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. LUTTENBERG, 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. LUTTENBERG, 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.

SA 4863. Mrs. DOLE (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 “Liebowitz-Warnen 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 Appliance 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 THROUGH OFFSETS AND INTERNATIONAL ALLOWANCES

Subtitle A—Offsets in the United States

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

Subtitle III—REDUCING EMISSIONS THROUGH EMISSIONS TRADING MARKET

Sec. 301. Substitution of annual emission allowances.
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 requirements.

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. Regulation.
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.
Sec. 1122. 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. 1212. Forest Service Emergency Fire-fighting 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 Program.
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—HYDROFLUOROCARBON EMISSIONS
Sec. 1501. Regulations.
Sec. 1502. National recycling and emission reduction program.
Sec. 1503. Fire suppression agents.
Sec. 1504. National recycling and emission reduction program.
Sec. 1505. Forest carbon activities.
Sec. 1506. Establishing and distributing offset allowances.
Sec. 1507. Limitation on double counting.
Sec. 1508. Effect of subtitle.

Subtitle C—National Wildlife Adaptation Strategy
Sec. 1601. National Academy of Sciences report.
Sec. 1602. Environmental Protection Agency recommendations.
Sec. 1603. Presidential recommendations.

TITLE XVII—MISCELLANEOUS
Subtitle A—Miscellaneous
Sec. 1701. Establishment.
Sec. 1702. Auctions.
Sec. 1703. Deposits.
Sec. 1704. Disbursements from Fund.
Sec. 1705. Use of Funds.

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.
Sec. 1752. Prohibition on delegation.

Sec. 1761. Study and research.
Sec. 1751. Integration.

CONGRESSIONAL RECORD — SENATE

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 global 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, displacing 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 destablization 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 that will impact those in the most vulnerable developing countries to increase resilience to those effects;
(10) the ingenuity of the people of the United States and the other developed countries 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 that reflect the impacts of that degree of global climate change that now is unavoidable;
(12) Congress need not 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 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 in this Act for technology deployment are predicated upon historical emissions and other historical activities;
(18) the measures in this Act are not the only measures Congress will need to enact over the decades-long program established in this Act for technology deployment are predicated upon historical emissions and other historical activities;
(19) it is in the national security and economic interest of the United States that the United States continue to be a leader in curbing global climate change, including increases in poverty and destablization of economies and societies, are likely to pose a danger to the security interest and economic interest of the United States;
(20) fossil fuel-fired electric power generating facilities in the United States are likely to be affected by climate change for sustenance and livelihoods, as well as economic growth and stability;
(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 presence 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-fueled 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 sufficiently enough to prevent the catastrophic impacts of global climate change; and
(2) to accomplish that purpose—
(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 predominately 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 ADDICTIONALITY.—The terms “additional” and “additionally” 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. 7522(i)), or a lower nationwide Bin emission standard; or
(B) any new emission standard for fine particulate matter prescribed by the Administrator under that Act; and
(4) THE CONGRESS.—The term “Congress” means the Congress of the United States, as constituted on 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)戲A．— (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 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 system” and “biologically sequestered” mean:

(A) the capture, separation, isolation, or removal of greenhouse gases from the atmosphere by restoring regal means, such as by growing plants; and
(B) the storage of those greenhouse gases in place.

(8) Board.—The term “Board” means the Carbon Market Efficiency Board established by section 521.

(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 52908 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 practices or equivalent thereof, 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).


(14) Cost-containment auction.—The term “cost-containment auction” means an auction conducted by the Administrator pursuant to section 522.

(15) Cost-containment auction price.—The term “cost-containment auction price” means the average market price at which emission allowances are offered for sale during a cost-containment auction in a particular year.
(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 by 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—
(A) 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.
(41) REGULAR AUCTION.—The term “regular auction” means an auction of emission allowances conducted by the Administrator under this Act that is open to the public and not a cost-contained 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) RAILIT RATE FOR DISTRIBUTION SERVICE.—The term “rail rate” means the rate that a local distribution company charges for the use of the system of the local distribution company.
(B) EXCLUSION.—The term “rail rate for distribution service” does not include any energy component of the rate.
(44) RENEWABLE ENERGY.—The term “renewable energy” means energy derived primarily from a new source of energy, such as—
(A) renewable hydropower;
(B) solar energy;
(C) wind energy; or
(D) geothermal energy.
(45) RURAL ELECTRIC COOPERATIVE.—The term “rural electric cooperative” means a cooperative electric service and distribution system owned and operated by a rural electric cooperative association.
(46) RURAL ELECTRICITY.—The term “rural electricity” means electrical energy provided by a cooperative electric service and distribution system owned and operated by a rural electric cooperative association.
(47) RURAL ELECTRICITY ACT OF 1936.—The term “Rural Electrification Act of 1936” means the Act approved June 10, 1936 (42 U. C. S. 9821 et seq.), as amended.
(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 ECOLOGICAL SYSTEM.—The term “terrestrial ecological system” means a land-occurring community of plants and animals with their environment.
(51) TRIBAL REGULATORY AUTHORITY.—The term “tribal regulatory authority” means any Indian tribe that has been granted status as a regulatory authority in accordance with section 301(d) of the Clean Air Act (42 U. C. S. 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 emissions reduction and greenhouse gas emission trading market established pursuant to this Act.

SEC. 102. FEDERAL GREENHOUSE GAS REGISTRY—GENERAL.

(1) REQUIREMENTS.—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—
(A) achieves the purposes described in section 101; and
(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 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 or methods 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) 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;
(7) include methods for avoiding the double-counting of greenhouse gas emissions;
(8) include protocols for verification of submitted data;
(9) establish a means for electronic reporting; and
(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 to submit 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 September 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

Subtitle C—Greenhouse Gas Emission Trading Systems

SEC. 112. NATIONAL GREENHOUSE GAS EMISIONS TRADING SYSTEM.

(1) REQUIREMENTS.—The Administrator shall, by regulation, establish and implement a Federal greenhouse gas emissions trading system that—
(2) establishes a carbon price that is consistent with the national price of纳入的国际排放配额，确保配额价格的全球统一，以实现“公平交易”的目标。
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 under section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6298a), or an equivalent score on an established energy performance benchmarking metric determined under the regulations promulgated pursuant to subsection (d); and
(2) in retrofitted existing buildings that demonstrate substantial improvement in the score 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).
(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 Super-Efficient Equipment and Appliances Deployment Program is established under section 312.

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 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 on a competitive basis among 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. 113. CLEAN MEDIUM- AND HEAVY-DUTY HYBRID FLEETS PROGRAM.
(a) In General.—The Administrator shall by regulation, 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 on a competitive basis among 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 BOARD.
(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).
(c) 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) 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 national policies, rules, or laws that are capable of producing measurable, reportable, and verifiable greenhouse gas emission mitigations.
(d) Qualifying Entity.—The term “qualifying 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.
(e) 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 Energy Deployment 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; and
(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; and
(B) are allocated in a manner consistent with commitments by the United States
under international climate change agreements; and
(C) are expected 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 for 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, cooperative agreements, contracts, insurance, or loan guarantees or with qualified entities; and
(B) as direct assistance to qualified entities that—
(i) fund 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 section 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 verifying greenhouse gas emissions and 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 resources; 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—
(A) a description of the capacity building program to be funded using the assistance;
(B) 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—
(A) a description of the technology program to be funded using the assistance;
(B) the terms and conditions of the provision of assistance; and
(III) an estimate of the additional quantity of greenhouse gas emission reductions expected from the use of assistance; and
(iv) a description of how the technology program will contribute to achieving the purposes of this section.

(8) 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.

(9) SUBSEQUENT REPORTS.—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.

(10) OTHER REPORTS.—Nothing in this section alters or affects any authority of the Secretary of State under—
(A) title V of the Foreign Relations Authorization Act, Fiscal Year 1979 (22 U.S.C. 3561 et seq.); or
(B) section 622(c) of the Foreign Assistance Act of 1961 (22 U.S.C. 2322(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 1322.

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 research and development program 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 this section shall include research relating to—
(1) the impacts of climate change on, and solutions to problems involving, water quality, including—
(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 temperature and other climatic changes;
(B) to improve the accuracy and resolution of climate change models at the regional level; and
(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 reduced and erratic periods of precipitation and runoff; infrastructure impacts and solutions for water treatment facilities and underground pipelines, including research—
(i) to evaluate and mitigate the impacts of sea level rise on—
(A) near-shore facilities; and
(B) infrastructure that supplies drinking water; and
(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 desalination of seawater, furnace, 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 exchange, banking, and transfers; and
(B) the economic benefits of sharing risks of shortage across larger 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 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 ground-water 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 methods 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 research—
(A) to develop strategic approaches to water demand management that offer the lowest-cost, noninfrastructure options to serve the populations or manage declining supplies, primarily through—
(i) efficiencies in water use and reallocation of saved water;
(ii) demand management tools; and
(iii) economic incentives; and
(iv) water-saving technologies; and
(B) relating to efficiencies in water management that incorporate—
(i) supply-side and demand-side processes;
(ii) continuous adaptive management; and
(iii) the inclusion of stakeholders in decision-making 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 energy supply; and
(B) to develop effective communication approaches to achieve—
(i) public acceptance of alternative water supplies, new policies and practices, including conservation and demand management; and
(ii) public recognition and acceptance of increased costs.

d. 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 bioenergy 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; and
(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 calendar year 2012 through 2050, as follows:

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<th>Calendar Year</th>
<th>Quantity of emission allowances (in millions)</th>
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<tr>
<td>2012</td>
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</table>

(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 or 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 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) in which HFC that was, during the preceding calendar year, processed 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 where the Federal waterfowl refuge is located or the outer Continental Shelf off the coast of that State by that covered entity and not re-injected 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 submis-
sion or certification required under paragraph (a), the Administrator shall assume that no seque-
stration, destruction, or retention of greenhouse gas has occurred or will occur.

(2) Exclusions in Section (a), 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 Administrator determines that 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 any 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 or an act of Congress;

(2) the petroleum-based liquid fuel imported into the United States from the NAFTA country was produced or manufactured in or by that country in any case in which the Administrator has determined, after public notice and an opportunity for public comment, that—

(a) 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 or an act of Congress;

(b) the covered entity subject to any of paragraphs (a) and (b) of subsection (a) 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 or offset allowances 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 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 or offset allowances for that product under 1 of those paragraphs.

(ii) Determination of Compliance.—Not later than 180 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 or offset allowances for that product under 1 of those paragraphs.

(j) 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 an emission allowance for that carbon dioxide equivalent of greenhouse gas that was not emitted through the use of that feedstock or petroleum based gaseous fuel, or natural gas, or natural gas liquid gas as a feedstock, or used a perfluorocarbon in semiconductor re-

search or manufacturing in the United States during that calendar year.

(k) Export 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 subject to any of paragraphs (a) and (b) of subsection (a) 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 or offset allowances for that product under 1 of those paragraphs.

(2) Nonapplicability to Certain Feedstock Uses.—Paragraph (1) shall not apply to any feedstock use to which subsection (b)(2) applies.

(l) 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 or offset allowances for that product under 1 of those paragraphs.

(2) Nonapplicability to Certain Feedstock Uses.—Paragraph (1) shall not apply to any feedstock use to which subsection (b)(2) applies.

(m) Import 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 that the Administrator determines imported to the United States a product described in paragraph (2), (3), or (5) of subsection (a) during that calendar year a quantity of emission allowances or offset allowances for that product under 1 of those paragraphs.
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 Natural Resources Conservation Service or the National Institute of Food and Agriculture or at land-grant colleges and universities).

(c) HANDBOOK.—

(1) (A) 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.

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

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

(ii) is subject, 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

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

(2) 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 NETWORK.

(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 governing the certification and issuance of offset allowances in accordance with this subtitle.

(b) OUTLINE.—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) 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 from 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).

(C) 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 subsequent calendar 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).

(B) 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;

(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 offsets from greenhouse gases 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 management practices, including—

(A) forest management and other land use practices, including—

(i) reforestation and reafforestation;

(ii) forest conversion to active biomass production and management;

(iii) forest thinning and selective cutting; and

(iv) forest fire reduction and fuel reduction;

(B) practices to reduce greenhouse gas emissions from oil or gas production, including—

(i) enhanced oil or gas recovery;

(ii) isotope technologies; and

(iii) sequestration of greenhouse gases into deep saline formations or rock or mineral deposits;

(C) manure management and disposal, including—

(i) methane capture and combustion;

(ii) capture, combustion, or use of biogas;

(iii) composting and drying manure;

(iv) anaerobic digestion; and

(v) composting;

(D) livestock confinement systems, including—

(i) methane capture and combustion;

(ii) capture, combustion, or use of biogas;

(iii) anaerobic digestion; and

(iv) composting;

(E) methane capture and combustion;

(F) methane capture and combustion from agriculture;

(G) methane capture and combustion 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 Natural Resources Conservation Service or the National Institute of Food and Agriculture or at land-grant colleges and universities).

(c) HANDBOOK.—

(1) (A) 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.

