—

''(1) IN GENERAL.—Not later than July 1, 2009, the Secretary shall establish a renewable energy credit trading program under which each electric utility shall submit to the Secretary renewable energy credits to certify the compliance of the electric utility with respect to obligations under subsection (b).

''(2) ADMINISTRATION.—As part of the program, the Secretary shall—

''(A) issue tradeable renewable energy credits to generators of electric energy from new renewable energy;

''(B) issue nontradeable renewable energy credits to generators of electric energy from existing renewable energy;

''(C) issue renewable energy credits to electric utilities associated with State renewable portfolio standard compliance mechanisms pursuant to subsection (i);

''(D) ensure that a kilowatt hour, including the associated renewable energy credit, shall be used only once for purposes of compliance with this section;

''(E) allow double credits for generation from facilities on Indian land, and triple credits for generation from small renewable distributed generators (meaning those no larger than 1 megawatt); and

''(F) ensure that, with respect to a purchaser that as of the date of enactment of this section has a purchase agreement from a renewable energy facility placed in service before that date, the credit associated with the generation of renewable energy under the contract is issued to the purchaser of the electric energy.

''(3) DURATION.—A credit described in subparagraph (A) or (B) of paragraph (2) may only be used for compliance with this section during the 3-year period beginning on the date of issuance of the credit.

''(4) TRANSFERS.—An electric utility that holds credits in excess of the quantity of credits needed to comply with subsection (b) may transfer the credits to another electric utility in the same utility holding company system.

''(5) DELEGATION OF MARKET FUNCTION.—The Secretary may delegate to an appropriate entity that establishes markets the administration of a national tradeable renewable energy credit market for purposes of creating a transparent national market for the sale or trade of renewable energy credits.

''(d) ENFORCEMENT.—

''(1) CIVIL PENALTIES.—Any electric utility that fails to meet the compliance requirements of subsection (b) shall be subject to a civil penalty.

''(2) AMOUNT OF PENALTY.—Subject to paragraph (3), the amount of the civil penalty shall be equal to the product obtained by multiplying—

''(A) the number of kilowatt-hours of electric energy sold to electric consumers in violation of subsection (b); by

''(B) the greater of—

''(i) 2 cents (adjusted for inflation under subsection (h)); or

''(ii) 200 percent of the average market value of renewable energy credits during the year in which the violation occurred.

''(3) MITIGATION OR WAIVER.—

''(A) IN GENERAL.—The Secretary may mitigate or waive a civil penalty under this subsection if the electric utility is unable to comply with subsection (b) for reasons outside of the reasonable control of the utility.

''(B) REDUCTION.—The Secretary shall reduce the amount of any penalty determined under paragraph (2) by an amount paid by the electric utility to a State for failure to comply with the requirement of a State renewable energy program if the State requirement is greater than the applicable requirement of subsection (b).

''(4) PROCEDURE FOR ASSESSING PENALTY.—The Secretary shall assess a civil penalty under this subsection in accordance with the procedures prescribed by section 333(d) of the Energy Policy and Conservation Act of 1954 (42 U.S.C. 6303).

''(e) STATE RENEWABLE ENERGY ACCOUNT PROGRAM.—

''(1) IN GENERAL.—Not later than December 31, 2008, the Secretary of the Treasury shall establish a State renewable energy account in the Treasury.

''(2) DEPOSITS.—

''(A) IN GENERAL.—All money collected by the Secretary from alternative compliance payments and the assessment of civil penalties under this section shall be deposited into the renewable energy account established under paragraph (1).

''(B) SEPARATE ACCOUNT.—The State renewable energy account shall be maintained as a separate account in the Treasury and shall not be transferred to the general fund of the Treasury.

''(3) USE.—Proceeds deposited in the State renewable energy account shall be used by the Secretary, subject to appropriations, for a program to provide grants to the State agency responsible for developing State energy conservation plans under section 362 of the Energy Policy and Conservation Act (42 U.S.C. 6322) for the purposes of promoting renewable energy production, including programs that promote technologies that reduce the use of electricity at customer sites such as solar water heating.

''(4) ADMINISTRATION.—The Secretary may issue guidelines and criteria for grants awarded under this subsection. State energy offices receiving grants under this section shall maintain such records and evidence of compliance as the Secretary may require.

''(5) PREFERENCE.—In allocating funds under this program, the Secretary shall give preference—

''(A) to States in regions which have a disproportionately small share of economically sustainable renewable energy generation capacity; and

''(B) to State programs to stimulate or enhance innovative renewable energy technologies.

''(f) RULES.—The Secretary shall issue rules implementing this section not later than 1 year after the date of enactment of this section.

''(g) EXEMPTIONS.—This section shall not apply in any calendar year to an electric utility—

''(1) that sold less than 4,000,000 megawatt-hours of electric energy to electric consumers during the preceding calendar year; or

''(2) in Hawaii.

''(h) INFLATION ADJUSTMENT.—Not later than December 31, 2008, and December 31 of

each year thereafter, the Secretary shall adjust for United States dollar inflation (as measured by the Consumer Price Index)—

''(1) the price of a renewable energy credit under subsection (c)(2); and

''(2) the amount of the civil penalty per kilowatt-hour under subsection (d)(2).

''(i) STATE PROGRAMS.—

''(1) IN GENERAL.—Nothing in this section diminishes any authority of a State or political subdivision of a State to adopt or enforce any law or regulation respecting renewable energy, but, except as provided in subsection (d)(3), no such law or regulation shall relieve any person of any requirement otherwise applicable under this section.

''(2) COORDINATION.—The Secretary, in consultation with States having such renewable energy programs, shall, to the maximum extent practicable, facilitate coordination between the Federal program and State programs.

''(3) REGULATIONS.—

''(A) IN GENERAL.—The Secretary, in consultation with States, shall promulgate regulations to ensure that an electric utility subject to the requirements of this section that is also subject to a State renewable energy standard receives renewable energy credits in relation to equivalent quantities of renewable energy associated with compliance mechanisms, other than the generation or purchase of renewable energy by the electric utility, including the acquisition of certificates or credits and the payment of taxes, fees, surcharges, or other financial compliance mechanisms by the electric utility or a customer of the electric utility, directly associated with the generation or purchase of renewable energy.

''(B) PROHIBITION ON DOUBLE COUNTING.—The regulations promulgated under this paragraph shall ensure that a kilowatt hour associated with a renewable energy credit issued pursuant to this subsection shall not be used for compliance with this section more than once.

''(j) RECOVERY OF COSTS.—

''(1) IN GENERAL.—The Commission shall issue and enforce such regulations as are necessary to ensure that an electric utility recovers all prudently incurred costs associated with compliance with this section.

''(2) APPLICABLE LAW.—A regulation under paragraph (1) shall be enforceable in accordance with the provisions of law applicable to enforcement of regulations under the Federal Power Act (16 U.S.C. 791a et seq.).

''(k) WIND ENERGY DEVELOPMENT STUDY.—The Secretary, in consultation with appropriate Federal and State agencies, shall conduct, and submit to Congress a report describing the results of, a study on methods to increase transmission line capacity for wind energy development.

''(l) SUNSET.—This section expires on December 31, 2040.''.

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. prec. 2601) is amended by adding at the end of the items relating to title VI the following:

''Sec. 609. Rural and remote communities electrification grants.

''Sec. 610. Federal renewable portfolio standard.''.

SA 4841. Mr. SANDERS (for himself and Mr. KERRY) submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle D of title VIII, add the following:

SEC. 833. GRANTS FOR DEVELOPMENT OR CONSTRUCTION OF CONCENTRATING SOLAR POWER PLANTS.

(a) GOAL.—It is the goal of this section to add, over the 10-year period beginning on the date of enactment of this Act, at least an additional 200,000 megawatts of renewable electric power from concentrating solar power plants.

(b) GRANTS.—The Secretary of Energy, in consultation with the Administrator, shall establish a program under which the Secretary shall provide grants to eligible entities to pay the Federal share of the cost of developing or constructing concentrating solar power plants.

(c) FEDERAL SHARE.—The Federal share of a grant under this section shall be 12.5 percent of the cost of developing or constructing a concentrating solar power plant.

(d) RELATIONSHIP TO OTHER LAW.—The authority provided under this section shall be in addition to any other authority under which credits or other types of financial assistance are provided for the development or construction of a concentrating solar power plant.

(e) ALLOCATION.—

(1) IN GENERAL.—Notwithstanding section 551, not later than 330 days before the beginning of each of calendar years 2012 through 2021, of the quantity of emission allowances established pursuant to section 201(a) that are made available under section 551 for each of those calendar years, the Administrator shall allocate a percentage to provide grants under this section.

(2) QUANTITIES OF EMISSION ALLOWANCES ALLOCATED.—The quantities of emission allowances allocated pursuant to paragraph (1) shall be the quantities represented by the percentages in the following table:

Calendar year	Percentage for grants for concentrating solar power plants
2012	9.7
2013	9.2
2014	8.7
2015	8.3
2016	8.1
2017	7.8
2018	7.6
2019	7.4
2020	7.3
2021	7.0.

SA 4842. Mr. ALLARD submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

Beginning on page 291, strike line 24 and all that follows through page 292, line 16.

On page 301, line 12, strike ''(a) IN GENERAL.—''.