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

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

(ii) is subject, 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

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

(2) 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. 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) 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) application in 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 302(a) to submit any emission allowances, offset allowances, or international allowances;
(ii) methane capture and combustion on nonagricultural facilities; and
(iii) other actions that result in the avoidance or reduction of greenhouse gas emissions, as determined by the Administrator;
(B) include a method for use in quantifying the uncertainty in accordance with subsection (h); and
(F) any other category proposed to the Administrator by petition.
(2) Specific requirements.—The methodology or 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 the risk of reversal, from an offset project; and
(v) monitoring, verifying, and reporting the operation of an offset project; and
(B) procedures 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;
(3) consultation.—(A) The Administrator shall consult with the Secretary of Agriculture, shall consult with the Independent Expert Teams, and shall consult with any other groups necessary to support the methodology.
(B) A description of scientifically sound methods, as determined by the Administrator;
(C) 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;
(D) a methodology for use in assessing the risk that a sequestration will be reversed;
(E) a description of procedures that will be followed to measure, report, and compensate for any reversal that does occur;
(F) a procedure for use in determining whether the quantity of carbon sequestered on or in land where a project is carried out was significantly changed during the period prior to project initiation; and
(G) a description of measures that will be used to monitor, quantify, and discount reductions in greenhouse gas emissions or increases in sequestration as described in this section until the Administrator determines that the monitoring and quantification plan satisfies the applicable requirements of this subsection.
(4) 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 project is demonstrated to be in conformity with the applicable revisions.
(b) Technologies.—
(1) In general.—The Administrator may, 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.
(c) Monitoring testing.—The Administrator may not issue a methodology under this section until the Administrator determines that
(i) the methodology has been tested by 3 independent expert teams on at least 3 different offset projects to which that methodology applies; and
(ii) the emission reductions or sequestrations estimated by the expert teams for the same offset project do not differ by more than 10 percent.
(3) SEC. 304. PROJECT INITIATION AND APPROVAL.
(a) Project Approval.—A project developer—
(1) may submit a petition for offset project approval at any time after the effective date of regulations promulgated under section 302; but
(2) may not use or distribute offset allowances until such approval is received and
may after the emission reductions or sequestrations supporting the offset allowances are 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—
(1) a copy of the monitoring and quantification plan prepared for the offset project, as described in subsection (d); and
(2) a greenhouse gas information 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 information certification identifies a significant deviation in accordance with subsection (e); 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.
(3) Monitoring and Quantification.—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.
(4) 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.
(5) Plan Requirements.—Subject to section 302, the Administrator, in conjunction with the Secretary of Agriculture, shall promulgate regulations to ensure the required compliance with the monitoring and quantification plan, including—
(A) a description of the offset project, including project type;
(B) a determination of accounting periods; and
(C) an assignment of reporting responsibility;
(D) the contents and timing of public reports; and
(E) the procedures described in this section for the analysis of the results of any analyses.
(6) Petition Process.—The Independent Expert Teams and the Secretary of Agriculture may request that the Administrator develop a methodology to address additional issues that are necessary to comply with the requirements of this subtitle.
(I) what site-specific data, if any, will be used in monitoring, quantification, and the determination of discounts;
(II) a description of procedures for use in managing site-specific 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) TOOL DEVELOPMENT.—

(A) each greenhouse gas initiation certification submitted pursuant to this section shall include—

(1) 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

(2) 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 FROM BASELINE ESTIMATION.—The standardized methods used to determine and discount for uncertainty shall, for each project type, at a minimum—

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

(B) what site-specific data, if any, will be used by a project developer to determine the baseline;

(C) the robustness and rigor of methods determined under subclauses (II) and (V); and

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

(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) ADDITIONALITY DETERMINATION AND BASELINE ESTIMATION.—The standardized methods used to determine additionality and establish baselines shall, for each project, 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 baseline;

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

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

(g) ACQUISITION OF NEW DATA AND REVIEW OF METHODS FOR AGRICULTURAL AND FOREST 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; and

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

(h) CONGRESSIONAL RECORD

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) SCOPES 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

(ii) 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); and

(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) VERIFICATION ACCREDITATION.—

(A) IN GENERAL.—The Administrator shall—

(i) establish a public accessible database, which shall be maintained and updated by the Administrator;

(ii) register the developer of that determination;

(iii) 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. 306. REGISTRATION AND AWARDING OF OFFSET ALLOWANCES.

(a) IN GENERAL.—Offset allowances may be issued under this subtitle to—

(A) a project developer for which an affirmative determination under paragraph (1) has been made;

(B) a project developer that receives a verification report required under subsection (b); and

(C) a project developer that receives a verification report required under subsection (b) and—

(i) in the case of an affirmative determination under paragraph (1), the Administrator considers to be necessary to achieve the purposes of this subtitle; and

(ii) after the date on which the Administrator receives a verification report required under subsection (b), the Administrator shall—

(A) register the other offsets 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. TRANSITIONS FOR SEQUESTRATION PROJECTS.**

(a) **REVERSAL CERTIFICATION.**—

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

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

(A) whether any unmitigated reversal relating to a project that 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 carbon dioxide in greenhouse gas emissions or increase sequestration of carbon dioxide in countries other than the United States.

**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 specify—

(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) **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 Change Authority Registry, the GHG Registry, the Chicago Climate Exchange, the GHG Clean Projects Registry, or any other Federal, State, or private registry. 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 prior to 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 306(a); and

(2) a reversal certification submitted pursuant to section 306(b).

(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.**

(a) **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.

(b) **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.

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

(d) **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 the protection of native species; and

(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 established under the regulations established pursuant to subsection (a) and

(D) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(E) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(F) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(G) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(H) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(I) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(J) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(K) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(L) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(M) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(N) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(O) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(P) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(Q) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(R) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(S) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(T) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(U) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(V) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(W) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(X) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(Y) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (a) and

(Z) To prohibit the use of a species listed by a regional or State invasive plant council established under the regulations established pursuant to subsection (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 subject entity shall not be permitted to offset an emission allowance issued pursuant to this section until the program established under subsection (a) specifically certifies that the allowance that is offset is actually emitted by the 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 Secretary of Agriculture 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 and recorded in 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 a greenhouse gas management project 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 2020, 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.

(b) SECOND PERIOD.—Not later than 330 days before the beginning of each of calendar years 2021 through 2030, the Administrator shall allocate to the Secretary of Agriculture, for the program established pursuant to section 332, the portion 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 this section 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) doubling real, verifiable, additional, permanent, and enforceable increases in greenhouse gas sequestration on land owned or managed by the entities; and

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

(A) greenhouse gas emission reductions;

(B) credits for the reduction 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 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 entities covered under this Act, shall establish a comprehensive field sampling and pilot project program to improve the scientific data and calibration of standardized tools and methodologies.

(B) Testing new methodologies;—

(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 METHODOLOGIES.—

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

(2) SELECTION; FUNDING.—In carrying out the program under clause (1), 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 gases; 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 may be used as generating offset allowances pursuant to subtitle A shall not be used as the basis for a distribution of emission allowances under this section.

SEC. 323. AGRICULTURE 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 greenhouse gas emissions; and

(3) the proposed priority for additional research.

(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 from the Secretary to the Administrator, 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.

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

(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 greenhouse gas emissions; and

(3) the proposed priority for additional research.
The market—(A) is designed to prevent fraud and manipulation, which could potentially arise from many sources, including—
(i) a concentration of market power within the control of a limited number of individuals or entities; and
(ii) the abuse of material, nonpublic information and reporting requirements regarding transactions; and
(B)(i) is appropriately transparent, with real-time reporting of quotes and trades; and
(ii) makes information on price, volume, and supply and demand 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; and
(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 market protects investors and the public interest.
(II) the Federal Trade Commission.
(III) the Federal Reserve.
(IV) the Energy Information Administration.
(V) the Federal Energy Regulatory Commission.
(VI) the National Association of Securities Dealers.
(VII) the New York Mercantile Exchange.
(VIII) the Chicago Mercantile Exchange.
(2) High efficiency and performance of the market—
(1) the market shall promote the progress and safety of commerce and commerce the production and consumption of goods and services; and
(2) the market shall function smoothly and efficiently, generating prices that accurately reflect supply and demand for emission allowances; and
(3) the market shall be subject to effective and coordinated oversight, which integrates strong enforcement mechanisms, including mechanisms for cooperation with other national and international oversight regimes;
(4) the market shall be subject to effective and coordinated oversight, which integrates strong enforcement mechanisms, including mechanisms for cooperation with other national and international oversight regimes;
(5) the market shall be subject to effective and coordinated oversight, which integrates strong enforcement mechanisms, including mechanisms for cooperation with other national and international oversight regimes;
(6) the market shall establish an equitable system for best execution of customer orders.
(2) The market shall protect investors and the public interest.
(b) Establish.—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 Director of the Commodity Futures Trading Commission.
(6) Such other Executive branch officials as may be appointed by the President.
(d) Duties.—
(1) Identification of issues and appropriate activities.—
(A) General.—The Working Group shall identify—
(i) the major issues relating to the integrity, efficiency, orderliness, fairness, and competitiveness of the development of 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 subparagraphs (A)(i), (ii), and (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 Energy Regulatory Commission.
(2) Study.—The Working Group shall conduct a study of the major issues relating to the regulation of the emission allowance trading 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); and
(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.
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.
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).
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.
Enforcement.—Regulations promulgated under this section shall—
(I) be fully enforceable with respect to fines and penalties as are provided under the laws (including regulations) administered by the Federal agency that promulgated the regulations under this section; and
(II) the envelope of enforcement, in accordance with section 1722, be considered to have been promulgated pursuant to this Act.
Administration.—
(1) Information from Federal agencies.—
(A) General.—The Working Group may seek directly from any Federal agency such information as is necessary to carry out its duties.
(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 shall not receive any compensation from 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).
(4) 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
Section 421. Establishment.
There is established a board, to be known as the “Carbon Market Efficiency Board”.

June 4, 2008
CONGRESSIONAL RECORD—SENATE
S5063
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 individual 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) assure 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 I 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 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.

(C) 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 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 on cause under clause (i), the President shall provide to Congress an advance notification of the determination by the President to remove a 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 APPRENTICE.—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;

(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).

(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.

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

(f) OPEN MEETINGS.—The Board shall be subject to section 552b of title 5, United States Code (commonly known as the ‘‘Freedom of Information Act’’).

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

(h) REVIEW BY GOVERNMENT ACCOUNTABILITY OFFICE.—Not later than January 1, 2015, 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 supply decreases, or shifts in the allowance market, should those increases, decreases, or shifts occur; and

(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 allowance market; and

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

and 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 subsection (f) 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 DISTRIBUTION.

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 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 during that year;
(3) the balance, if any, of the amounts that—
   (A) were obligated during that year; but
   (B) shall not be obligated before removing a director for cause under section 436.

TRANSMIT TO THE CONGRESS FOR REVIEW

SEC. 436. REQUIREMENTS.

SEC. 437. REVIEWS AND AUDITS BY COMPTROLLER GENERAL.

SEC. 438. REGULATIONS.

SEC. 439. REMOVAL.

SEC. 440. APPOINTMENT AND TERM.

SEC. 441. REGULATIONS.

SEC. 442. REMOVAL.

SEC. 443. APPOINTMENT AND TERM.

ARTICLE II.

CONGRESSIONAL RECORD — SENATE
S5065

June 4, 2008

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) obtain emission allowances from the Administrator;

(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 earlier than the calendar year included in the identification number of the borrowed emission allowance.

SEC. 513. REIMBURSEMENT.

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 “source year”) that is earlier than the calendar year included in the identification number of the borrowed emission allowance,

(a) IN GENERAL.—The owner or operator of a covered entity may use banking to—

(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 from 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;

(b) LIMITATION.—On determination by the Administrator that compliance under the calendar year referred to in subsection (a) was not achieved using the cost relief measure, a covered entity may no longer borrow emission allowances from the Administrator for the calendar year.

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 from 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;

(b) LIMITATION.—On determination by the Administrator that compliance under the calendar year referred to in subsection (a) was not achieved using the cost relief measure, a covered entity may no longer borrow emission allowances from the Administrator for the calendar year.

Subtitle D—Cost-Contingent Auction Price

SEC. 522. COST-CONTINGENT AUCTION PRICE.

(a) IN GENERAL.—In December of each calendar year, the Administrator shall conduct a cost-contingent 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-contingent auction under subsection (a).

(c) USE OF EMISSION ALLOWANCES PURCHASED AT A COST-CONTINGENT AUCTION.—An emission allowance purchased at a cost-contingent 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 treated as compliance under that section irrespective of the year for which the emission allowance was established by the Administrator.

SEC. 523. COST-CONTINGENT AUCTION PRICE.

(a) IN GENERAL.—At each cost-contingent auction, the Administrator shall offer emission allowances for sale beginning at a minimum price, which shall be known as the “cost-contingent auction price”.

(b) COST-CONTINGENT AUCTION PRICE.

(a) IN GENERAL.—The cost-contingent auction price for the cost-contingent auction that takes place in December 2012 shall be the price established under paragraph (2).

(b) INITIAL COST-CONTINGENT AUCTION PRICE.

(1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the President shall establish the cost-contingent auction price for calendar year 2012 from within the range specified in paragraph (2), the cost-contingent auction price for calendar year 2012.

(2) RANGE.—The cost-contingent auction price per emission allowance for December 2012 shall be

(i) not more than $30;

(ii) $22.
(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) Administrator.—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).

SEC. 524. REGULAR AUCTION RESERVE PRICE.

(a) In General.—At any regular auction, there shall be an auction reserve price below which the Administrator shall not sell any emission allowance.

(b) Regular Auction Reserve 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. 525. POOL OF EMISSION ALLOWANCES FOR 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 reserve price per emission allowance 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 establish an auction reserve price pursuant to paragraph (1) of the quantity of 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 for 2031 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.

SEC. 527. USING THE PROCEEDS OF THE ANNUAL COST-CONTAINMENT AUCTIONS.

(a) Achieving Additional Emission Reductions From Unused Auction Proceeds.—
(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.—Notwithstanding section 202(c)(1), the Administrator shall deposit 30 percent of the proceeds from each cost-containment auction in the Climate Change Consumer Assistance Fund established by section 529.

SEC. 528. RETURNING EMISSION ALLOWANCES NOT SOLD AT THE ANNUAL COST-CONTAINMENT AUCTION.

(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 2013 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 conduct not fewer than 4 auctions, and 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:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Percentage for auction for Climate Change Worker Training and Assistance Fund</th>
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<tbody>
<tr>
<td>2012</td>
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<td>2013</td>
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<td>2031</td>
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<td>2032</td>
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</table>
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 calendar years 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 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).

OFFICE.—The term ‘‘Office’’ means the Office of Climate Change Adjustment Assistance established by subsection (e).

PROGRAM.—The term ‘‘Program’’ means the Climate Change Worker Adjustment Assistance Program established under regulations promulgated under subsection (c).

SECRETARY.—The term ‘‘Secretary’’ means the Secretary of Labor.

(1) 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 90 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, and the Chairmen or ranking minority members of committees of equivalent stature of the House of Representatives and the Senate, 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; and

(C) not later than 120 days after the date of enactment of this Act, formulate a strategic plan to the Committee on Ways and Means of the House of Representatives and the Committee on Finance of the Senate;

(D) not later than 270 days after the date of enactment of this Act, hold planning meetings; and

(E) not later than 270 days after the date of enactment of this Act, hold public hearings.

(f) PROGRAM ADMINISTRATION.

(A) 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.

(B) 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 Senate;

(D) the Committee on Finance of the Senate; and

(E) the Committee on Health, Education, Labor, and Pensions of the Senate.

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(f) PROGRAM ADMINISTRATION.

(A) 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.

(B) 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 Senate;
(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 adjustment 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) health care benefit replacement amount.

(4) LIMITATIONS ON CLIMATE CHANGE READJUSTMENT ALLOWANCES.—An eligible worker may receive 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 CARE MANAGEMENT SERVICES.—The Secretary shall provide, through agreements with State employment services agencies, to adversely affected workers who are engaged in similar work or training as the geographical area that is the subject of the order or as the geographical area in which training for a worker is provided in subsection (d), 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.

(7) STATE ADMINISTRATION OF WORKER ASSISTANCE.—Any State employment services agency, acting pursuant to an agreement with the Secretary, shall carry out such administrative activities (including using its State apprenticeship office, accord- ance with applicable standards for a merit system of personnel administration) as are necessary for the 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; and

(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).

(8) TRAINING.—

(a) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, the Secretary shall make available, to the worker, funds available to pay the costs of training for climate change adjustment assistance-eligible individuals under this section.

(b) DISTRICTS.—The procedures established under paragraph (1) shall be described in the strategic plan described in subsection (d)(3)(C)(ii).

(c) INCLUSION IN STRATEGIC PLAN.—The procedures established under paragraph (1) shall be included, in the strategic plan described in subsection (d)(3)(C)(ii).

(d) DISTRIBUTION.—In establishing and implementing the procedures under paragraph (1), the Secretary—

(A) shall 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 in that fiscal year.

(e) APPROVAL OF TRAINING.—

(A) IN GENERAL.—If the Secretary makes a determination described in subparagraph (B), the Secretary shall provide written notice to the worker.

(B) DETERMINATION.—The determination referred to in subparagraph (A) is a determina- tion that—

(i) the worker would benefit from appropriate training;

(ii) there is reasonable expectation of em- ployment following completion of the training;

(iii) training approved by the Secretary is reasonably available to the worker from gov- ernment or nonprofit educational or training sources;

(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.

(f) 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 Secre- tary directly or through a voucher system.

(g) 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 programs;

(B) any training program provided by a State pursuant to title I of the Workforce Invest- ment Act of 1998 (29 U.S.C. 2801 et seq.);

(C) any program of remedial education; and

(D) any program of remedial education.

(9) 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 dis- tance of the regular place of residence of the worker.

(10) ADDITIONAL ON-THE-JOB TRAINING.—Under the Program, the Secretary may provide funds to be used as job search allow- ances and relocation allowances.

(11) 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 subject of the order or as the geographical area in which training for a worker is provided in subsection (d), the Secretary shall, to the extent possible, consult with the labor organization prior to the effectiveness of this subsection.

(12) CONSISTENCY WITH CURRENT LABOR LAWS.—The Secretary shall determine which Federal worker protection, nondiscrimina- tion requirements, and labor standards apply to the Program.
(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 determine, as 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:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Percentage for distribution among carbon-intensive manufacturing facilities in United States</th>
</tr>
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<tbody>
<tr>
<td>2012</td>
<td>11</td>
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<tr>
<td>2013</td>
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<td>2030</td>
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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) The term ‘‘eligible manufacturing facility’’ means a manufacturing facility located in the United States that principally manufactures iron, steel, pulp, paper, cement, rubber, chemicals, glass, ceramics, sulfur hexafluoride, or aluminum and other nonferrous metals, within the United States.

(B) EXCLUSION.—The term ‘‘eligible manufacturing facility’’ does not include a facility eligible to receive emission allowances under subsection (c).

(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.—(1) IN GENERAL. The Administrator shall promulgate regulations establishing a system for distributing, for each of calendar years 2012 through 2025, 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 all currently operating facilities.

(2) THE RATIO THAT (DURING THE CALENDAR YEAR PRECEDING THE CALENDAR YEAR FOR WHICH EMISSION ALLOWANCES ARE DETERMINED) BEARS TO THE TOTAL QUANTITY OF ALLOCATION DISTRIBUTED UNDER SECTION 541.—(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 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 to which this section applies; and

(c) TOTAL ALLOCATION FOR CURRENTLY OPERATING FACILITIES. In this section:

(1) CURRENTLY OPERATING FACILITY.—The term ‘‘currently operating facility’’ means a manufacturing facility identified in the report, under section 543, for which emission allowances available for allocation during that calendar year are determined as the product obtained by multiplying

(A) the total quantity of emission allowances available for allocation under section 541; and

(B) the ratio that (during the calendar year preceding the calendar year for which emission allowances are being distributed under this section) bears to

(2) THE RATIO THAT (DURING THE CALENDAR YEAR IMEDIATELY PRECEDING THE YEAR TO WHICH THIS SECTION APPLIES) BEARS TO THE TOTAL QUANTITY OF ALLOCATION DISTRIBUTED UNDER SECTION 541.—(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 all currently operating 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

(A) the total quantity of emission allowances available for allocation under section 541; and

(B) the ratio that (during the calendar year preceding the calendar year for which emission allowances are being distributed under this section) bears to

(e) INDIVIDUAL ALLOCATIONS TO CURRENTLY OPERATING FACILITIES. The regulations promulgated under subsection (b) shall provide that the total quantity of emission allowances available for allocation under this section by all currently operating facilities, as determined by the Administrator, shall be distributed by the Administrator to owners or operators of currently operating facilities in the appropriate category, as determined under subsection (c); and

(f) ENERGY INTENSITY-BASED ALLOCATION. In this section:

(1) IN GENERAL. Not later than 1 year after the date on which the facility shuts 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 after 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:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Percentage for Distribution Among Fossil Fuel-Fired Electricity Generators in the United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>18.0</td>
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<tr>
<td>2013</td>
<td>18.0</td>
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<td>2016</td>
<td>17.75</td>
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<td>2029</td>
<td>3.0</td>
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<tr>
<td>2030</td>
<td>2.75</td>
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</tbody>
</table>

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 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—

(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 liquids at the time of importation into the United States.

SEC. 553. ALLOCATION.

Not later than 330 days after 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 liquids at the time of importation into the United States.

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).

Subtitle H—Transition Assistance for Natural-Gas Producers

SEC. 571. ALLOCATION.

Not later than 330 days 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 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 allocated for that year by 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 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 produced in the United States during the 3 calendar years preceding the date of distribution of emission allowances; and

(ii) the use by those rural electric cooperatives that receive an additional emission allowance under subsection (a) of emission allowances distributed to the owner or operator of an entity described in section 561 manufactured in the United States during the 3 calendar years preceding the date of distribution of emission allowances;

(2) 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 produced in the United States during the 3 calendar years preceding the date of distribution of emission allowances; and

(ii) the use by those rural electric cooperatives that receive an additional emission allowance under subsection (a) of emission allowances distributed to the owner or operator of an entity described in section 561 manufactured in the United States during the 3 calendar years preceding the date of distribution of emission allowances; and

(3) notwithstanding paragraph (1), provide for appropriate adjustments to reflect the effects of the regulations described in subsections (b)(2), (c), and (d) of section 302.
(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 reimported 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 502.

### 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) NUMERIC 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:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Percentage for auction for Climate Change Consumer Assistance Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>3.5</td>
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<tr>
<td>2013</td>
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<td>2026</td>
<td>9</td>
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</tbody>
</table>

#### 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.

### 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 calendar year 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.—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—

1. 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

2. 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.

(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; and

      (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.—A local distribution entity may develop an assistance program under this paragraph.

(ii) In consultation with appropriate State regulatory authorities; or

(iii) 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 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 program under this section. The Administrator may change the 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.

(f) 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 no 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) Procedural requirements.—

(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 is 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 the 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 emission allowances; and

(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, 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).

(b) Calculations.—For each calendar year 2012 through 2050, the Administrator shall allocate to States described in paragraph (1) the percentage of emission allowances specified in the following table:

<table>
<thead>
<tr>
<th>Calendar year</th>
<th>Percent of emission allowances for allocation among States relying heavily on manufacturing and on coal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>3</td>
</tr>
<tr>
<td>2013</td>
<td>3.5</td>
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<td>2038</td>
<td>4</td>
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<tr>
<td>2039</td>
<td>4</td>
</tr>
</tbody>
</table>
(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, $\frac{1}{2}$ 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, $\frac{1}{2}$ 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 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 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.

(3) USE.—During any calendar year, a State shall in general 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”, for the purposes of this section.

(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:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Percentage for auction for public transportation</th>
</tr>
</thead>
<tbody>
<tr>
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(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 (b) shall be made available, without further appropriation or fiscal year limitation, for grants described in subsections (g) through (l).

(g) GRANTS TO PROVIDE ADDITIONAL AND IMPROVED PUBLIC TRANSPORTATION SERVICES.—

(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) in accordance with the formulas contained in subsections (a) through (c) of section 5307 of title 49, United States Code; and

(B) 40 percent in accordance with the formula contained in section 5307 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) the Administrator shall establish pursuant to section 201(a) for each calendar year.

(2) IN GENERAL.—Each of calendar years 2012 through 2050, the Administrator shall establish in the Transportation Sector Emission Reduction Fund a portion of the proceeds of each auction conducted under subsection (b) through (l) that is determined by the Administrator and shall distribute the proceeds of each auction conducted under subsection (b) through (l) to public transportation systems.
(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 6833 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 5309(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.

(ii) DISTRIBUTION OF FUNDS.—In determining the recipients of grants under this subsection, applications shall be evaluated based on the direct and indirect greenhouse gas emissions reductions that are projected to result from the project and project actions as a percentage of the total direct and indirect emissions of an entity.

(iii) 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.

(iv) 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 5309 of title 49, United States Code:

(1) 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—

(A) include all modes of surface transportation;

(B) integrate transportation data collection, monitoring, planning, and modeling;

(C) report on estimated greenhouse gas emissions; and

(D) be designed to reduce greenhouse gas emissions from the transportation sector; and

(E) 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 301 of the Energy Conservation and Production Act (42 U.S.C. 6831) is amended to read as follows:

"SEC. 301. UPDATING STATE BUILDING ENERGY EFFICIENCY CODES.

"(a) UPDATE.—

"(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 January 1, 2012; or

(B) 50 percent, with respect to each edition of a model code or standard published on or after January 1, 2012; and

(C) targeting intermediate and subsequent years, to be established by the Secretary not later than 3 years before the beginning of each target year, in coordination with IECC and ASHRAE Standard 90.1 cycles, at the maximum level of energy efficiency that is lifecycle cost-effective and scientifically feasible.