On page 302, strike lines 6 through 22.

Beginning on page 306, strike line 17 and all that follows through page 307, line 9.

SA 4843. Mr. ALLARD submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

On page 64, strike lines 6 through 12 and insert the following:

(c) LEGAL STATUS.—

(1) IN GENERAL.—An emission allowance shall constitute a property right.

(2) COMPENSATION.—The Administrator shall provide to the holder of an emission allowance just compensation for the termination or limitation of the emission allowance.

SA 4844. Mr. MENENDEZ (for himself and Mr. KERRY) submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title XVI, add the following:

SEC. 16___. REPORT ON THE ECONOMIC IMPACTS OF CLIMATE CHANGE.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator shall enter into an arrangement with the National Academy of Sciences (referred to in this section as the ''Academy''), under which the Academy shall, not later than January 1, 2011, and every 5 years thereafter, submit to the Administrator and make available to the public a report that assesses the costs of climate change on the United States economy, including the costs associated with hurricanes and other storms, drought, hunger, water shortages, and coastal flooding.

(b) INITIAL REPORT.—

(1) REQUIREMENTS.—The initial report required under subsection (a) shall—

(A) include an analysis of the economic, social, and environmental consequences of climate change in the United States if action is not taken to reduce global greenhouse gas emissions;

(B) take into account the risks of increased climate volatility and major irreversible impacts of climate change;

(C) be organized by region of the United States;

(D) identify—

(i) the key economic and environmental effects from climate change; and

(ii) the main impacts to be expected from climate change, including impacts on—

(I) agriculture and forestry;

(II) the food supply;

(III) energy;

(IV) transportation;

(V) fisheries;

(VI) coastal impacts and habitability;

(VII) recreation and tourism;

(VIII) public health;

(IX) water quantity and quality;

(X) low-income consumers; and

(XI) ecosystems, such as forests, rivers, and lakes;

(E) include estimates of costs of the main impacts of climate change identified under subparagraph (D)(ii);

(F) express in monetary terms the cost of climate change on each sector of the economy on a regional basis and to the United States as a whole;

(G) make predictions for the economic cost of climate change in the United States for each decade beginning in 2020 and ending in 2100; and

(H) reference the latest information available from—

(i) the U.S. Global Change Research Program; and

(ii) the Intergovernmental Panel on Climate Change.

(2) LIMITATION.—The initial report shall not take into account any possible adaptations to the effects of climate change, including the construction of levies or other infrastructure adjustments.

(c) SUBSEQUENT REPORTS.—In addition to including the components required under subsection (b)(1), any report submitted after the date of the initial report shall include an estimate of the savings to the United States economy achieved due to any reduced climate change impacts associated with reductions in greenhouse gas emissions since the submission of the previous report.

SA 4845. Mr. MENENDEZ (for himself, Mr. LAUTENBERG, and Mr. SANDERS) submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

Beginning on page 196, strike line 15 and all that follows through page 198, line 16.

At the end of section 614(d)(1), add the following:

(W) To promote the development of renewable-energy sources, as defined in section 832(a).

At the end of section 614, add the following:

(e) ADDITIONAL ALLOCATION.—

(1) IN GENERAL.—In addition to the allocation made under subsection (a), not later than 330 days before the beginning of each of calendar years 2012 through 2030, the Administrator shall allocate a percentage of the quantity of emission allowances established pursuant to section 201(a) that are made available for that calendar year for distribution to reduce greenhouse gas emissions and promote renewable electricity generation in accordance with this subsection.

(2) QUANTITIES OF EMISSION ALLOWANCES ALLOCATED.—The quantities of emission allowances allocated pursuant to paragraph (1) shall be the quantities represented by the percentages in the following table:

Calendar year	Percentage for additional allocation
2012	2
2013	2
2014	2
2015	2
2016	2
2017	2
2018	1
2019	1
2020	1
2021	1
2022	1
2023	1
2024	1
2025	1
2026	1
2027	1
2028	1
2029	1
2030	1

(3) USE.—During any calendar year, of the total quantity of allowances allocated to a State under this section, a State shall use at least 25 percent to promote renewable electricity generation under subsection (d)(1)(W).

In section 832(b), strike ''start-up, expansion, and operation of the facilities'' and insert ''start-up or expansion of the facilities''.

SA 4846. Mr. MENENDEZ (for himself and Mr. KERRY) submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

Strike the table that appears on page 193, before line 1, and insert the following:

Calendar year	Percentage for distribution among fossil fuel-fired electricity generators in United States
2012	16.5
2013	16.5
2014	16.5
2015	16.5
2016	16.25
2017	16
2018	15.75
2019	14.75
2020	13.5
2021	12
2022	9.75
2023	8.75
2024	7.5
2025	7.25
2026	4.25
2027	3
2028	2.75
2029	1.5
2030	1.25.

On page 426, strike lines 14 through 16 and insert the following:

section—

(1) for each of calendar years 2012 through 2030, 2.5 percent of the aggregate quantity of emission allowances established for the applicable calendar year pursuant to section 201(a); and

(2) for each of calendar years 2031 through 2050, 1 percent of the aggregate quantity of emission allowances established for the applicable calendar year pursuant to section 201(a).

SA 4847. Mr. MENENDEZ (for himself, Mr. LAUTENBERG, and Mr. SANDERS) submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

In section 551(a), strike''2030'' and insert ''2022''.

In section 551(b), strike the table and insert the following:

Calendar year	Percentage for distribution among fossil fuel-fired electricity generators in United States
2012	18
2013	16.25
2014	14.5
2015	12.75
2016	11
2017	9.25
2018	7.5
2019	5.75
2020	4
2021	2.25
2022	0.5

In section 552(a), strike''2030'' and insert ''2022''.

At the end of section 614(d)(1), add the following:

(W) To promote the development of renewable-energy sources, as defined in section 832(a).

(X) To provide funding to pay the costs of training for climate change adjustment assistance-eligible individuals under section 535(h).

At the end of section 614, add the following:

(e) ADDITIONAL ALLOCATION.—

(1) IN GENERAL.—In addition to the allocation made under subsection (a), not later than 330 days before the beginning of each of calendar years 2012 through 2030, the Administrator shall allocate a percentage of the quantity of emission allowances established pursuant to section 201(a) that are made available for that calendar year for distribution to reduce greenhouse gas emissions, promote renewable electricity generation, assist low-income consumers, train workers, and improve energy efficiency in accordance with this subsection.

(2) QUANTITIES OF EMISSION ALLOWANCES ALLOCATED.—The quantities of emission allowances allocated pursuant to paragraph (1) shall be the quantities represented by the percentages in the following table:

Calendar year	Percentage for additional allocation
2012	0
2013	1.75
2014	3.5
2015	5.25
2016	6.75
2017	8.25
2018	9.75
2019	10.5
2020	11
2021	11.25
2022	10.75
2023	10.25
2024	9
2025	8.75
2026	5.75
2027	4.5
2028	4.25
2029	3

Calendar year	Percentage for additional allocation
2030	2.75

(3) USE.—During any calendar year, of the total quantity of allowances allocated to a State under this section, a State shall use—

(A) at least 20 percent to promote renewable electricity generation under subsection (d)(1)(W);

(B) at least 10 percent to promote energy efficiency under subsection (d)(1)(B);

(C) at least 15 percent to train workers under subsection (d)(1)(X); and

(D) at least 5 percent to mitigate impacts on low-income energy consumers under subsection (d)(1)(A).

In section 832(b), strike ''start-up, expansion, and operation of the facilities'' and insert ''start-up or expansion of the facilities''.

SA 4848. Mr. NELSON of Nebraska submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

SEC. _____. NATIONAL COMMISSION ON ENERGY POLICY AND GLOBAL CLIMATE CHANGE.

(a) ESTABLISHMENT.—There is established a commission, to be known as the ''National Commission on Energy Policy and Global Climate Change'' (referred to in this section as the ''Commission'').

(b) PURPOSES.—The purposes of the Commission are—

(1) to examine all aspects of the national energy situation and related policies in order to develop a comprehensive, economy-wide policy approach to energy issues;

(2) to examine relevant data relating to global climate change, including impacts of human activities; and

(3) to report to Congress and the President the findings, conclusions, and recommendations of the Commission for legislation to establish a comprehensive national energy policy that ensures national energy security and significantly reduces greenhouse gas emissions in order to address global climate change without damaging the economy.

(c) COMPOSITION.—

(1) MEMBERSHIP.—The Commission shall be composed of 12 members, of whom—

(A) 1 shall be jointly appointed by the Majority Leader of the Senate and the Speaker of the House of Representatives, who shall serve as Chairperson of the Commission;

(B) 1 shall be jointly appointed by the Minority Leader of the Senate and the Minority Leader of the House of Representatives, who shall serve as Vice-Chairperson of the Commission;

(C) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Environment and Public Works of the Senate;

(D) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Natural Resources of the House of Representatives, in consultation with the Select Committee on Energy Independence and Global Warming of the House of Representatives;

(E) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Energy and Natural Resources of the Senate;

(F) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Energy and Commerce of the House of Representatives;

(G) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Commerce, Science, and Transportation of the Senate;

(H) 1 shall be jointly appointed by the Chairpersons and Ranking Members of the Committees on Science and Technology and Transportation and Infrastructure of the House of Representatives;

(I) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Agriculture, Nutrition, and Forestry of the Senate;

(J) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Agriculture of the House of Representatives;

(K) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Finance of the Senate; and

(L) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Ways and Means of the House of Representatives.