(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)(i) that a code or standard does not meet the energy savings goals described in paragraph (1) or that the code or standard under 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—

(aa) the quantity of energy savings represented by the modified code or standard.

(ii) 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—

(aa) the quantity of energy savings represented by the modified code or standard.

(iii) GOVERNMENT SHARE OF COSTS.—Not later than 2 years after the determination of a model code or standard published under paragraph (1) or that a 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.

(3) GOVERNMENT SHARE OF COSTS.—

(1) IN GENERAL.—If the IECC or ASHRAE Standard 90.1 regarding building energy use is revised, the Secretary shall determine whether the revision will—

(A) improve energy efficiency in buildings; and

(B) meet the energy savings goals described in paragraph (1).

(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; and

(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).

(3) 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 CODES.—

(I) GENERAL CERTIFICATION.—

(1) 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 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, 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.

(3) FAILURE TO CERTIFY.—

(A) 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.

(B) NONCOMPLIANCE BY STATE.—If the Secretary determines that a State has failed 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.

(c) Technical Assistance.—

(1) In general.—The Secretary shall provide technical assistance (including building energy analysis and design tools, building demonstration, 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.

(d) Incentive Funding.—

(1) In general.—The Secretary shall provide incentive funding to States—

(A) to implement this section; and

(B) to implement and improve residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

(2) Amount.

(A) to implement this section; and

(B) to implement and improve State residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

(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 implement and improve residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

(2) Amount.

(A) to implement this section; and

(B) to implement and improve State residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

(g) 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.

(h) Incentive Funding.—

(1) In general.—The Secretary shall provide incentive funding to States—

(A) to implement this section; and

(B) to implement and improve residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

(2) Amount.

(A) to implement this section; and

(B) to implement and improve State residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

(i) 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.

(j) Incentive Funding.—

(1) In general.—The Secretary shall provide incentive funding to States—

(A) to implement this section; and

(B) to implement and improve residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

(2) Amount.

(A) to implement this section; and

(B) to implement and improve State residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

(k) 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.

(l) Incentive Funding.—

(1) In general.—The Secretary shall provide incentive funding to States—

(A) to implement this section; and

(B) to implement and improve residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

(2) Amount.

(A) to implement this section; and

(B) to implement and improve State residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

(m) 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.

(n) Incentive Funding.—

(1) In general.—The Secretary shall provide incentive funding to States—

(A) to implement this section; and

(B) to implement and improve residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

(2) Amount.

(A) to implement this section; and

(B) to implement and improve State residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.

SEC. 614. STATE LEADERS IN REDUCING EMISSIONS.

(a) Allocation.—

(1) In general.—Not later than 330 days before the beginning of each calendar year from 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 calendar year from 2012 through 2050, the Administrator shall distribute in accordance with paragraph (1) the percentage of emission allowances specified in the following table:

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<thead>
<tr>
<th>Calendar Year</th>
<th>Percentage for State leaders in reducing greenhouse gas emissions and improving energy efficiency</th>
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<tbody>
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(b) Conforming Amendment.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6632) is amended by adding at the end the following:

‘‘(17) IECC.—The term ‘IECC’ means the International Energy Conservation Code.’’.
(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.—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); or

(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 providing assistance to displaced workers.

(G) To engage local and municipal government in increasing recycling rates through workforce development programs.

(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 encourage localized efforts to protect consumers 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 sale of those emission allowances) under this section for that calendar year for 1 or more of the following purposes:

(a) To mitigate 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.
June 4, 2008

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(1) 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—
   (i) the allowances received under this section; and
   (ii) 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 distribute in accordance with subsection (b) the percentage 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 (b) the percentage of emission allowances specified in the following table:

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<tr>
<th>Calendar Year</th>
<th>Percentage for States and Indian tribes for adaptation activities</th>
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(2) 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) ALLOCATIONS.—Of the emission allowances allocated each year pursuant to section 621, the Administrator shall allocate 90 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.

(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 that are affected by climate change, including the development of plans to protect, or, as necessary or applicable, to relocate the facilities or infrastructure;

(2) SPECIFIC USES.—The projects and activities described in paragraph (1) shall include—
   (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 modeling;
   (vi) storm surge sea level rise linked inundation modeling;
   (vii) shoreline change modeling based on sea level rise projections;
   (viii) sea level rise vulnerability analyses and socioeconomic studies;
   (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 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 PARTNERSHIP.—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 of the emission allowances on a pro rata basis to the States based on the level of climate change impacts that each State has experienced to date and most severe impacts on the availability of freshwater and on agriculture, as determined by the Administrator.

(1) In General.—For each calendar year, a State receiving emission allowances under this section shall use the allowances, or the proceeds of 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 clean-up technologies, and flood control) 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.

(b) 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 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 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 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 principles established by the Indian Self-Determination and Educational Assistance Act (25 U.S.C. 450 et seq.), in consultation with the Secretary of the Interior and Indian tribes, no 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 (a) to Indian tribes, beginning no 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 calendar year from 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) Notice.—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 shall be carried forward to the next fiscal year.

(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 developing 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); and

(C) to support and 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. 4368a) and the Clean Air Act (42 U.S.C. 7401 et seq.);

(D) to mitigate impacts on low-income Indian energy consumers; and

(E) to provide 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 lands;

(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 and analysis, vulnerability assessment, and ecosystem response assessment); and

(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 climate change.

(f) No Tribal Authority Requirement.—The Administrator shall not require Indian tribes to submit to the Tribal Climate Change Assistance Fund.

(g) No Tribal Authority Requirement.—The Administrator shall not require Indian tribes to submit to the Tribal Climate Change Assistance Fund.

(h) Tribal Authority.—The Administrator 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.

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(2) the proceeds of the sale by the State 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”).

(1) Auctions.—

(i) 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 203(a) for raising funds for deposit in the Fund.

(ii) 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:

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(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. 669a(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 carrying out 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. 460l–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. 460l–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. 460l–6), be available without further appropriation for nonadaptation needs.

(3) Allocations.—Of the amounts deposited in the Land and Water Conservation Fund under paragraph (1)—

(A) ½ 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. 460l–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. 460l–7); and

(iii) in addition to grants provided pursuant to—

(I) annual appropriations Acts;


(III) any other authorization for nonadaptation needs;

(B) ½ 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 1998 (16 U.S.C. 2105c); and

(C) 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. 460l–9).

(4) Expenditure of Funds.—In allocating funds under paragraph (2), 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 systems, and

(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 under 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) Use 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 that is 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 in paragraph (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 the impacts of 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; and

(5) establish methods to—

(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) update 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 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, 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 regional fishery management plans and habitat conservation activities under the Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.);
(E) 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;
(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.

SEC. 703. GENERAL DISTRIBUTION.
Not later than 4 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:

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<th>Calendar Year</th>
<th>Percentage for Allocation to Early Action Program</th>
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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—
(1) 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 costs of acquiring, developing, and maintaining eligible technologies and holding the emission allowances under subsection (a)(2).

SEC. 705. DISTRIBUTION TO POWER PLANTS MINIMUM ALLOWANCES PENDING CONSENT DECREES.
(a) DEFINITION OF ELIGIBLE FACILITY.—In this section, the term “eligible facility” means a 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 eligible entity 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 an annual carbon dioxide emissions resulting from the repowering, will not be distributed to the owner or operator of the facility pursuant to section 201(a)(2).
Title X—Low-Carbon Electricity and Advanced Research

Subtitle A—Low- and Zero-Carbon Electricity Technology

Sect. 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 that produce zero- or low-carbon generation technologies.
(2) Qualifying component.—The term ‘‘qualifying component’’ means a component that 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 314 of title 40, United States Code.

Sect. 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’’. There is established in the Treasury of the United States a fund, to be known as the ‘‘Low- and Zero-Carbon Electricity Technology Fund’’.
(1) **In General.**—For each of calendar years 2012 through 2050, 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 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 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, the Energy Innovation Acceleration Fund pursuant to section 431 to carry out the financial incentives program established under section 906.

SEC. 906. FINANCIAL INCENTIVES PROGRAM. For fiscal year 2012 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 that establish or convert facilities 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 heat input, respectively, to dollars per megawatt-hour of electricity generated.

(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.**—For 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; and

(B) engineering integration costs of zero- or low-carbon generation technology and qualifying components; and

(C) prototype 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) demonstrate the greatest use of domestically-sourced parts and components;

(2) return to productive service existing manufacturing capacity;

(3) are located in States with the greatest availability of unemployed manufacturing workers;

(4) compensate workers in an amount that is not less than 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) **APPLICATIONS.**—

(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 type 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, 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 pursuant to section 911.

(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 the Energy Transformation Acceleration Fund established pursuant to section 912.

**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 deposited 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”), to which shall be deposited 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, 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 Kick-Start Program with the goal of rapidly bringing into operation in the United States not fewer than 5 nor more than 15 commercial facilities that capture and geologically sequester carbon 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 proceeds, in the Fund.

(e) PRIORITY.—The Board shall design and carry out the Kick-Start Program 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 type 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 the prior approval of the Administrator, 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.

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 Kick-Start Program with the goal of rapidly bringing into operation in the United States not fewer than 5 nor more than 15 commercial facilities that capture and geologically sequester carbon 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 proceeds, in the Fund.

(e) PRIORITY.—The Board shall design and carry out the Kick-Start Program 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 type 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 the prior approval of the Administrator, 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.

SEC. 1006. AUCTIONS.

Not later than 120 days after the date of enactment of this Act, and annually thereafter, 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 Kick-Start Program with the goal of rapidly bringing into operation in the United States not fewer than 5 nor more than 15 commercial facilities that capture and geologically sequester carbon 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 proceeds, in the Fund.

(e) PRIORITY.—The Board shall design and carry out the Kick-Start Program 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 type 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 the prior approval of the Administrator, 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.

SEC. 1006. AUCTIONS.

Not later than 120 days after the date of enactment of this Act, and annually thereafter, 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 Kick-Start Program with the goal of rapidly bringing into operation in the United States not fewer than 5 nor more than 15 commercial facilities that capture and geologically sequester carbon 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 proceeds, in the Fund.

(e) PRIORITY.—The Board shall design and carry out the Kick-Start Program 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 type 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 the prior approval of the Administrator, 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.
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) Definitions.—

(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 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 1022(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 1022(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 1022(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.

(b) Bonus Allowance Adjustment Ratio.—

(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 sequestering carbon dioxide from the facility.

(2) Limitation.—In determining the 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).

(c) Enhanced Oil Recovery.—For a carbon capture and sequestration project sequestering carbon dioxide 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 sequestrations 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. 300sf) is amended—

(1) in subsection (b)(1), by striking “subsection (d)(3)” and inserting “subsection (e)(2)”;

(2) by redesigning 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 2007, 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. 300t-6(a)(4)) is amended by striking “section 1421(d)(2)” and inserting “section 1421(d)(3).”

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.

(b) STORAGE FORMATION.—The term “storage formation” means the 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) estimate of potential volumes of oil and gas recoverable by injection and storage of industrial carbon dioxide in potential storage formations;

(5) any risk associated with the potential storage formations; and

(6) the work performed to develop the Carbon Sequestration Atlas of the United States and Canada published by the Department of Energy in April 2006.

(c) COORDINATION.—

(1) FEDERAL COORDINATION.—The Secretary shall consult with the Chairman of the Federal Energy Regulatory Commission and the Administrator of the Environmental Protection Agency with respect to closed geological sequestration or enhanced oil recovery.

(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 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.—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 the Interior, the Administrator, and the Chairman of the Federal Energy Regulatory Commission, shall conduct a national assessment of the capacity for carbon dioxide storage in accordance with the methodology.

(1) 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 test data.

(2) PARTNERSHIP WITH OTHER DRILLING PROGRAMS.—As part of the drilling characterization under paragraph (2), the Secretary shall enter into agreements, as appropriate, with other entities to collect and integrate data from other drilling programs relevant to the storage of carbon dioxide in geological formations.

(3) 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;

(ii) a new database developed by the Secretary, as the Secretary determines to be necessary; and

(B) RANKING.—The database shall include the data necessary to rank potential storage sites—

(i) by capacity and risk;

(ii) across the United States;

(iii) within each State; and

(iv) 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 Representa
tives a report describing the results of the assessment.

(6) PERIODIC UPDATES.—The assessment shall be updated periodically (including not less frequently than once every 3 years) as necessary to account for new and private sector decisionmaking, as determined by the Secretary.

SEC. 102d. STUDY OF FEASIBILITY RELATING TO CONSTRUCTION AND OPERATION OF PIPELINES AND GEOLOGICAL CARBON DIOXIDE SEQUESTRATION FACILITIES.

(a) IN GENERAL.—The Secretary of Energy, in coordination with 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; and

(2) the 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; and

(B) the construction and operation of facilities for the geological sequestration of carbon dioxide;

(c) REPORT.—Not later than 2 years after the date of enactment of this Act, the Administrator shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science and Technology of the House of Representa
tives a report describing the results of the study.

SEC. 1103. CLEAN MEDIUM- AND HEAVY-DUTY HYDROGEN FLEETS.

(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) implement a program for distributing emission allowances allocated pursuant to section 1102 to entities in

(b) LABORATORY FOR DISTRIBUTION OF CLEAN MEDIUM- AND HEAVY-DUTY HYDROGEN FLEETS.

SEC. 1104. CLEAN MEDIUM- AND HEAVY-DUTY HYDROGEN 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) implement a program for distributing emission allowances allocated pursuant to section 1102 to entities in

(3) any regulatory, financing, or siting consideration, 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 responsibility to the public sector or within the private sector, and possible indemnity from long-term liabilities.
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.

(2) REQUIREMENTS.—The regulations promulgated pursuant to subsection (a) shall require that—

(A) only new purchasers of commercial vehicles weighing at least 8,500 pounds are eligible for receipt of emission allowances under the program;

(B) 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;

(C) rewards increase commensurately with fuel efficiency of qualifying vehicles;

(D) qualifying vehicles shall be categorized into not fewer than 3 classes of vehicle weight, in order to ensure—

(i) adequate availability of rewards for different categories of commercial vehicles; and

(ii) that the rewards for heavier, more expensive vehicles are proportional to the rewards for lighter, less expensive vehicles;

(E) that the rewards for heavier, more expensive vehicles are proportional to the rewards for lighter, less expensive vehicles; and

(F) engineering integration performed in service during the period beginning on the date of enactment of this Act and ending on December 31, 2029; and

(G) engineering integration costs incurred after the date of enactment of this Act.

(3) PERIOD OF AVAILABILITY.—An award under subsection (a) shall apply to—

(A) 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

(B) engineering integration costs incurred after the date of enactment of this Act.

(4) ADDITIONAL REQUIREMENTS.—The Climate Change Technology Board shall not make an award under this section to—

(A) an automobile manufacturer or component supplier that, directly or through a parent, subsidiary, or affiliated entity, is not in compliance with regulations promulgated pursuant to subsection (a) shall require that emission allowances shall be distributed under the program established pursuant to section 136(d)(2) of the Energy Independence and Security Act of 2007 (42 U.S.C. 1703(d)) shall apply to prospective recipients under this section.

The regulations promulgated pursuant to paragraph (1) shall require that emission allowances shall be distributed under the program established pursuant to section 136(d)(2) of the Energy Independence and Security Act of 2007 (42 U.S.C. 1703(d)) shall apply to prospective recipients under this section.

(b) PROGRAM.—For each of calendar years 2012 through 2030, the Administrator shall establish a program for distributing emission allowances established pursuant to section 211(o)(1) of the Clean Air Act (42 U.S.C. 7545(o)(1)); and

(c) USE OF FUNDS.—For each of calendar years 2012 through 2030, all funds deposited into the Fund during the preceding year pursuant to section 1112 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 established pursuant to this section.

SEC. 1114. USE OF FUNDS.

For each of calendar years 2012 through 2030, all funds deposited into the Fund during the preceding year pursuant to section 1112 shall be made available, without further appropriation or fiscal year limitation, to the Climate Change Technology Board established by this section for making manufacturer facility conversion awards under this section.

SEC. 1115. MANUFACTURER FACILITY CONVERSION.

(a) USE OF FUNDS.—For each of calendar years 2012 through 2030, all funds deposited into the Fund during the preceding year pursuant to section 1112 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 established pursuant to this section.

(b) USE OF FUNDS.—For each of calendar years 2012 through 2030, all funds deposited into the Fund during the preceding year pursuant to section 1112 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 this section.

SEC. 1116. USE OF FUNDS.

For each of calendar years 2012 through 2030, all funds deposited into the Fund during the preceding year pursuant to section 1112 shall be made available, without further appropriation or fiscal year limitation, to the Climate Change Technology Board established by this section for making manufacturer facility conversion awards established pursuant to this section.

SEC. 1117. USE OF FUNDS.

For each of calendar years 2012 through 2030, all funds deposited into the Fund during the preceding year pursuant to section 1112 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 established pursuant to this section.

The Administrator shall promulgate regulations to establish a program for distributing emission allowances established pursuant to subsection (a) to entities in the United States as a reward for production in the United States of fuels 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) to support commercial 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)));

(C) in a manner that provides priority to projects that achieve—

(i) low costs to consumers over the medium- and long-term; and

(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 sectors of the transportation sector, including the aviation and marine segments.
Title II—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 is increasingly on advanced, clean, low-carbon fuels for transportation.

SEC. 1132. DEFINITIONS.

Section 210(c) 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; and

(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 after January 1, 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

(ii) 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 fuels to prevent, or to reduce, on an annual average basis, the average lifecycle greenhouse gas emissions per unit of energy of the aggregate quantity of transportation fuel products refined, blended, or imported by the fuel provider to a level that is, to the maximum extent practicable—

(aa) less 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 requirement under paragraph (13)(B)(ii); and

(cc) by not later than calendar year 2023, at least 5 percent less than the fuel emission baseline; and

(iii) 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.

(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.—

(1) 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).

(2) USE OF BANKED CREDITS.—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—

(I) 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.—

(1) 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.

(2) 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 offset the deficiency 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.

(3) 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.

(4) 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 the State to establish, 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 1210(a).
(2) FOREST SERVICE FUND.—The term “Forest Service Fund” means the Forest Service Emergency Firefighting Fund established by section 1210(a).
(3) WILDLIFE ADAPTATION FUND.—The term “Wildlife Adaptation Fund” means the National Wildlife Adaptation Fund established by section 1210(b)(2).

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 calendar year 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 $800,000,000; and
(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.
(B) the interval between each auction is of equal duration.
(c) QUANTITIES OF EMISSION ALLOWANCES.
(A) IN GENERAL.—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:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Percentage for auction for funds</th>
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<tbody>
<tr>
<td>2012</td>
<td>3</td>
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<tr>
<td>2013</td>
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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 Agriculture (referred to in this section as the “Secretary”) for normal, non-emergency 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 (2) 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 a report—
(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. 1211. 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. 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, non-emergency 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 (2) 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, a report—
(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.
(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;
(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) 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, priorities for Federal 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;
(B) have the greatest need for protection, restoration, and conservation;
(C) are located near human populations that are vulnerable to climate change and ocean acidification;
(D) are particularly vulnerable to climate change and ocean acidification;
(E) are particularly vulnerable to climate change and ocean acidification;
(F) have the greatest need for protection, restoration, and conservation;
(G) are located near human populations that are vulnerable to climate change and ocean acidification;
(H) are located near human populations that are vulnerable to climate change and ocean acidification;
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(W) are located near human populations that are vulnerable to climate change and ocean acidification;
(X) are located near human populations that are vulnerable to climate change and ocean acidification;
(Y) are located near human populations that are vulnerable to climate change and ocean acidification;
(Z) are located near human populations that are vulnerable to climate change and ocean acidification;

(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 Oceanic Activities;
(F) State or local integrated water resource management plans;
(G) watershed plans developed pursuant to section 308 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 President shall establish the Science Advisory Board, and shall appoint the members of the Advisory Board that is composed of—

(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 scientific evidence 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) COORDINATION.—The Advisory Board shall collaborate with any other climate change or ocean acidification 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.).

SOURCE 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, coastal management agencies, tribes, and Indian tribes, shall—

(c) ESTABLISHMENT.—There is established a National Wildlife Adaptation Program.

(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 scientific evidence 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) COORDINATION.—The Advisory Board shall collaborate with any other climate change or ocean acidification 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.).

SOURCE 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, coastal management agencies, tribes, 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 of climate change on fish, wildlife, and plants, the habitats of fish, wildlife, and plants, and associated ecological processes; and
(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); and

(c) CONSULTATION.—In operating the Science Center, the Secretary shall collaborate with any other climate change or ocean acidification research entity of any other Federal agency.

(d) USE AND AVAILABILITY OF FUNDS.—Amounts deposited in the Wildlife Adaptation Fund under section 1231(a) 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 (including through the purchase of aquatic and terrestrial ecological systems and coastal and island lands); and

Subtitle D—National Wildlife Adaptation Program

SOURCE SCIENCE CENTER.

(a) IN GENERAL.—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 1231(a) of this Act.

(b) USE AND AVAILABILITY OF FUNDS.—Amounts deposited in the Wildlife Adaptation Fund under section 1231(a) 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 (including through the purchase of aquatic and terrestrial ecological systems and coastal and island lands); and

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 1231(a) of this Act.

(b) USE AND AVAILABILITY OF FUNDS.—Amounts deposited in the Wildlife Adaptation Fund under section 1231(a) 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 (including through the purchase of aquatic and terrestrial ecological systems and coastal and island lands); and

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 1231(a) of this Act.

(b) USE AND AVAILABILITY OF FUNDS.—Amounts deposited in the Wildlife Adaptation Fund under section 1231(a) 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 (including through the purchase of aquatic and terrestrial ecological systems and coastal and island lands); and

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 1231(a) of this Act.

(b) USE AND AVAILABILITY OF FUNDS.—Amounts deposited in the Wildlife Adaptation Fund under section 1231(a) 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 (including through the purchase of aquatic and terrestrial ecological systems and coastal and island lands); and

Subtitle D—National Wildlife Adaptation Program
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 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 1230(a),

(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;

(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 Secretary of the Interior 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 Program.

(2) 10 percent shall be allocated to the Secretary of the Interior for adaptation activities carried out under cooperative grant programs.

(a) the cooperative endangered species conservation fund established under title 2 of the Endangered Species Act of 1973 (16 U.S.C. 1532 et seq.);

(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 Acts of 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. 610(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 North American Waterfowl Management Plan;

(J) the Fish and Wildlife Management Program, and the National Park Service; and

(2) 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. FEDERAL AGENCIES.**

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—

(A) large-scale freshwater aquatic ecosystems, including the Everglades, the Great Lakes, the Mississippi River, the Missouri River, the Colorado River, the Sacramento-San Joaquin Rivers, the Ohio River, the Columbia-Snake River System, the Apalachicola, the Chattahoochee and Flint River Systems, the Connecticut River, and the Yellowstone River;

(B) large-scale estuarine ecosystems, including the Chesapeake Bay, Long Island Sound, Great South Channel, Mississippi River Delta, San Francisco Bay Delta, Narragansett Bay, and Albemarle-Pamlico Sound; and

(C) 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 Interior for use by the Corps of Engineers to carry out adaptation activities for protecting and restoring—

(A) large-scale freshwater aquatic ecosystems, including the ecosystems described in section 1234(1);

(B) large-scale estuarine ecosystems, including the ecosystems described in section 1234(2);

(C) 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;

(D) habitats or ecosystems under programs such as—

(i) the Estuary Restoration Act of 2000 (33 U.S.C. 2201 et seq.); and

(ii) project modifications in accordance with section 1133 of the Water Resources Development Act of 1986 (33 U.S.C. 2206a) for improvement of the environment; and

(iii) the program for aquatic restoration under section 206 of the Water Resources Development Act of 1996 (33 U.S.C. 2206).

**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 for protecting, maintaining, and restoring coastal, estuarine, Great Lakes, and marine resources, habitats, and ecosystems, including activities carried out under—

(A) the coastal and estuarine land conservation program;

(B) the community-based restoration program;

(C) 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 plans that are—

(i) 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

(ii) described in other applicable sections of this Act; and

(D) pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.);

(E) the Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.);

(F) the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 et seq.);

(G) the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.);

(H) the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1401 et seq.);


**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;

(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 on the distribution, abundance, and genetic diversity of imperiled species, ecosystems, and waters under the jurisdiction of the United States (including the possessions and territories of the United States); and

(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 non-Federal 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).
SEC. 1301. DEFINITIONS.

In this subtitle:

(1) BASELINE EMISSION LEVEL.—

(A) 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 associated to the category of the covered good of the foreign country during calendar year 2005, based on the best available information.

(B) With respect to a 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 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:

(1) 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.

(2) In the case of a foreign country that is not considered to have taken comparable action under clause (1), the Commission shall take into consideration, in making a determination, the relevant period, the foreign country has implemented, verified, and enforced each of the following requirements:

(i) The deployment and use of state-of-the-art technologies in industrial processes, equipment manufacturing facilities, power generation, 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 emissions and other emission credits.

(iv) Any determination on comparable action made by the Commission under this paragraph shall comply with applicable international agreements.

(v) COMPLIANCE YEAR.—The term "compliance year" means each calendar year for which the requirements, as determined by the Commission, 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 list prepared under section 1306.

(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 manufacturing 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 covered good.

(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 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 under section 1302.

(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 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 re-exports 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 change in 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 greenhouse gas emissions associated to the category of the covered good of the foreign country, the total annual 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), 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 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 attributable to the achievement of the purposes described in section 1302; and

(B) the United States should adopt 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 comparable action taken by those countries.
(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 objectives of the 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 will 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) 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 subchapter.