(2) QUALIFICATIONS.—

(A) POLITICAL PARTY AFFILIATION.—An appointment of a member of the Commission under paragraph (1) shall be made—

(i) without regard to the political party affiliation of the member; and

(ii) on a nonpartisan basis.

(B) NONGOVERNMENTAL APPOINTEES.—A member appointed to the Commission under paragraph (1) shall not be an officer or employee of—

(i) the Federal Government; or

(ii) any unit of State or local government.

(C) SENSE OF CONGRESS REGARDING OTHER QUALIFICATIONS.—It is the sense of Congress that members appointed to the Commission under paragraph (1) should be prominent, nationally recognized United States citizens, with a significant depth of experience in professions such as governmental service, science, energy, economics, the environment, agriculture, manufacturing, public administration, and commerce (including aviation matters).

(3) DEADLINE FOR APPOINTMENTS.—All members of the Commission shall be appointed by not later than 90 days after the date of enactment of this Act.

(4) MEETINGS.—

(A) INITIAL MEETING.—The Commission shall hold the initial meeting of the Commission as soon as practicable, and not later than 60 days, after the date on which all members of the Commission are appointed.

(B) SUBSEQUENT MEETINGS.—After the initial meeting under subparagraph (A), the Commission shall meet at the call of—

(i) the Chairperson; or

(ii) a majority of the members of the Commission.

(5) QUORUM.—7 members of the Commission shall constitute a quorum.

(6) VACANCIES.—A vacancy on the Commission—

(A) shall not affect the powers of the Commission; and

(B) shall be filled in the same manner in which the original appointment was made.

(d) DUTIES.—

(1) IN GENERAL.—The Commission shall—

(A) study and evaluate relevant data, studies, and proposals relating to national energy policies and policies to address global climate change, including any relevant legislation, Executive order, regulation, plan, policy, practice, or procedure relating to—

(i) domestic production and consumption of energy from all sources and imported sources of energy, particularly oil and natural gas;

(ii) domestic and international oil and gas exploration, production, refining, and pipelines and other forms of infrastructure and transportation;

(iii) energy markets, including energy market speculation, transparency, and oversight;

(iv) the structure of the energy industry, including the impacts of consolidation, antitrust, and oligopolistic concerns, market manipulation and collusion concerns, and other similar matters;

(v) electricity production and transmission issues, including fossil fuels, renewable energy, energy efficiency, and energy conservation matters;

(vi) transportation fuels, biofuels and other renewable fuels, fuel cells, motor vehicle power systems, efficiency, and conservation; and

(vii) nuclear energy, including matters relating to permitting, regulation, and legal liability;

(B) examine relevant data relating to global climate change and the national and global environment, including—

(i) the impacts on the global climate system and the environment of human activities, particularly greenhouse gas emissions and pollution; and

(ii) the consequences of global climate change on humans and other species, particularly consequences to the national security, economy, and public health and safety of the United States;

(C) identify, review, and evaluate the lessons of past energy policies, energy crises, environmental problems, and attempts to address global climate change;

(D) evaluate proposals for energy and global climate change policies, including proposals developed by Members of Congress, congressional Committees, relevant Federal, regional, and State government agencies, nongovernmental organizations, independent organizations, and international organizations, with the goal of expanding those proposals to develop a blueprint for comprehensive energy and global climate change legislation; and

(E) submit to Congress and the President the reports required under subsection (h).

(2) RELATIONSHIP TO EFFORTS OF CONGRESS.—The Commission shall—

(A) review the information compiled by, and the findings, conclusions, and recommendations of, congressional Committees of relevant jurisdiction; and

(B) based on the results of the review, pursue any appropriate inquiry that the Commission determines to be necessary to carry out the duties of the Commission under paragraph (1).

(e) POWERS.—

(1) IN GENERAL.—

(A) RULES.—The Commission may establish such rules relating to administrative procedures as are reasonably necessary to enable the Commission to carry out this section.

(B) HEARINGS AND EVIDENCE.—

(i) IN GENERAL.—The Commission or any subcommittee or member of the Commission may, for the purpose of carrying out this section—

(I) hold such hearings and sit and act at such times and places, take such testimony, receive such evidence, and administer such oaths as the Commission determines to be appropriate; and

(II) subject to paragraph (2)(A), require, by subpoena or otherwise, the attendance and testimony of such witnesses and the production of such books, records, correspondence,

memoranda, papers, and documents, as the Commission determines to be necessary.

(ii) PUBLIC REQUIREMENT.—In accordance with applicable laws (including regulations) and Executive orders regarding protection of information acquired by the Commission, the Commission shall ensure that, to the maximum extent practicable—

(I) all hearings of the Commission are open to the public, including by—

(aa) providing live and recorded public access to hearings on the Internet; and

(bb) publishing all transcripts and records of hearings at such time and in such manner as is agreed to by the majority of members of the Commission; and

(II) all findings and reports of the Commission are made public.

(2) SUBPOENAS.—

(A) ISSUANCE.—

(i) IN GENERAL.—A subpoena may be issued under this subsection only—

(I) on agreement of the Chairperson and Vice-Chairperson of the Commission; or

(II) on the affirmative vote of at least 6 members of the Commission.

(ii) SIGNATURE.—Subject to clause (i), a subpoena issued under this paragraph may be—

(I) issued under the signature of the Chairperson of the Commission (or a designee who is a member of the Commission); and

(II) served by any individual or entity designated by the Chairperson or designee.

(B) ENFORCEMENT.—

(i) IN GENERAL.—In the case of contumacy or failure to obey a subpoena issued under subparagraph (A), the United States district court for the judicial district in which the subpoenaed individual or entity resides, is served, or may be found, or to which the subpoena is returnable, may issue an order requiring the individual or entity to appear at a designated place to testify or to produce documentary or other evidence.

(ii) FAILURE TO OBEY.—

(I) IN GENERAL.—A failure to obey the order of a United States district court under clause (i) may be punished by the United States district court as a contempt of the court.

(II) ENFORCEMENT BY COMMISSION.—In the case of failure of a witness to comply with a subpoena, or to testify if summoned pursuant to this paragraph—

(aa) the Commission, by majority vote, may certify to the appropriate United States Attorney a statement of fact regarding the failure; and

(bb) the United States Attorney may bring the matter before the grand jury for action in accordance with sections 102 through 104 of the Revised Statutes (2 U.S.C. 192 et seq.).

(3) CONTRACTING.—To the extent amounts are made available in appropriations Acts, the Commission may enter into contracts to assist the Commission in carrying out the duties of the Commission under this section.

(4) INFORMATION FROM FEDERAL AGENCIES.—

(A) IN GENERAL.—The Commission may secure directly from a Federal agency such information as the Commission considers to be necessary to carry out this section.

(B) PROVISION OF INFORMATION.—On request of the Chairperson of the Commission, the head of the agency shall provide the information to the Commission.

(C) TREATMENT.—Information provided to the Commission under this paragraph shall be received, handled, stored, and disseminated by members and staff of the Commission in accordance with applicable law (including regulations) and Executive orders.

(5) ASSISTANCE FROM FEDERAL AGENCIES.—

(A) GENERAL SERVICES ADMINISTRATION.—The Administrator of General Services shall provide to the Commission, on a reimbursable basis, administrative support and other services to assist the Commission in carrying out the duties of the Commission under this section.

(B) OTHER DEPARTMENTS AND AGENCIES.—In addition to the assistance described in subparagraph (A), any other Federal department or agency may provide to the Commission such services, funds, facilities, staff, and other support as the head of the department or agency determines to be appropriate.

(6) POSTAL SERVICES.—The Commission may use the United States mails in the same manner and under the same conditions as other agencies of the Federal Government.

(7) GIFTS.—The Commission may accept, use, and dispose of gifts or donations of services or property only in accordance with the ethical rules applicable to congressional officers and employees.

(8) VOLUNTEER SERVICES.—

(A) IN GENERAL.—Notwithstanding section 1342 of title 31, United States Code, the Commission may accept and use the services of volunteers serving without compensation.

(B) REIMBURSEMENT.—The Commission may reimburse a volunteer for office supplies, local travel expenses, and other travel expenses, including per diem in lieu of subsistence, in accordance with section 5703 of title 5, United States Code.

(C) TREATMENT.—A volunteer of the Commission shall be considered to be an employee of the Federal Government in carrying out activities for the Commission, for purposes of—

(i) chapter 81 of title 5, United States Code;

(ii) chapter 11 of title 18, United States Code; and

(iii) chapter 171 of title 28, United States Code.

(f) COMMISSION PERSONNEL MATTERS.—

(1) COMPENSATION OF MEMBERS.—A member of the Commission shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for level IV of the Executive Schedule under section 5315 of title 5, United States Code, for each day (including travel time) during which the member is engaged in the performance of the duties of the Commission.

(2) TRAVEL EXPENSES.—A member of the Commission shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for an employee of an agency under subchapter I of chapter 57 of title 5, United States Code, while away from the home or regular place of business of the member in the performance of the duties of the Commission.