(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 subchapter.

(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 no 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 serve only 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 reappointed.

(E) Chairperson and Vice-Chairperson.

(A) Designation.—

(i) In General.—The President shall designate a Chairperson and Vice-Chairperson of the Commission that are eligible for designation under subparagraph (C).

(ii) Failure to Designate.—If the President fails to designate a Chairperson under clause (i), the commission, with the longest period of continuous service on the Commission shall serve as Chairperson.

(B) Term of Office.—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 the provisions of this subtitle.

(c) Determination of Comparable Action.—

(A) In General.—The Administrator shall make a determination of 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.

(B) Duties.—The Commission shall—

(1) determine whether foreign countries are taking comparable action under section 1305; and

(2) establish a list of foreign countries under section 1306(b).

(c) Duties. The Commission shall—

(1) determine whether foreign countries are taking comparable action under section 1305; and

(2) establish a list of foreign countries under section 1306(b).

(3) classify categories of goods and products as manufactured items for consumption in accordance with the requirements of section 1305(b).

(d) Economic Adjustment Ratio.—

(1) The Commission shall determine the economic adjustment ratio that applies to covered goods of covered foreign countries under section 1306(c).

(2) 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 Bureaus.—The Commission, as appropriate, may delegate to the Bureau of Immigration and Customs Enforcement any power of the Commission under this subsection.

(d) Enforcement.—On delegation by the Commission of a power under subparagraph (A), the Bureau of Immigration and Customs Enforcement shall take such action 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 the 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) any period in which a 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 made under this section 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 pursuant to which the Administrator shall offer for sale to United States importers international reserve allowances in accordance with this section.

(b) 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 reserve allowances established pursuant to section 201(a).

(c) 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.

(d) 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 202;

(ii) for each day on which international reserve allowances are offered for sale under this subsection, 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 202(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 of international reserves allowances under this subsection.

(7) COVERED ENTITIES.—International reserve allowances may not be covered by the above
team of paragraph requirements of section 202.

(8) PROCEDURES.—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, 2014, the United States shall place on the list of foreign countries, in accordance with this subsection.

(i) each foreign country the covered goods of which are subject to the requirements of this section; and

(ii) each foreign country the covered goods of which are not subject to the requirements of this section.

(2) EXCLUDED 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 the name of each foreign country the covered goods of which are subject to the requirements of this section.

(c) WRITTEN DECLARATIONS.—

(1) IN GENERAL.—Effective beginning January 1, 2014, the 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 depo

(ii) the difference between—

(I) the amount of the deposit under paragraph (3)(D); and

(II) the final assessment.

(c) ALLOWANCE DEPOSIT.—

(I) IN GENERAL.—The Bureau of Immigration and Customs Enforcement shall—

(a) prepare the final assessment under subparagraph (A) with the quantity of international reserve allowances deposited under paragraph (3)(D)(i); and

(b) notify the Administrator of the final assessment as is necessary to cover the shortage.

(ii) require submission for a compliance statement.

(d) 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.

(e) 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 make an application to the Administrator and the Bureau of Immigration and Customs Enforcement shall refund the excess quantity of allowances.

(f) 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 shortage of international reserve allowances under subparagraph (A), the im

(g) ALLOWANCE RESTRICTIONS.

(A) IN GENERAL.—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.

(B) METHOD.—A corrected declaration shall be in the form of a final assessment and shall be submitted to the Administrator the office of the Bureau of Immigration and Customs Enforcement to which the original declaration was sub

(h) QUANTITY OF ALLOWANCES REQUIRED.

(1) METHODOLOGY.—

(A) IN GENERAL.—The Administrator shall establish, by regulation, the methodology for calculating the required number of international reserve allowances that a United States im

(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 statement.

(D) QUANTITY OF ALLOWANCES REQUIRED.

(1) METHODOLOGY.—

(A) IN GENERAL.—The Administrator shall establish, by regulation, the method for calcu

(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 statement.

(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 the name of each foreign country the covered goods of which are subject to the requirements of this section.

(c) WRITTEN DECLARATIONS.—

(1) IN GENERAL.—Effective beginning January 1, 2014, the 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 de
(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 requirement under section 202 for the category of covered goods if manufactured in the United States); by

(B) the total number of units of the covered good that is 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 been allocated at no cost under titles V through XI of the Clean Air Act as of 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.

(ii) the total number of units of the covered goods if manufactured and processed entirely in that covered foreign country for the compliance year; and

(B) REQUIREMENTS.—

(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) if the Administrator 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).

(iii) ADMINISTRATIVE HEARING.—The Administrator shall establish procedures for administrative hearings under subparagraph (C)(ii) to ensure that—

(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 greenhouse gas emissions of the covered foreign country during the relevant period.

(B) Any regulatory programs, requirements, or policies of a covered foreign country that have been implemented, verified, and enforced during the relevant period, the foreign country has implemented to limit greenhouse gas emissions during the relevant period.

(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 that adjusting the ratio by a factor of up to 1.5 is necessary 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,
(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; and
(2) to address greenhouse gas emissions attributable to the production of manufactured items for consumption that are not subject to the domestic allowance requirement 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) Revise 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 stock assessments 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) overall reductions in greenhouse gas emissions as otherwise would be practicable; and
(C) substantially benefit biodiversity, conservation of 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 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 forest-dependent communities, including—(1) projects for storage of carbon in peatland or other natural land that the Administrator determines to be eligible for a distribution of offset allowances for international forest carbon activities described in subsection (a); and
(2) projects for storage of carbon in peatland or other natural land that the Administrator determines to be eligible for a distribution of offset allowances for internationally protected forests.

(b) Allocation.—Not later than 390 days before the beginning of each calendar year, the Administrator shall allocate for distribution under this section to the foreign countries described in subsection (a)(1) and (2) the total number of emission allowances allocated under paragraphs (1) and (2) for the applicable calendar year.

(c) Quality and Eligibility Requirements.—The regulations promulgated pursuant to subsection (b) shall require that, in order to be approved for use under this section, offset allowances shall—
(1) be eligible for a distribution of offset allowances for international forest carbon activities;
(2) be approved by the Administrator; and
(3) meet the quality and eligibility requirements established by the Administrator.

(d) AGENCY ADMINISTRATIVE PROGRAMS.—The Administrator shall promulgate regulations that allow the Secretary of the Interior, the Secretary of State, the Secretary of Agriculture, and the Administrator to use emissions allowances allocated under this section in accordance with the Administrator's discretion.

(e) Application.—The Administrator shall promote the use of emissions allowances allocated under this section in accordance with the Administrator's discretion.

(f) AGENCY ADMINISTRATIVE PROGRAMS.—The Administrator shall promulgate regulations that allow the Secretary of the Interior, the Secretary of State, the Secretary of Agriculture, and the Administrator to use emissions allowances allocated under this section in accordance with the Administrator's discretion.

(g) Allocation.—The Administrator shall promote the use of emissions allowances allocated under this section in accordance with the Administrator's discretion.

(h) AGENCY ADMINISTRATIVE PROGRAMS.—The Administrator shall promulgate regulations that allow the Secretary of the Interior, the Secretary of State, the Secretary of Agriculture, and the Administrator to use emissions allowances allocated under this section in accordance with the Administrator's discretion.

SEC. 1313. FOREST CARBON ACTIVITIES.
(a) Eligibility Requirements.—(1) In General.—Not later than 3 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 shall—
(1) be eligible for a distribution of offset allowances for international forest carbon activities;
(2) be approved by the Administrator; and
(3) meet the quality and eligibility requirements established by the Administrator.

(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, the Secretary of Agriculture, and the Administrator 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 shall—
(1) be eligible for a distribution of offset allowances for international forest carbon activities;
(2) be approved by the Administrator; and
(3) meet the quality and eligibility requirements established by the Administrator.

(c) Application.—The Administrator shall promote the use of emissions allowances allocated under this section in accordance with the Administrator's discretion.

(d) AGENCY ADMINISTRATIVE PROGRAMS.—The Administrator shall promulgate regulations that allow the Secretary of the Interior, the Secretary of State, the Secretary of Agriculture, and the Administrator to use emissions allowances allocated under this section in accordance with the Administrator's discretion.

(e) Allocation.—The Administrator shall promote the use of emissions allowances allocated under this section in accordance with the Administrator's discretion.

(f) AGENCY ADMINISTRATIVE PROGRAMS.—The Administrator shall promulgate regulations that allow the Secretary of the Interior, the Secretary of State, the Secretary of Agriculture, and the Administrator to use emissions allowances allocated under this section in accordance with the Administrator's discretion.

(g) Allocation.—The Administrator shall promote the use of emissions allowances allocated under this section in accordance with the Administrator's discretion.

(h) AGENCY ADMINISTRATIVE PROGRAMS.—The Administrator shall promulgate regulations that allow the Secretary of the Interior, the Secretary of State, the Secretary of Agriculture, and the Administrator to use emissions allowances allocated under this section in accordance with the Administrator's discretion.

[i]...
(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 consider-
ation relevant international standards.
(2) PERIODIC REVIEW OF NATIONAL-LEVEL REDUCTIONS IN DEFORESTATION AND DEGRADA-
TION.—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 para-
graph (1) that have—
(A) achieved national-level reductions of deforestation and degradation rates appropriate to
the average annual deforestation and degradation rates of the country, and of all coun-
dies, during a period of at least 5 years; and
(B) demonstrated those reductions using remote sensing technology, taking into consid-
eration the average annual deforestation and degradation rates below a historical reference scenario, taking into con-
sideration international standards.
(ii) demonstrated those reductions using remote sensing technology, taking into con-
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the average annual deforestation and degradation rates of the country, and of all coun-
dies, during a period of at least 5 years; and
(B) demonstrated those reductions using remote sensing technology, taking into consid-
eration the average annual deforestation and degradation rates below a historical reference scenario, taking into con-
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graph (1) that have—
(A) achieved national-level reductions of deforestation and degradation rates appropriate to
the average annual deforestation and degradation rates of the country, and of all coun-
dies, during a period of at least 5 years; and
(B) demonstrated those reductions using remote sensing technology, taking into consid-
eration the average annual deforestation and degradation rates below a historical reference scenario, taking into con-
sideration international standards.
(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) distribute the auction proceeds in a manner to ensure that—
(i) each auction takes place during the period beginning 330 days before, and ending 60 days after, the beginning of each calendar year; and
(ii) the interval between each auction is of equal duration.

(3) METHOD 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, or an account in the Fund.

(b) PERCENTAGE FOR AUCTION.—For each of the calendar years 2012 through 2050, the Administrator shall auction in accordance with subsection (b) the percentage of emission allowances specified in the following table:

<table>
<thead>
<tr>
<th>Calendar year</th>
<th>Percentage for auction for Fund</th>
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<tbody>
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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 “Agency”) and the United States Agency for International Development, 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 maintain the economic and national security of the United States by minimizing, averting, or increasing reliance to potentially destabilizing global climate change impacts;
(2) to support the development of national and regional climate change adaptation and disaster risk reduction programs in vulnerable developing countries, including the planning, financing, and execution of adaptation projects;
(3) to support the identification and deployment of 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 increased 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 Appropriations, the Committee on Energy and Commerce, and the Committee on Foreign Relations the biennial report required under section 1331(b)(1), and the reports required under section 1331(b)(4) and section 1331(b)(6) of this Act,
(2) identify and make recommendations regarding the development of—
(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,
(3) in consultation with the communities and stakeholders at international, national, and local levels, and
(4) as determined by 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.

(d) LIMITATION.—Not more than 10 percent of the amount made available to carry out this subtitle shall be spent in any single country in any calendar year.

(e) 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—
(1) full disclosure of information,
(2) consultation with the communities and stakeholders at international, national, and local levels, and
(3) informed participation.

(f) 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 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, and natural resource management objectives and initiatives in the countries served by the projects.

(g) INTERNATIONAL FUNDS.—The Program shall—
(1) authorize the international organizations to carry out this Program.

(h) IMPLEMENTATION OF PROGRAM.—The Program shall—
(1) authorize the international organizations to carry out this Program.
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) establishes the performance indicators to be used in measuring or assessing the achievement of the performance goals described in paragraph (1); and

(vi) provides 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—

(1) meets the purposes of this subtitle in addressing the climate change adaptation needs of developing countries; and

(2) enhances the national security of the United States.

(b) REQUIREMENTS.—In carrying out this section, the Administrator of the Agency shall—

(I) conduct not fewer than 4 auctions; and

(II) in the case of an HFC producer, a value equal to the difference between—

(A) the quantity of HFC imported for resale 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) establishes the performance indicators to be used in measuring or assessing the achievement of the performance goals described in paragraph (1); and

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(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—

(1) meets the purposes of this subtitle in addressing the climate change adaptation needs of developing countries; and

(2) enhances the national security of the United States.

(b) REQUIREMENTS.—In carrying out this section, 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) express 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 amount of funds available under section 1332(c)(1) a description of the results of the monitoring and evaluation of programs under this section.

(2) the process and methodology for selecting the recipients of assistance or grants from the fund;

(3) the descriptions of 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;

(4) the performance indicators to be used in measuring or assessing the achievement of the performance goals described in paragraph (1); and

(5) the procedures for recommendations for adjustments to assistance under this subtitle to enhance the impact of the assistance; and

(6) the participation of other countries and international organizations in funding and administering the international fund.

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” means—

(A) in the case of an HFC producer, a value equal to the difference between—

(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

(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 or transferred to another HFC producer in the United States through sale or other transaction; and

(iii) the quantity of HFC imported for resale from any source into the United States; and

(iv) the quantity of HFC exported or transferred to another HFC producer in the United States through sale or other transaction.
Section 608 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.—Endorsed and adopted by the Congress of the United States, the Administrator shall promulgate regulations establishing standards and requirements regarding the sale or distribution, or offer for sale and distribution, of a product that contains refrigerants or blowing agents with lower global warming potential than HFCs currently in use; and

“(2) by inserting ‘‘or hydrofluorocarbon substitutes for those substances’’ after ‘‘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) by redesigning paragraphs (1) through (3) as subparagraphs (A) through (C), respectively, and indenting the subparagraphs appropriately;

(3) in subsection (b) (as redesignated by paragraph (1)”—

(A) in the matter following paragraph (3), by striking “Such regulations” and inserting the following:—

“(B) The regulations”; and

(B) by redesigning paragraph (3) as paragraph (4); and

(4) in subsection (c) (as redesignated by 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, of a product that contains refrigerants or blowing agents with lower global warming potential than HFCs currently in use; and

“(B) by redesigning paragraphs (1) through (3) as subparagraphs (A) through (C), respectively, and indenting the subparagraphs appropriately;

(3) in paragraph (1) (as redesignated by paragraph (2))—

(A) in the second sentence, by striking “Effective” 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”.

SECTION 1503. FIRE SUPPRESSION AGENTS.

Section 608(a) of the Clean Air Act (42 U.S.C. 7671d(a)) is amended—

(1) by redesigning 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.—Endorsed and adopted by the Congress of the United States, the Administrator shall promulgate regulations establishing standards and requirements regarding the sale or distribution, or offer for sale and distribution, of a product that contains refrigerants or blowing agents with lower global warming potential than HFCs currently in use; and

“(2) by inserting ‘‘or hydrofluorocarbon substitutes for those substances’’ after ‘‘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) by redesigning paragraphs (1) through (3) as subparagraphs (A) through (C), respectively, and indenting the subparagraphs appropriately;

(3) in subsection (b) (as redesignated by paragraph (1)”—

(A) in the matter following paragraph (3), by striking “Such regulations” and inserting the following:—

“(B) The regulations”; and

(B) by redesigning paragraph (3) as paragraph (4); and

(4) in subsection (c) (as redesignated by 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, of a product that contains refrigerants or blowing agents with lower global warming potential than HFCs currently in use; and

“(B) by redesigning paragraphs (1) through (3) as subparagraphs (A) through (C), respectively, and indenting the subparagraphs appropriately;

(3) in paragraph (1) (as redesignated by paragraph (2))—

(A) in the second sentence, by striking “Effective” 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”.

SECTION 1502. PERIODIC REPORTS AND RECOMMENDATIONS

SEC. 1601. NATIONAL ACADEMY OF SCIENCES RECOMMENDATIONS

Section 1601 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 that—

“(1) with a global warming potential of more than 150; and

“(2) that is used in or for types of equipment 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:—

“(B) The regulations”; and

(B) by redesigning paragraph (3) as paragraph (4); and

(4) in subsection (c) (as redesignated by 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, of a product that contains refrigerants or blowing agents with lower global warming potential than HFCs currently in use; and

“(B) by redesigning paragraphs (1) through (3) as subparagraphs (A) through (C), respectively, and indenting the subparagraphs appropriately;

(3) in paragraph (1) (as redesignated by paragraph (2))—

(A) in the second sentence, by striking “Effective” 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”.

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, advise the Administrator to Congress 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) the 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) trends in, and projections for, the health of the oceans and ocean ecosystems, including projected changes in ocean acidity, temperatures, extent of coral reefs, and other indicators of ocean ecosystems health, resulting from anthropogenic carbon dioxide emissions and climate change.

(f) 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 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 goals of this Act;

(6) the feasibility of retiring quantities of the emission allowances established pursuant to section 210(a);

(7) the extent to which establishing policies for reducing greenhouse gas emissions in addition to the policies established by this Act; and

(8) whether the use and trading of emission allowances is increasing emissions of 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 under section 101(10) of the Clean Air Act (42 U.S.C. 7424(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”); and

(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 adversely;

(11) with respect to the offset programs established under this Act—

(A) the uncertainty and additionality of domestic offset projects, 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 recommendations submitted required by subsection (a) shall include measures that would—

(1) expand the definition of the term “covered entity” under this Act;

(2) expand the compliance obligations established by section 102;

(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 direct, indirect, or cumulative increases in covered pollutants resulting from the use and trading of emission allowances or from transformations of technologies or practices that are in place.

(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 Academy of Sciences pursuant to section 1601.

(d) ONGOING EVALUATION OF IMPACTS.—Not later than 3 years 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 subtitle shall prevent the Administrator, a State, or any person to use any authority under this Act or any other law to promulgate, adopt, or enforce any regulations.

SEC. 1605. PRESIDENTIAL RECOMMENDATIONS.

(a) ESTABLISHMENT OF TASK FORCE.—Not later than January 1, 2013, 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 Chairman of the Interagency Climate Change Task Force.

(d) REPORT TO PRESIDENT.—

(1) IN GENERAL.—Not later than April 1, 2013, the Interagency Climate Change Task Force shall submit to the President a report recommending 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 recommendations submitted by the Administrator to Congress under section 1602.

(3) INCLUSIONS.—The Interagency Climate Change Task Force shall submit 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, 2013, 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).

SEC. XVIII.—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 conduct an auction, in accordance with paragraph (2), 1 percent of the quantity of emission allowances established pursuant to section 210(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 2028 through 2060, the Administrator shall conduct an auction, in accordance with paragraph (2), 1 percent of the quantity of emission allowances established pursuant to section 210(a) for the calendar year, to raise funds for deposit in the Fund.

(2) NUMBERS; FREQUENCY.—For each calendar year during the period described in paragraph (1), the Administrator shall conduct the auction, in accordance with the following:

(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.

The proceeds of the Fund 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 2056, 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 State, the Secretary of Energy, the heads of other Federal departments or agencies required to carry out activities under this Act, the Board, or the Carbon Sequestration Laboratory 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 security, or economic security emergency exists, or that a national security, energy security emergency exists, or that it is in the paramount interest of

(b) C ONSULTATION.—In making an emergency declaration under subsection (a), the President shall—

(1) consult with 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; and

(5) the Committee on 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 is issued.

(b) EXTENSION.—The President may request an extension of a proclamation terminated under subsection (a), in accordance with the requirements of this subtitle.

(c) APPROVAL.—If the President requests an extension of a proclamation terminated under subsection (a), 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—

(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.—For each of calendar years 114 and 307(a) of the Clean Air Act (42 U.S.C. 7607(a)) in carrying out, administering, and enforcing this Act, the Administrator shall have the same powers and authorities provided under sections 114 and 307 of the Clean Air Act (42 U.S.C. 7607(f)).

(b) COURT JURISDICTION.—A court of competent jurisdiction may award costs of ligation (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. 1722. ENFORCEMENT.

(a) VIOLATIONS.—

(1) IN GENERAL.—It shall be unlawful for any covered entity or other Federal official pursuant to this Act.

(b) ENFORCEMENT.—

(1) IN GENERAL.—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 violation of this Act.

(2) 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 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 violation of this Act.

(c) JUDICIAL REVIEW.—

(1) IN GENERAL.—Any individual or entity may submit a petition for judicial review of any regulation promulgated, or final action taken, 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) 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 in accordance with section 307(b) of the Clean Air Act (42 U.S.C. 7607(b)).

(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 in accordance with section 307(b) of the Clean Air Act (42 U.S.C. 7607(b)).

(c) JUDICIAL REVIEW.—

(1) IN GENERAL.—Any individual or entity may submit a petition for judicial review of any regulation promulgated, or final action taken, 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) 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 in accordance with section 307(b) of the Clean Air Act (42 U.S.C. 7607(b)).

(C) RESPONSE.—In selecting a remedy for an individual or entity the authority to correct any deficiency identified by the court—

(i) as expeditiously as practicable;

(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.

(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)).
(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 agencies.

Subtitle G—State-Federal Interaction and Research

SEC. 1761. STUDY AND RESEARCH.

(a) General.—(1) The Administrator shall enter into an arrangement with the National Academy of Sciences or an institution of higher education or collaborative of such institutions to 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; and

(C) land use planning and transportation policy; and

(d) fuel carbon intensity standards and

(2) 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; and

(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 for the promotion of renewable energy technologies.

(c) PROCEEDS FROM AUCTIONS.—None of the proceeds from any auction conducted under this Act may be obligated after fiscal year 2007 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. 3062, 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 ADJUST 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 by the National Academy of Sciences, that the continuing buildup of anthropogenic greenhouse gases in the atmosphere threatens the stability of the global climate system.

(2) The 2007 Fourth Assessment Report of the Intergovernmental Panel on Climate Change concluded that most of the warming observed over the last 50 years 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 extreme weather events, sea-level rise, and the destruction of coastal and island ecosystems, may result in significant economic, social, and environmental losses to the United States and other countries.

(b) RECOMMENDATIONS.

(1) The United States has the largest economy in the world and is also the largest historical emitter of greenhouse gases.

(2) 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.

(3) 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 a lower cost of greenhouse gases or in the capture and storage of greenhouse gases.

(4) 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.

(5) The development and sale of climate-friendly technologies in the United States and internationally represent economic opportunities for workers and businesses in the United States.

(6) 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 resources, and reducing the vulnerability of energy delivery infrastructure.

(7) Other industrialized countries are undertaking measures to reduce greenhouse gas emissions that provide the opportunities in the developing countries to those countries with a competitive advantage in the growing global market for climate-friendly technologies.

(8) 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 technologies that are affordable and could contribute to international efforts to address climate change.

(9) The national security of the United States will increasingly depend on the deployment of diplomatic, military, scientific, and economic resources for solving the problems of the overreliance of the United States and the world on high-carbon energy.

(10) The United States is a party to the United Nations Framework Convention on Climate Change, done May 9, 1992, and entered into force March 21, 1994 (in this preamble referred to as the “Convention”).

(11) 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.

(12) The Convention establishes that parties bear “common but differentiated responsibilities” for efforts to achieve the objective of stabilizing greenhouse gas concentrations.

(13) 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.

(14) 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, verifiable, and internationally binding, and support for developing countries in addressing technology transfers, adaptation, financing, decarbonization, and capacity building.

(15) The Major Economies Process on Energy Security and Climate Change, initiated by President George W. Bush, seeks a consensus among the countries of the world, including the major economies on how those countries can contribute to a new agreement under the Convention.

(16) 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”.

(17) 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.

(18) The latest scientific evidence suggests that anthropogenic climate change is increasingly beyond the United States and the United States supported the goal of achieving a new international agreement by 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 promote economic growth through a new generation of energy 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; and

(C) establish a 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 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 Environmental 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) The potential impacts of 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 of the United States.

(4) The United States has the largest economy in the world and is also the largest historical emitter of greenhouse gases.

(5) The greenhouse gas emissions of the United States are projected to continue to rise.

(6) The greenhouse gas emissions of the United States 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.

(7) The greenhouse gas emissions of some developing countries are rising more rapidly than the emissions of the United States and developing countries may require that such commitments and actions vary.

(23) The latest scientific evidence suggests that anthropogenic climate change is in progress and the United States has supported the goal of achieving a new international agreement during 2009, both leading urgency to the need for renewed United States leadership and to foster sustained economic growth and to address 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 4833. 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 “.”
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:

(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 478, line 17, and insert the following:

At the end, insert the following:

CONGRESSIONAL RECORD — SENATE
June 4, 2008

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:

(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 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 of the global cumulative emission budget of the United States, for the period described in paragraph (1), that—
(A) is realistically consistent with remaining within the range of the global cumulative emission budget recommended under paragraph (1); and
(B) takes into consideration emission reductions and improvements by countries that have already committed to and have internationally and developed 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 emissions 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 State;
(2) the Secretary of 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 established in section 1601(d)(1), including measures that would—
(A) adjust the definition of the term “covered entity” under this Act;
(B) adjust the in-trade 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 greenhouse 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 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.

(2) ON GOING 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 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.

(b) 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 current Congress 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 30 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 legislation 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) STATUS PROCEDURE.—In the Senate—
(A) a committee to which legislative referral is made under paragraph (1) may be discharged from further consideration of the implementing legislation at the end of the calendar day in which the referral is made, and from further consideration of the legislation thereafter, upon a majority vote of the Members of the Committee, and for good cause shown;
(B) after that 30-calendar-day period, the legislation shall be placed on the calendar.