(3) STAFF.—

(A) IN GENERAL.—The Chairperson of the Commission may, without regard to the civil service laws (including regulations), appoint and terminate an executive director and such other additional personnel as are necessary to enable the Commission to perform the duties of the Commission.

(B) CONFIRMATION OF EXECUTIVE DIRECTOR.—The employment of an executive director shall be subject to confirmation by the Commission.

(C) COMPENSATION.—

(i) IN GENERAL.—Except as provided in clause (ii), the Chairperson of the Commission may fix the compensation of the executive director and other personnel without regard to the provisions of chapter 51 and subchapter III of chapter 53 of title 5, United States Code, relating to classification of positions and General Schedule pay rates.

(ii) MAXIMUM RATE OF PAY.—The rate of pay for the executive director and other personnel shall not exceed the rate payable for level V of the Executive Schedule under section 5316 of title 5, United States Code.

(D) STATUS.—The executive director and any employee (not including any member) of the Commission shall be considered to be employees under section 2105 of title 5, United States Code, for purposes of chapters 63, 81, 83, 84, 85, 87, 89, and 90 of that title.

(E) CONSULTANT SERVICES.—The Commission may procure the services of experts and consultants in accordance with section 3109 of title 5, United States Code, at rates not to exceed the daily rate paid to an individual occupying a position at level IV of the Executive Schedule under section 5315 of title 5, United States Code.

(g) NONAPPLICABILITY OF FACA.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Commission.

(h) REPORTS.—

(1) INTERIM REPORTS.—Not later than June 1, 2009, and thereafter as the Commission determines to be appropriate, the Commission shall submit to Congress and the President an interim report describing the findings and recommendations agreed to by a majority of members of the Commission during the period beginning on the date on which, as applicable—

(A) all members of the Commission are appointed under subsection (c); or

(B) the most recent interim report was submitted under this paragraph.

(2) FINAL REPORT.—Not later than 18 months after the date on which all members of the Commission are appointed under subsection (c), the Commission shall submit to Congress and the President a final report establishing a plan for development of legislation for a comprehensive national policy relating to energy security that—

(A) addresses global climate change; and

(B) describes the findings and recommendations agreed to by a majority of members of the Commission.

(i) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Commission such sums as are necessary to carry out this section, to remain available until the later of—

(1) the date on which the funds are expended; or

(2) the date of termination of the Commission under subsection (j).

(j) TERMINATION.—

(1) IN GENERAL.—The Commission shall terminate on the date that is 60 days after the date on which the final report is submitted under subsection (h)(2).

(2) ADMINISTRATIVE ACTIVITIES BEFORE TERMINATION.—During the 60-day period described in paragraph (1), the Commission may conclude the activities of the Commission, including—

(A) providing testimony to appropriate committees of Congress regarding the reports of the Commission; and

(B) publishing the final report of the Commission.

SA 4849. Mr. BAUCUS submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title XVII, add the following:

Subtitle H—Committees of Appropriate Jurisdiction

SEC. 1771. COMMITTEES OF APPROPRIATE JURISDICTION.

No revenue or outlays may be disbursed from any fund established in the Treasury of the United States by this Act, except pursuant to legislation reported by the congressional Committees of appropriate jurisdiction and subsequently enacted by Congress.

SA 4850. Mr. BAUCUS submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

On page 31, between lines 9 and 10, insert the following:

(50) TAX RELIEF FUND.—The term ''Tax Relief Fund'' means the fund established by section 581.

On page 31, line 10, strike ''(50)'' and insert ''(51)''.

On page 31, line 14, strike ''(51)'' and insert ''(52)''.

On page 161, strike lines 9 through 12.

On page 161, lines 15 and 16, strike ''Climate Change Worker Training and Assistance'' and insert ''Tax Relief Fund''.

On page 161, lines 23 and 24, strike ''Climate Change Worker Training and Assistance'' and insert ''Tax Relief Fund''.

In the heading of the right column of the table contained on page 162, after line 17, strike ''Climate Change Worker Training and Assistance'' and insert ''Tax Relief Fund''.

On page 163, lines 4 and 5, strike ''Climate Change Worker Training and Assistance'' and insert ''Tax Relief Fund''.

Beginning on page 163, strike line 6 and all that follows through page 183, line 3.

On page 201, strike lines 20 through 23 and insert the following:

SEC. 581. ESTABLISHMENT OF TAX RELIEF FUND.

There is established in the Treasury of the United States a fund, to be known as the ''Tax Relief Fund''.

On page 202, strike lines 3 and 4 and insert the following:

(b) and (c) and in addition to other auctions conducted pursuant to this Act, to raise funds for deposit in the Tax Relief Fund, for each of calendar

On page 202, lines 10 and 11, strike ''Climate Change Consumer Assistance'' and insert ''Tax Relief Fund''.

In the heading of the right column of the table contained on page 203, after line 2, strike ''Climate Change Consumer Assistance'' and insert ''Tax Relief Fund''.

On page 204, lines 1 and 2, strike ''Climate Change Consumer Assistance'' and insert ''Tax Relief Fund''.

On page 204, strike lines 3 through 14 and insert the following:

SEC. 584. SENSE OF SENATE REGARDING USE OF AMOUNTS IN TAX RELIEF FUND.

It is the Sense of the Senate that the Secretary of the Treasury should use amounts deposited in the Tax Relief Fund pursuant to this Act for each calendar year to provide tax relief to consumers in the United States.

Beginning on page 204, strike line 22 and all that follows through page 217, line 4, and insert the following:

SEC. 601. AUCTIONS FOR TAX RELIEF.

(a) AUCTION.—

(1) FIRST PERIOD.—Not later than 330 days before the beginning of calendar year 2012, the Administrator shall auction 12.75 percent of the quantity of emission allowances established pursuant to section 201(a) for that calendar year.

(2) SECOND PERIOD.—Not later than 330 days before the beginning of each of calendar years 2013 through 2025, the Administrator shall auction 13 percent of the quantity of emission allowances established pursuant to section 201(a) for that calendar year.

(3) THIRD PERIOD.—Not later than 330 days before the beginning of each of calendar years 2026 through 2050, the Administrator shall auction 13.5 percent of the quantity of emission allowances established pursuant to section 201(a) for that calendar year.

(b) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to subsection (a) in the Tax Relief Fund for use in accordance with section 584.

On page 217, strike lines 8 through 16 and insert the following:

(1) IN GENERAL.—Not later than 330 days before the beginning of each of calendar years 2012 through 2050, the Administrator shall auction a percentage of the quantity of emission allowances established pursuant to section 201(a) for the applicable calendar year, in accordance with the table contained in paragraph (2).

On page 217, line 19, strike ''allocate to States described in'' and insert ''auction under''.

In the heading of the right column of the table contained on page 217, after line 21, strike ''allocation among States relying heavily on manufacturing and on coal'' and insert ''auction''.

Beginning on page 218, strike line 1 and all that follows through page 222, line 4, and insert the following:

(b) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to subsection (a) in the Tax Relief Fund, for use in accordance with section 584.

Beginning on page 222, strike line 8 and all that follows through page 223, line 11, and insert the following:

SEC. 611. AUCTIONS FOR TAX RELIEF.

(a) AUCTION OF ALLOWANCES.—In accordance with subsections (b) and (c), for each of calendar years 2012 through 2050, the Administrator shall auction a quantity of the emission allowances established pursuant to section 201(a) for each calendar year.

(b) NUMBER; FREQUENCY.—For each calendar year during the period described in subsection (a), the Administrator shall—

(1) conduct not fewer than 4 auctions; and

(2) schedule the auctions in a manner to ensure that—

(A) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(B) the interval between each auction is of equal duration.

(c) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—For each calendar year of the period described in subsection (a), the Administrator shall auction a quantity of emission allowances in accordance with the applicable percentages described in the following table:

In the heading of the right column of the table contained on page 223, after line 11, strike ''for public transportation''.

Beginning on page 224, strike line 1 and all that follows through page 228, line 25, and insert the following:

(d) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to this section, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

On page 240, strike lines 5 through 17 and insert the following:

(a) IN GENERAL.—In accordance with subsection (b), for each of calendar years 2012 through 2050, the Administrator shall—

(1) auction 2 percent of the emission allowances established pursuant to section 201(a) for the calendar year; and

(2) immediately on completion of an auction, deposit the proceeds of the auction in the Tax Relief Fund, for use in accordance with section 584.

On page 241, strike lines 6 through 21 and insert the following:

(a) AUCTION.—

(1) IN GENERAL.—Not later than 330 days before the beginning of each of calendar years 2012 through 2050, the Administrator shall auction a percentage of the quantity of emission allowances established pursuant to section 201(a) for the applicable calendar year, in accordance with paragraph (2).

(2) PERCENTAGES FOR AUCTION.—For each of calendar years 2012 through 2050, the Administrator shall auction in accordance with paragraph (1) the percentage of emission allowances specified in the following table:

In the heading of the right column of the table contained on page 241, after line 21, strike ''State leaders in reducing greenhouse gas emissions and improving energy efficiency'' and insert ''auction''.

Beginning on page 242, strike line 1 and all that follows through page 249, line 9, and insert the following:

(b) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to this section, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

On page 249, strike lines 13 through 24 and insert the following:

SEC. 621. AUCTIONS.

(a) IN GENERAL.—Not later than 330 days before the beginning of each of calendar years 2012 through 2050, the Administrator shall auction a percentage of the quantity of emission allowances established pursuant to section 201(a) for the applicable calendar year, in accordance with subsection (b).

(b) PERCENTAGES FOR ALLOCATION.—For each of calendar years 2012 through 2050, the Administrator shall auction in accordance with subsection (a) the per-

In the heading of the right column of the table contained on page 250, after line 2, strike ''States and Indian tribes for adaptation activities'' and insert ''auction''.

Beginning on page 250, strike line 3 and all that follows through page 267, line 11, and insert the following:

SEC. 622. USE OF PROCEEDS.

The Administrator shall deposit all proceeds of auctions conducted pursuant to this subtitle, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

Beginning on page 283, strike line 14 and all that follows through page 292, line 16, and insert the following:

SEC. 801. AUCTIONS FOR TAX RELIEF.

(a) FIRST PERIOD.—Not later than 330 days before the beginning of each of calendar years 2012 through 2030, the Administrator shall auction 6.25 percent of the emission allowances established pursuant to section 201(a) for that calendar year.

(b) SECOND PERIOD.—Not later than 330 days before the beginning of each of calendar years 2031 through 2050, the Administrator shall auction 3.25 percent of the emission allowances established pursuant to section 201(a) for that calendar year.

(c) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to this section, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

Beginning on page 292, strike line 22 and all that follows through page 302, line 22, and insert the following:

SEC. 901. AUCTIONS FOR TAX RELIEF.

(a) FIRST PERIOD.—

(1) IN GENERAL.—For each of calendar years 2012 through 2021, the Administrator shall auction 1.75 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year, in accordance with paragraph (2).

(2) NUMBER; FREQUENCY.—For each calendar year during the period described in paragraph (1), the Administrator shall—

(A) conduct not fewer than 4 auctions; and

(B) schedule the auctions in a manner to ensure that—

(i) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(ii) the interval between each auction is of equal duration.

(b) SECOND PERIOD.—

(1) IN GENERAL.—For each of calendar years 2022 through 2030, the Administrator shall auction 2 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year, in accordance with paragraph (2).

(2) NUMBER; FREQUENCY.—For each calendar year during the period described in paragraph (1), the Administrator shall—

(A) conduct not fewer than 4 auctions; and

(B) schedule the auctions in a manner to ensure that—

(i) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(ii) the interval between each auction is of equal duration.

(c) THIRD PERIOD.—

(1) IN GENERAL.—For each of calendar years 2031 through 2050, the Administrator shall auction 1 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year, in accordance with paragraph (2).

(2) NUMBER; FREQUENCY.—For each calendar year during the period described in paragraph (1), the Administrator shall—

(A) conduct not fewer than 4 auctions; and

(B) schedule the auctions in a manner to ensure that—

(i) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(ii) the interval between each auction is of equal duration.

(d) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to this section, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

Beginning on page 303, strike line 2 and all that follows through page 304, line 7, and insert the following:

SEC. 911. AUCTIONS FOR TAX RELIEF.

(a) IN GENERAL.—For each of calendar years 2012 through 2050, the Administrator shall auction 0.25 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year, in accordance with subsection (b).

(b) NUMBER; FREQUENCY.—For each calendar year during the period described in subsection (a), the Administrator shall—

(1) conduct not fewer than 4 auctions; and

(2) schedule the auctions in a manner to ensure that—

(A) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(B) the interval between each auction is of equal duration.

(c) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to this section, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

Beginning on page 304, strike line 9 and all that follows through page 307, line 19, and insert the following:

Subtitle A—Auctions for Tax Relief

SEC. 1001. AUCTIONS FOR TAX RELIEF.

(a) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, and annually thereafter through 2022, the Administrator shall auction 1 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year that occurs 3 years after the calendar year during which the auction is conducted.

(b) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to this section, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

SEC. 1002. ADDITIONAL AUCTIONS.

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall auction

In the heading of the right column of the table contained on page 307, after line 22, strike ''allocation to Bonus Allowance Account'' and insert ''auction''.

Beginning on page 308, strike line 1 and all that follows through page 318, line 4, and insert the following:

(b) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to this section, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

Beginning on page 330, strike line 8 and all that follows through page 332, line 9, and insert the following:

SEC. 1101. AUCTIONS FOR TAX RELIEF.

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall auction 0.5 percent of the quantity of emission allowances established pursuant to section 201(a) for calendar years 2012 through 2017.

(b) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to this section, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

Beginning on page 332, strike line 12 and all that follows through page 338, line 5, and insert the following:

SEC. 1111. AUCTIONS.

(a) IN GENERAL.—For each of calendar years 2012 through 2050, the Administrator shall auction 1 percent of the quantity of emission allowances established pursuant to section 201(a) for the calendar year, in accordance with subsection (b).

(b) NUMBER; FREQUENCY.—For each calendar year during the period described in subsection (a), the Administrator shall—

(1) conduct not fewer than 4 auctions; and

(2) schedule the auctions in a manner to ensure that—

(A) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(B) the interval between each auction is of equal duration.

(c) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to this section, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

Beginning on page 338, strike line 7 and all that follows through page 340, line 21, and insert the following:

SEC. 1121. AUCTIONS FOR TAX RELIEF.

(a) AUCTIONS.—

(1) FIRST PERIOD.—Not later than 330 days before the beginning of each of calendar years 2012 and 2013, the Administrator shall auction 1 percent of the emission allowances established pursuant to section 201(a) for that calendar year.

(2) SECOND PERIOD.—Not later than 330 days before the beginning of each of calendar years 2014 through 2017, the Administrator shall auction 0.75 percent of the emission allowances established pursuant to section 201(a) for that calendar year.

(3) THIRD PERIOD.—Not later than 330 days before the beginning of each of calendar years 2018 through 2030, the Administrator shall auction 1 percent of the emission allowances established pursuant to section 201(a) for that calendar year.

(b) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to this section, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

Beginning on page 426, strike line 1 and all that follows through page 442, line 2, and insert the following:

SEC. 1312. AUCTIONS FOR TAX RELIEF.

(a) AUCTIONS.—For each of calendar years 2012 through 2050, the Administrator shall auction a quantity of allowances described in subsection (b) established pursuant to section 201(a) for that calendar year.

(b) QUANTITY OF ALLOWANCES.—The quantity of allowances referred to in subsection (a) is, with respect to each applicable calendar year—

(1) 1 percent of the quantity of emission allowances established for that calendar year; and

(2) of the quantity of offset allowances established for that calendar year—

(A) the number of offset allowances that the Administrator determines to be appropriate; but

(B) in no case more than 10 percent of the quantity of emission allowances established for that calendar year.

(c) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to this section, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

SEC. 1313. ADDITIONAL AUCTIONS.

(a) AUCTIONS.—

(1) IN GENERAL.—For each of calendar years 2012 through 2017, the Administrator shall auction 0.5 percent of the emission allowances established pursuant to section 201(a) for the calendar year, in accordance with paragraph (2).

(2) NUMBER; FREQUENCY.—For each calendar year during the period described in paragraph (1), the Administrator shall—

(A) conduct not fewer than 4 auctions; and

(B) schedule the auctions in a manner to ensure that—

(i) each auction takes place during the period beginning 330 days before, and ending 60 days before, the beginning of each calendar year; and

(ii) the interval between each auction is of equal duration.

(b) USE OF PROCEEDS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to this section, immediately on receipt of those proceeds, in the Tax Relief Fund, for use in accordance with section 584.

SA 4851. Mr. BARRASSO submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title XII, add the following:

Subtitle E—Carbon Output Reduction Plans for National Forest Land and Resource Management Areas

SEC. 1241. CARBON OUTPUT REDUCTION PLANS.

(a) DEFINITIONS.—In this section:

(1) MANAGEMENT PLAN.—The term ''management plan'' means—

(A) a National Forest management plan under—

(i) the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1600 et seq.); and

(ii) the National Forest Management Act of 1976 (16 U.S.C. 1600 et seq.); and

(B) a resource management plan under the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.).

(2) SECRETARY.—The term ''Secretary'' means—

(A) with respect to subsection (b), the Secretary of Agriculture (acting through the Chief of the Forest Service); and

(B) with respect to subsection (c) the Secretary of the Interior (acting through the Director of the Bureau of Land Management).

(b) NATIONAL FOREST LAND MANAGED BY THE SECRETARY OF AGRICULTURE.—

(1) CARBON OUTPUT REDUCTION PLANS.—

(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, in accordance with subparagraph (B), the Secretary shall require the forest supervisor of each National Forest to amend the management plan of the National Forest under the jurisdiction of the forest supervisor to develop and carry out a carbon output reduction plan to reduce the quantity of carbon output generated by hazardous fuels and wildfires, to the maximum extent practicable, by—

(i) as of January 1, 2015, 10 percent;

(ii) as of January 1, 2020, 25 percent; and

(iii) as of January 1, 2050, 50 percent.

(B) CARBON OUTPUT BASELINE.—

(i) IN GENERAL.—In developing a carbon output reduction plan under subparagraph (A), the forest supervisor of each National Forest shall include in the carbon output reduction plan applicable to the National Forest under the jurisdiction of the forest supervisor a carbon output baseline developed in accordance with clause (ii).

(ii) BASELINE METHODOLOGY.—

(I) IN GENERAL.—In developing a carbon output baseline under clause (i), each forest supervisor of a National Forest shall base the carbon output baseline for the National Forest on the average annual quantity of carbon output generated by the National Forest during the most recent 5 calendar-year period for which data are available.

(II) PRESCRIBED BURNS AND WILDLAND FIRE USE FIRES.—In developing a carbon output baseline under clause (i), each forest supervisor of a National Forest shall not consider carbon output generated as the result of prescribed burns or wildland fire use fires in the National Forest.

(iii) USE.—Each forest supervisor of a National Forest shall use the carbon output baseline applicable to the National Forest to determine the reduction of carbon output generated by the National Forest for each calendar year.

(2) AUTHORIZED FORMS OF PAYMENT.—In carrying out a carbon output reduction plan under paragraph (1), a forest supervisor of a National Forest may enter into a contract with an appropriate individual or entity to allow the individual or entity to perform services in exchange for any form of payment authorized by the forest supervisor (including any goods-for-services contract or stewardship contract).

(c) RESOURCE MANAGEMENT AREAS MANAGED BY THE SECRETARY OF THE INTERIOR.—

(1) CARBON OUTPUT REDUCTION PLANS.—

(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, in accordance with subparagraph (B), the Secretary shall require the district director of each resource management area that the Secretary determines to be extensively forested to amend the management plan of the resource management area under the jurisdiction of the district director to develop and carry out a carbon output reduction plan to reduce the quantity of carbon output generated by hazardous fuels and wildfires, to the maximum extent practicable, by—

(i) as of January 1, 2015, 10 percent;

(ii) as of January 1, 2020, 25 percent; and

(iii) as of January 1, 2050, 50 percent.

(B) CARBON OUTPUT BASELINE.—

(i) IN GENERAL.—In developing a carbon output reduction plan under subparagraph (A), the district director of each resource management area described in subparagraph (A) shall include in the carbon output reduction plan applicable to the resource management area under the jurisdiction of the district director a carbon output baseline developed in accordance with clause (ii).

(ii) BASELINE METHODOLOGY.—

(I) IN GENERAL.—In developing a carbon output baseline under clause (i), each district director of a resource management area described in subparagraph (A) shall base the carbon output baseline for the resource management area on the average annual quantity of carbon output generated by the resource management area during the most recent 5 calendar-year period for which data are available.

(II) PRESCRIBED BURNS AND WILDLAND FIRE USE FIRES.—In developing a carbon output baseline under clause (i), each district director of a resource management area described in subparagraph (A) shall not consider carbon output generated as the result of prescribed burns or wildland fire use fires in the resource management area.

(iii) USE.—Each district director of a resource management area described in subparagraph (A) shall use the carbon output baseline applicable to the resource management area to determine the reduction of carbon output generated by the resource management area for each calendar year.

(2) AUTHORIZED FORMS OF PAYMENT.—In carrying out a carbon output reduction plan under paragraph (1), a district director of a resource management area may enter into a contract with an appropriate individual or entity to allow the individual or entity to perform services in exchange for any form of payment authorized by the district director (including any goods-for-services contract or stewardship contract).

SA 4852. Mr. BARRASSO submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

Strike the table that begins on page 183, after line 18, and ends on page 184, before line 1, and insert the following:

Calendar Year	Percentage for distribution among carbon-intensive manufacturing facilities in United States
2012	12
2013	12
2014	12
2015	12
2016	12
2017	12
2018	12
2019	12
2020	12
2021	12
2022	11
2023	10
2024	8
2025	7
2026	6
2027	5
2028	4
2029	3
2030	2.

On page 184, line 16, insert ''and nonfuel minerals'' after ''metals''.

Strike the table that begins on page 458, after line 5, and insert the following:

Calendar year	Percentage for auction for Deficit Reduction Fund
2012	4.75
2013	4.75
2014	4.75
2015	5.50
2016	5.75
2017	5.75
2018	6.25
2019	6
2020	7
2021	8.5
2022	7.75
2023	8.75
2024	9.75
2025	9.75
2026	11.75
2027	11.75
2028	11.75
2029	12.75
2030	12.75
2031	19.75
2032	17.75
2033	17.75
2034	16.75
2035	16.75
2036	16.75
2037	16.75
2038	16.75
2039	16.75
2040	16.75
2041	16.75
2042	16.75
2043	16.75
2044	16.75
2045	16.75
2046	16.75
2047	16.75
2048	16.75
2049	16.75
2050	16.75.

SA 4853. Mr. BARRASSO submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle B of title X, add the following:

SEC. 10___. ADVANCED COAL AND SEQUESTRATION TECHNOLOGIES PROGRAM.

(a) ADVANCED COAL TECHNOLOGIES.—

(1) DEFINITIONS.—In this section:

(A) ADVANCED COAL GENERATION TECHNOLOGY.—Subject to paragraph (2), the term ''advanced coal generation technology'' means an advanced coal-fueled power plant technology that meets 1 of the following performance standards for limiting carbon dioxide emissions from an electric generation unit on an annual average basis, as determined by the Climate Change Technology Board:

(i) For an electric generation unit that is not a new entrant and that commences operation of carbon capture and sequestration equipment not later than December 31, 2015—

(I) treatment of at least the quantity of flue gas equivalent to 100 megawatts of the output of the electric generation unit; and

(II) a capability of capturing and sequestering at least 85 percent of the carbon dioxide in that flue gas.

(ii) For an electric generation unit that is not a new entrant and that commences operation of carbon capture and sequestration equipment after December 31, 2016, achievement of an average annual emission rate of not more than 1,200 pounds of carbon dioxide per megawatt-hour of net electricity generation, after subtracting the carbon dioxide that is captured and sequestered.

(iii) For a new entrant electric generation unit for which construction of the unit commenced prior to July 1, 2018, achievement of an average annual emission rate of not more than 800 pounds of carbon dioxide per megawatt-hour of net electricity generation, after subtracting the carbon dioxide that is captured and sequestered.

(iv) For a new entrant electric generation unit for which construction of the unit commenced on or after July 1, 2018, achievement of an average annual emissions rate of not more than 350 pounds of carbon dioxide per megawatt-hour of net electricity generation, after subtracting the carbon dioxide that is captured and sequestered.

(v) For any unit at a covered entity that is not an electric generation unit, achievement of an average annual emission rate that is achieved by the capture and sequestration of a minimum of 85 percent of the total carbon dioxide emissions produced by the unit.

(B) COMMENCED.—The term ''commenced'', with respect to construction, means that an owner or operator has—

(i) obtained the necessary permits to carry out a continuous program of construction; and

(ii) entered into a binding contractual obligation, with substantial financial penalties for cancellation, to undertake such a program.

(C) CONSTRUCTION.—The term ''construction'', with respect to a carbon capture and sequestration project, means the fabrication, erection, or installation of technology for the project.

(2) ADJUSTMENT OF PERFORMANCE STANDARDS.—

(A) IN GENERAL.—The Climate Change Technology Board may adjust the emission performance standards for a carbon capture and sequestration project under paragraph (1)(A) for an electric generation unit that uses subbituminous coal, lignite, or petroleum coke in significant amounts.

(B) REQUIREMENT.—If the Climate Change Technology Board adjusts a standard under subparagraph (A), the adjusted performance standard for the applicable project shall prescribe an annual emission rate that requires the project to achieve an equivalent reduction from uncontrolled carbon dioxide emissions levels from the use of subbituminous coal, lignite, or petroleum coke, as compared to the emissions the project would have achieved if that unit had combusted only bituminous coal during the particular calendar year.

(C) APPLICABILITY OF BONUS ALLOWANCE ADJUSTMENT RATIO.—The bonus allowance adjustment ratio under section 1013(b) shall apply to an electric generation unit described in paragraph (1)(A)(i) only with respect to the megawatt-hours and carbon dioxide emissions attributable to the treated share of the flue gas of the electric generation unit.

(3) DEMONSTRATION PROJECTS AND DEPLOYMENT INCENTIVES.—

(A) IN GENERAL.—The Climate Change Technology Board shall use not less than $40,000,000,000 of amounts made available from the sale of allowances under the program to carry out this section to support demonstration projects using advanced coal generation technology, including retrofit technology that could be deployed on existing coal generation facilities, and to provide financial incentives to facilitate the deployment of not more than 20 gigawatts of advanced coal generation technologies.

(B) CERTAIN PROJECTS.—Of the amounts described in subparagraph (A), the Climate Change Technology Board shall make available up to 25 percent for projects that meet the carbon dioxide emission performance standard under paragraph (1)(A)(i).

(C) ADMINISTRATION.—In providing incentives under this paragraph, the Climate Change Technology Board shall—

(i) provide appropriate incentives for regulated investor-owned utilities, municipal utilities, electric cooperatives, and independent power producers, as determined by the Secretary of Energy; and

(ii) ensure that a range of the domestic coal types is employed in the facilities that receive incentives under this paragraph.

(D) FUNDING REQUIREMENTS.—

(i) SEQUESTRATION ACTIVITIES.—The Climate Change Technology Board shall provide incentives only to projects that meet 1 of the emission performance standards for limiting carbon dioxide described in clause (ii) or (iii) of paragraph (1)(A).

(ii) PROJECTS USING CERTAIN COALS.—In providing incentives under this paragraph, the Climate Change Technology Board shall set aside not less than 25 percent of any amounts made available to carry out this subsection for projects using coal with an energy content of not more than 10,000 British thermal units per pound.

(4) STORAGE AGREEMENT REQUIRED.—The Climate Change Technology Board shall require a binding storage agreement for the carbon dioxide captured in a project under this subsection in a geological storage project permitted by the Administrator under regulations promulgated pursuant to section 1421(d) of the Safe Drinking Water Act (42 U.S.C. 300h(d)).

(5) DISTRIBUTION OF FUNDS.—

(A) REQUIREMENT.—The Climate Change Technology Board shall make awards under this section in a manner that maximizes the avoidance or reduction of greenhouse gas emissions.

(B) INCENTIVES.—A project that receives an award under this subsection may elect 1 of the following financial incentives:

(i) A loan guarantee.

(ii) A cost-sharing grant to cover the incremental cost of installing and operating carbon capture and storage equipment (for which utilization costs may be covered for the first 10 years of operation).

(iii) Production payments of not more than 1.5 cents per kilowatt-hour of electric output during the first 10 years of commercial service of the project.

(6) LIMITATION.—A project may not receive an award under this subsection if the project receives an award under section 4402.

(b) SEQUESTRATION.—

(1) IN GENERAL.—The Climate Change Technology Board shall use not less than $10,000,000,000 of amounts made available from the sale of allowances to carry out this section for large-scale geological carbon storage demonstration projects that store carbon dioxide captured from electric generation units using coal gasification or other advanced coal combustion processes, including units that receive assistance under subsection (a).

(2) PROJECT CAPITAL AND OPERATING COSTS.—

(A) IN GENERAL.—The Climate Change Technology Board shall provide assistance under this subsection to reimburse the project owner for a percentage of the incremental project capital and operating costs of the project that are attributable to carbon capture and sequestration, as the Secretary determines to be appropriate.

(B) CERTAIN PROJECTS.—Of the assistance provided under subparagraph (A), the Climate Change Technology Board shall make available up to 25 percent for projects that meet the carbon dioxide emissions performance standard under subsection (a)(1)(A)(i).

SA 4854. Mr. BARRASSO submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

On page 381, between lines 9 and 10, insert the following:

SEC. 1238. RECOVERY PLANS.

Nothing in this subtitle requires the Secretary of the Interior (or the Secretary of Commerce, with respect to any species for which the Secretary of Commerce has program responsibilities under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)) to update any recovery plan developed under section 4(f) of the At Act 916 U.S.C. 1533(f0 that was approved before the date of enactment of this Act.

SA 4855. Mr. BARRASSO submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title V, add the following:

Subtitle J—Small Business Refiners

SEC. 591. DEFINITION OF SMALL BUSINESS REFINER.

In this subtitle:

(1) IN GENERAL.—The term ''small business refiner'' means a refiner that meets the applicable Federal refinery capacity and employee limitations criteria described in section 45H (c) of the Internal Revenue Code of 1986 (in effect on the date of enactment of this Act).

(2) EXCLUSION.—The term ''small business refiner'' does not include an entity formed by a merger or acquisition involving a refining entity that—

(A) does not meet the applicable criteria referred to in paragraph (1); and

(B) occurred after December 31, 2007.

SEC. 592. ALLOCATIONS.

(a) CALENDAR YEARS 2012 THROUGH 2017.—Notwithstanding any other provision of this

Act, for each of calendar years 2012 through 2017, the Administrator shall—

(1) adjust the allocations under subtitles E and F to owners and operators of carbon-intensive manufacturing facilities and fossil fuel-fired electric power generating facilities, respectively, by ½ percent; and

(2) allocate 1 percent of the emission allowances established under section 201(a) for those facilities to small business refiners in accordance with this subtitle.

(b) CALENDAR YEARS 2018 THROUGH 2030.—Notwithstanding any other provision of this Act, for each of calendar years 2012 through 2017, the Administrator shall—

(1) adjust the allocations under subtitle G to owners and operators of facilities that manufacture petroleum-based liquid or gaseous fuel by 1 percent; and

(2) allocate 1 percent of the emission allowances established under section 201(a) for those facilities to small business refiners in accordance with this subtitle.

SEC. 593. TREATMENT OF EXPANSIONS.

Emissions of carbon dioxide equivalent from transportation fuel resulting from an expansion in capacity by a small business refiner that qualifies under section 179(c) of the Internal Revenue Code of 1986 shall be added to the 2006 carbon dioxide equivalents of the small business refiner for the purpose of calculating the quantity of emission allowances to be distributed to the small business refiner under this subtitle.

SA 4856. Mr. BARRASSO submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title XVII, add the following:

Subtitle H—Atmospheric Removal of Greenhouse Gases

SEC. 1771. SHORT TITLE.

This subtitle may be cited as the ‘‘Greenhouse Gas Emission Atmospheric Removal Act’’ or the ‘‘GEAR Act’’.

SEC. 1772. STATEMENT OF POLICY.

It is the policy of the United States to provide incentives to encourage the development and implementation of technology to permanently remove greenhouse gases from the atmosphere on a significant scale.

SEC. 1773. DEFINITIONS.

In this subtitle:

(1) COMMISSION.—The term ‘‘Commission’’ means the Greenhouse Gas Emission Atmospheric Removal Commission established by section 1775(a).

(2) GREENHOUSE GAS.—The term ‘‘greenhouse gas’’ means—

(A) carbon dioxide;

(B) methane;

(C) nitrous oxide;

(D) sulfur hexafluoride;

(E) a hydrofluorocarbon;

(F) a perfluorocarbon; and

(G) any other gas that the Commission determines is necessary to achieve the purposes of this subtitle.

(3) INTELLECTUAL PROPERTY.—The term ‘‘intellectual property’’ means—

(A) an invention that is patentable under title 35, United States Code; and

(B) any patent on an invention described in subparagraph (A).

(4) SECRETARY.—The term ‘‘Secretary’’ means the Secretary of Energy.

SEC. 1774. GREENHOUSE GAS EMISSION ATMOSPHERIC REMOVAL PROGRAM.

The Secretary, acting through the Commission, shall provide to public and private entities, on a competitive basis, financial awards for the achievement of milestones in developing and applying technology that could significantly slow or reverse the accumulation of greenhouse gases in the atmosphere by permanently capturing or sequestrating those gases without significant countervailing harmful effects.

SEC. 1775. GREENHOUSE GAS EMISSION ATMOSPHERIC REMOVAL COMMISSION.

(a) ESTABLISHMENT.—There is established within the Department of Energy a commission to be known as the ‘‘Greenhouse Gas Emission Atmospheric Removal Commission’’.

(b) MEMBERSHIP.—

(1) COMPOSITION.—The Commission shall be composed of 11 members appointed by the President, by and with the advice and consent of the Senate, who shall provide expertise in—

(A) climate science;

(B) physics;

(C) chemistry;

(D) biology;

(E) engineering;

(F) economics;

(G) business management; and

(H) such other disciplines as the Commission determines to be necessary to achieve the purposes of this subtitle.

(2) TERM; VACANCIES.—

(A) TERM.—A member of the Commission shall serve for a term of 6 years.

(B) VACANCIES.—A vacancy on the Commission—

(i) shall not affect the powers of the Commission; and

(ii) shall be filled in the same manner as the original appointment was made.

(3) INITIAL MEETING.—Not later than 30 days after the date on which all members of the Commission have been appointed, the Commission shall hold the initial meeting of the Commission.

(4) MEETINGS.—The Commission shall meet at the call of the Chairperson.

(5) QUORUM.—A majority of the members of the Commission shall constitute a quorum, but a lesser number of members may hold hearings.

(6) CHAIRPERSON AND VICE CHAIRPERSON.—The Commission shall select a Chairperson and Vice Chairperson from among the members of the Commission.

(7) COMPENSATION.—A member of the Commission shall be compensated at level III of the Executive Schedule.

(c) DUTIES.—The Commission shall—

(1) subject to subsection (d), develop specific requirements for—

(A) the competition process;

(B) minimum performance standards;

(C) monitoring and verification procedures; and

(D) the scale of awards for each milestone identified under paragraph (3);

(2) establish minimum levels for the capture or net sequestration of greenhouse gases that are required to be achieved by a public or private entity to qualify for a financial award described in paragraph (3);

(3) in coordination with the Secretary, offer those financial awards to public and private entities that demonstrate—

(A) a design document for a successful technology;

(B) a bench scale demonstration of a technology;

(C) technology described in subparagraph (A) that—

(i) is operational at demonstration scale; and

(ii) achieves significant greenhouse gas reductions; and

(D) operation of technology on a commercially viable scale that meets the minimum levels described in paragraph (2); and

(4) submit to Congress—

(A) an annual report that describes the progress made by the Commission and recipients of financial awards under this section in achieving the demonstration goals established under paragraph (3); and

(B) not later than 1 year after the date of enactment of this Act, a report that describes the levels of funding that are necessary to achieve the purposes of this subtitle.

(d) PUBLIC PARTICIPATION.—In carrying out subsection (c)(1), the Commission shall—

(1) provide notice of and, for a period of at least 60 days, an opportunity for public comment on, any draft or proposed version of the requirements described in subsection (c)(1); and

(2) take into account public comments received in developing the final version of those requirements.

(e) PEER REVIEW.—No financial award may be provided under this subtitle until such time as the proposal for which the award is sought has been peer reviewed in accordance with such standards for peer review as the Commission shall establish.

SEC. 1776. INTELLECTUAL PROPERTY CONSIDERATIONS.

(a) IN GENERAL.—Title to any intellectual property arising from a financial award provided under this subtitle shall vest in 1 or more entities that are incorporated in the United States.

(b) RESERVATION OF LICENSE.—The United States—

(1) may reserve a nonexclusive, nontransferable, irrevocable, paid-up license, to have practiced for or on behalf of the United States, in connection with any intellectual property described in subsection (a); but

(2) shall not, in the exercise of a license reserved under paragraph (1), publicly disclose proprietary information relating to the license.

(c) TRANSFER OF TITLE.—Title to any intellectual property described in subsection (a) shall not be transferred or passed, except to an entity that is incorporated in the United States, until the expiration of the first patent obtained in connection with the intellectual property.

SEC. 1777. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated such sums as are necessary to carry out this subtitle.

SEC. 1778. TERMINATION OF AUTHORITY.

The Commission and all authority of the Commission provided under this subtitle terminate on December 31, 2020.

SA 4857. Mr. DORGAN submitted an amendment intended to be proposed by him to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

On page 304, strike line 19 and insert the following:

(a) IN GENERAL.—Not later than 120 days after the date of enactment

On page 304, after line 25, add the following:

(b) ADDITIONAL FUNDS.—

(1) IN GENERAL.—For the period of calendar years 2009 through 2018, of the proceeds of the auctions conducted under section 1402(a), $20,000,000,000 shall be allocated by the Administrator to the Kick-Start Program in accordance with the schedule described in paragraph (2).

(2) SCHEDULE.—

(A) IN GENERAL.—Subject to subparagraph (B), of the $20,000,000,000 described in paragraph (1), the Administrator shall allocate—

(i) $1,200,000,000 in calendar year 2009;

(ii) $1,100,000,000 in calendar year 2010;

(iii) $900,000,000 in calendar year 2011;

(iv) $3,100,000,000 in 2012;

(v) $3,000,000,000 in each of calendar years 2013 and 2014; and

(vi) $2,000,000,000 in each of calendar years 2015 through 2018.

(B) INCREASE IN ALLOCATION.—If any portion of the funds to be allocated under subparagraph (A) for a calendar year is unavailable for that allocation, that portion shall be added to the amount to be allocated in the subsequent calendar year.

On page 305, line 19, insert ''research, development, demonstration, and'' before ''early deployment''.

Beginning on page 305, strike line 22 and all that follows through page 306, line 2, and insert the following:

(b) GOALS.—The Board shall design and operate the Kick-Start Program with the goals of—

(1) advancing additional advanced coal research and development innovations for capturing and storing carbon dioxide; and

(2) rapidly bringing into operation in the United States not fewer than 5 commercial facilities that capture and geologically sequester carbon released when coal is used to generate electricity.

(c) KICK-START COMPONENTS.—

(1) RESEARCH AND DEVELOPMENT.—

(A) IN GENERAL.—For each fiscal year, the Secretary of Energy shall use 50 percent of the amounts in the Fund derived from auctions conducted under section 1002(b) to carry out the programs established under sections 962 and 963 of the Energy Policy Act of 2005 (42 U.S.C. 16292, 16293).

(B) REQUIREMENTS.—In carrying out the programs, the Secretary of Energy shall provide for the investigation of a wide variety of technologies for carbon capture for—

(i) retrofitting of existing facilities; and

(ii) installation of carbon-capture technology on next-generation coal-fueled facilities.

(2) DEPLOYMENT.—The Secretary of Energy shall use 50 percent of the amounts in the Fund derived from auctions conducted under section 1002(b) to carry out a program to facilitate the deployment of the technologies described in paragraph (1)(B).

On page 306, line 3, strike ''(c)'' and insert ''(d)''.

On page 306, strike lines 4 through 9 and insert the following:

Program on—

(1) the ''Early Deployment Fund'' recommendations contained in the final report issued by the Advanced Coal Technology Work Group of the Clean Air Act Advisory Committee of the Environmental Protection Agency and dated January 29, 2008; and

(2) the programs established under sections 962 and 963 of the Energy Policy Act of 2005 (42 U.S.C. 16292, 16293).

(e) COAL DIVERSITY.—The Kick-Start Program

On page 306, line 13, strike ''(e)'' and insert ''(f)''.

On page 306, line 17, strike ''(f)'' and insert ''(g)''.

On page 457, line 13, insert ''and the Carbon Capture and Sequestration Technology Fund established by section 1001'' before the period at the end.

SA 4858. Mrs. DOLE submitted an amendment intended to be proposed by her to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

On page 341, strike lines 5 through 7 and insert the following:

(2) to reduce greenhouse gas emissions, the United States should not rely on ethanol produced from corn and should rely increasingly on advanced, clean, low-carbon fuels for transportation.

SA 4859. Mrs. DOLE submitted an amendment intended to be proposed by her to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

On page 84, strike lines 13 and 14 and insert the following:

(ii) forest management activities inclusive of associated recognized carbon pools, including—

(I) forest product carbon sequestration;

(II) afforestation; and

(III) forest management activities that contribute to forest carbon sequestration;

SA 4860. Mrs. DOLE submitted an amendment intended to be proposed by her to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title XVII, add the following:

Subtitle H—Sense of the Senate Regarding the Need to Expedite Certain Outer Continental Shelf Oil and Gas Lease Sales

SEC. 1771. SENSE OF THE SENATE.

(a) FINDINGS.—The Senate finds that—

(1) the citizens of the United States face economic hardships due to high fuel costs;

(2) the citizens of the United States rely on oil and gas produced from resources located in the approximately 1,760,000,000 acres of the outer Continental Shelf;

(3) the Secretary of the Interior (referred to in this section as the ''Secretary''), in accordance with section 18 of the Outer Continental Shelf Lands Act (43 U.S.C. 1344), has prepared, for calendar years 2007 through 2012, an oil and gas leasing program (referred to in this section as the ''5-year program'') indicating a 5-year schedule of lease sales designed to best meet the energy needs of the United States;

(4) the 5-year program includes 21 lease sales in 8 areas, including—

(A) 4 areas located off of the coast of the State of Alaska;

(B) 1 area located off of the Atlantic Coast; and

(C) 3 areas located in the Gulf of Mexico;

(5) the analysis completed for the 5-year program has indicated that implementation of the 5-year program would result in—

(A) the production of an estimated 10,000,000,000 barrels of oil and 45,000,000,000,000 cubic feet of natural gas; and

(B) the generation of $170,000,000,000 in net benefits for the United States during the 40-year period beginning on the date of implementation of the 5-year program; and

(6) the United States should—

(A) be less dependent on foreign oil; and

(B) develop more domestic sources of energy.

(b) SENSE OF THE SENATE.—It is the sense of the Senate that, as soon as practicable after the date of enactment of this Act, the Secretary should expedite each remaining lease sale included in the 5-year program regardless of the year for which any particular lease sale is scheduled.

SA 4861. Mrs. DOLE (for herself and Mr. WARNER) submitted an amendment intended to be proposed by her to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

Beginning on page 291, strike line 24 and all that follows through page 292, line 16.

On page 301, strike line 12 and insert the following:

In making awards under this sub-

On page 302, strike lines 6 through 22.

Beginning on page 306, strike line 17 and all that follows through page 307, line 9.

SA 4862. Mrs. DOLE (for herself and Mr. WHITEHOUSE) submitted an amendment intended to be proposed by her to the bill S. 3036, to direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes; which was ordered to lie on the table; as follows:

On page 251, strike lines 1 through 13 and insert the following:

(A) IN GENERAL.—The term ''Coastal State'' means any State or territory of the United States with a coastal zone management plan or program that is approved under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.).

On page 251, line 14, strike ''(C)'' and insert ''(B)''.

On page 254, strike lines 13 through 20 and insert the following:

(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 the development of strategies that use natural resources, such as natural buffer zones, natural shorelines, and habitat protection or restoration, to mitigate risks and impacts;

On page 255, strike lines 23 and 24 and insert the following:

(v) coastal habitat loss;

NOTICE OF HEARING

COMMITTEE ON ENERGY AND NATURAL RESOURCES

Mr. BINGAMAN. Mr. President, I would like to announce for the information of the Senate and the public that a hearing has been scheduled before Committee on Energy and Natural Resources Subcommittee on National Parks.

The hearing will be held on June 17, 2008, at 2:30 p.m, in room SD–366 of the Dirksen Senate Office Building.

The purpose of the hearing is to receive testimony on the following bills: S. 1774, to designate the John Krebs Wilderness in the State of California, to add certain land to the Sequoia-Kings Canyon National Park Wilderness, and for other purposes; S. 2255, to amend the National Trails System Act to provide for studies of the Chisholm Trail and Great Western Trail to determine whether to add the trails to the