(3) MOTION TO PROCEED IN SENATE.—
(1) IN GENERAL.—In the Senate, after the committee to which legislative referral is made under paragraph (1) has reported the legislation or been discharged under subsection (c)(2)(A) from further consideration of the legislation, it shall be in order, 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 be debatable, and a debatable 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.
At the appropriate place, 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-FC26-06NT22073, 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 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. 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:

SEC. 127. FUTUREGEN COOPERATIVE AGREEMENT.

(a) IN GENERAL.—Subject to subsection (b), the Secretary of Energy shall continue the cooperative agreement numbered DE-FC26-06NT22073, 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 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:

SEC. 127. FUTUREGEN COOPERATIVE AGREEMENT.

(a) IN GENERAL.—Subject to subsection (b), the Secretary of Energy shall continue the cooperative agreement numbered DE-FC26-06NT22073, 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 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.

At the appropriate place, 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-FC26-06NT22073, 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 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 4836. Mr. BIDEN (for himself, Mr. LUGAR, Mr. KERRY, Mr. WARNER, Mr. MENENDEZ, Ms. SNOWE, Mr. CARDIN, Mr. CASEY, Mr. BATH, Ms. COLLINS, Mr. OBAMA, Mr. WEDO, Mr. WHITAKER, 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:

SEC. 127. FUTUREGEN COOPERATIVE AGREEMENT.

(a) IN GENERAL.—Subject to subsection (b), the Secretary of Energy shall continue the cooperative agreement numbered DE-FC26-06NT22073, 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 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.

At the appropriate place, 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-FC26-06NT22073, 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 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.
(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 and growing emissions of greenhouse gases in the atmosphere threaten 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) Such 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 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 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 levels necessary to avoid serious climate change would require 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 in other countries 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 enhances the industriousness 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 directly depend on the deployment of diplomatic, military, scientific, and economic resources for solving the problem of the overreliance of the United States and the United Kingdom on carbon energy and to support the establishment of a bipartisan Senate observer group, the members of which should be designated by the chairman and ranking member of the Senate under article II, section 2 of the Constitution of the United States to provide advice and consent 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 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 to take any other actions necessary (including revising the post-2020 emission limits in the chart in subsection (a)) to achieve an 80 percent reduction in all United States greenhouse gas 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. 610. FEDERAL RENEWABLE PORTFOLIO STANDARDS.

(a) In General.—Title VI of the Public Utility Regulatory Policy 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 point of delivery 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 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 3 years after 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) on a cumulative basis, by the average percentage decrease in the annual kilowatt hour production for the 7-year period described in subparagraph (A) 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 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.

(8) NEW RENEWABLE ENERGY.—

The term ‘new renewable energy’ includes current, wave, tidal, and thermal energy.

(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 average energy above the average generation during the 3-year period ending on the date of enactment of this section at the facility from—

(1) solar or wind energy or ocean energy;

(2) landfill gas; or

(3) incremental geothermal production.

(9) OCEAN ENERGY.—The term ‘ocean energy’ includes current, wave, tidal, and thermal energy.

(h) RENEWABLE ENERGY REQUIREMENT.—

(1) IN GENERAL.—Each electric utility that sells electricity to electric consumers shall obtain a percentage of the base amount of electric energy sold to electric consumers in any calendar year from new renewable energy or existing renewable energy.

(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 lowest kilowatt hour production years in such 7-year period.

3. Amendment of section 333—not later than January 1, 2009, the Secretary shall establish a renewable energy credit trading program under which 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 renewable energy credits to electric utilities associated with State renewable portfolio standard compliance mechanisms pursuant to subsection (i);

(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 tradeable 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 between the date that the facility was placed in service and the date the Secretary issued the renewable energy credit, and the date that the generation of renewable energy under the contract is issued to the purchaser of the electric energy.

(i) DURATION.—A credit described in subparagraph (A) of paragraph (2) shall only be used for compliance with this section during the 3-year period beginning on the date of issuance of the credit.

(2) 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.

(3) DELEGATION OF MARKET FUNCTION.—The Secretary may delegate to an appropriate entity that establishes markets for the administration of a national tradeable renewable energy credit program for purposes of creating a transparent national market for the sale or trade of renewable energy credits.

(4) ENFORCEMENT.—

(1) CIVIL PENALTY.—Any electric utility that fails to meet the compliance requirements of subsection (b) shall be subject to a civil penalty.

(ii) that sold less than 4,000,000 megawatt-hours of electric energy to electric consumers during the preceding calendar year; or

(ii) 200 percent of the average market value of renewable energy credits during the year in which the violation occurred.

(iii) 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 meet the requirements of subsection (b) of each renewable energy program if the State requirement is greater than the applicable requirement of subsection (b).

(ii) PROCEDURE FOR ASSESSING PENALTY.—

The Secretary shall assess a civil penalty under this subsection in accordance with the procedures prescribed by section 533(d) of the Energy Policy and Conservation Act of 1975 (42 U.S.C. 6305).

(i) STATE RENEWABLE ENERGY ACCOUNT PROGRAM.—

(A) IN GENERAL.—Not later than December 31, 2008, the Secretary of the Treasury shall establish a State renewable energy account in the Treasury.

(B) DEPOSITS.—All money collected by the Secretary from alternative compliance payments and the assessment of civil penalties under this section shall be deposited in the renewable energy account established under paragraph (1).

(C) 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. 6222) 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.

(D) 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.

(E) PREFERENCE.—In allocating funds under this program, the Secretary shall give preference—

(1) to States in regions which have a disproportionately small share of economically sustainable renewable energy generation capacity; and

(2) 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.
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 grants 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.—The quantities of emission allowances allocated pursuant to paragraph (1) shall be the quantities represented by the percentages in the following table:

<table>
<thead>
<tr>
<th>Calendar year</th>
<th>Percentage for grants for concentrating solar power plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>9.7</td>
</tr>
<tr>
<td>2013</td>
<td>9.2</td>
</tr>
<tr>
<td>2014</td>
<td>8.7</td>
</tr>
<tr>
<td>2015</td>
<td>8.3</td>
</tr>
<tr>
<td>2016</td>
<td>8.1</td>
</tr>
<tr>
<td>2017</td>
<td>7.6</td>
</tr>
<tr>
<td>2018</td>
<td>7.4</td>
</tr>
<tr>
<td>2019</td>
<td>7.3</td>
</tr>
<tr>
<td>2020</td>
<td>7.0</td>
</tr>
</tbody>
</table>

was ordered to lie on the table; as follows:

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 impacts 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 of 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); and

(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 2090; and

(H) reference the latest information available from—

(i) the U.S. Global Change Research Program; and

(ii) the Intergovernmental Panel on Climate Change.
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:

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 applicable calendar year pursuant to section 201(a) and in section 2029, 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 energy 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:

<table>
<thead>
<tr>
<th>Calendar year</th>
<th>Percentage for distribution among fossil fuel-fired electricity generators in United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>16.5</td>
</tr>
<tr>
<td>2013</td>
<td>16.5</td>
</tr>
<tr>
<td>2014</td>
<td>16.5</td>
</tr>
<tr>
<td>2015</td>
<td>16.5</td>
</tr>
<tr>
<td>2016</td>
<td>16.25</td>
</tr>
<tr>
<td>2017</td>
<td>16</td>
</tr>
<tr>
<td>2018</td>
<td>15.75</td>
</tr>
<tr>
<td>2019</td>
<td>14.75</td>
</tr>
<tr>
<td>2020</td>
<td>13.5</td>
</tr>
<tr>
<td>2021</td>
<td>12</td>
</tr>
<tr>
<td>2022</td>
<td>9.75</td>
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<tr>
<td>2023</td>
<td>7.5</td>
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<tr>
<td>2024</td>
<td>7.5</td>
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<tr>
<td>2025</td>
<td>7.25</td>
</tr>
<tr>
<td>2026</td>
<td>4.25</td>
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<tr>
<td>2027</td>
<td>2.75</td>
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<tr>
<td>2028</td>
<td>1.5</td>
</tr>
<tr>
<td>2029</td>
<td>1.25</td>
</tr>
</tbody>
</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, 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 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 553(b).

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 applicable calendar year pursuant to section 201(a) and in section 2029, 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:

<table>
<thead>
<tr>
<th>Calendar year</th>
<th>Percentage for distribution among fossil fuel-fired electricity generators in United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>1.75</td>
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<tr>
<td>2014</td>
<td>3.5</td>
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<td>2015</td>
<td>5.25</td>
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<td>2016</td>
<td>6.75</td>
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<td>2017</td>
<td>8.25</td>
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<tr>
<td>2018</td>
<td>9.75</td>
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<td>2019</td>
<td>10.5</td>
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<tr>
<td>2020</td>
<td>11</td>
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<tr>
<td>2021</td>
<td>11.25</td>
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<tr>
<td>2022</td>
<td>10.75</td>
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<td>2023</td>
<td>10.25</td>
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<td>2024</td>
<td>9</td>
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<td>2025</td>
<td>8.75</td>
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<td>2026</td>
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<td>2027</td>
<td>4.5</td>
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<td>2028</td>
<td>4.25</td>
</tr>
<tr>
<td>2029</td>
<td>3</td>
</tr>
</tbody>
</table>
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. 1. 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) 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 advise the President and the Congress on issues and policies relating to promoting energy efficiency, reducing dependence on foreign energy supplies, and addressing energy security and national security issues.

(c) COMPOSITION.

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 Majority 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) 3 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Energy and Natural Resources of the Senate;

(E) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Energy and Commerce of the House of Representatives;

(F) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Energy and Commerce, Science, and Transportation of the Senate;

(G) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Science and Technology of the House of Representatives;

(H) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Agriculture, Nutrition, and Forestry of the Senate;

(I) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Agriculture of the House of Representatives;

(J) 1 shall be jointly appointed by the Chairperson and Ranking Member of the Committee on Commerce 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.

(d) DUTIES.

(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 government service, science, energy, economics, the environment, agriculture, manufacturing, public administration, and commerce (including aviation matters).

(3) DEADLINE FOR APPOINTMENTS.—

(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.

(C) QUORUM.—7 members of the Commission shall constitute a quorum.

(D) VACANCIES.—A vacancy on the Commission—

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

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

(e) POWERS.

(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 legislative, 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 pipeline systems 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, anti-trust, 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 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.

(1) IN GENERAL.—The Commission may establish such rules relating to administrative procedures as are reasonably necessary to enable the Commission to carry 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 necessary to enable the Commission to carry out this section;

(ii) 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 regulations regarding protection of information acquired by the Commission, the Commission shall ensure that, to the maximum extent practicable:

(A) the Chair or other officer of the Commission are open to the public, including by—

(aa) providing live and recorded public access to hearings on the Internet; and

(bb) transcribing and recording hearings at such time and in such manner as is agreed to by the majority of members of the Commission;

(B) 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) if the matter is within the jurisdiction of the Commission;

(II) served by any individual or entity designated by the Chairperson or designee.

(ii) 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.

(B) Failure to obey order.

(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) FEDERAL AGENCY PROVISIONS.—A Commission may secure directly from a Federal agency such information as the Commission considers 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 OF INFORMATION.—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 Commission, the Administrator, or any other Federal 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, sell, disburse, and dispose of gifts of money, 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 without compensation.

(B) REIMBURSEMENT.—The Commission may reimburse a volunteer for office supplies, travel expenses, and other expenses, including per diem in lieu of subsistence, in accordance with sections 179 and 180 of title 41, United States Code, at rates not to exceed the daily rate paid to individuals employed as consultants in accordance with section 3109 of title 5, United States Code.

(9) NONAPPLICABILITY OF FACA.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Commission.

(10) Reports.—

(A) Interim reports.—Not later than June 1 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,

(aa) all members of the Commission are appointed under subsection (c); or

(bb) the most recent interim report was submitted under this paragraph.

The final report of the Commission, or any interim report, shall be published 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—

(aa) addresses global climate change; and

(bb) describes the findings and recommendations agreed to by a majority of members of the Commission.

(B) 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—

(i) the date on which the funds are expended;

(ii) the date of termination of the Commission under subsection (i).

(C) TERMINATION.—

(1) IN GENERAL.—The Commission shall cease to exist on the date that is 60 days after the date on which the final report is submitted under subsection (b)(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 required 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 181, 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) in addition to other auctions conducted pursuant to this Act, to raise funds for deposit in the Tax Relief Fund, for each calendar year.

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 206, after line 2, strike ‘‘Climate Change Worker Training and 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 PROCEEDS FROM AUCTION OF 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 each calendar year 2012 through 2050, 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 calendar year 2013 through 2025, the Administrator shall auction 12.75 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 calendar year 2026 through 2050, the Administrator shall auction 13.3 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 this Act 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 quantity of emission allowances established pursuant to section 201(a) for the applicable calendar year, in accordance with 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.

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 calendar year 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:

(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 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 242, strike line 1 and all that follows through page 292, line 16, and insert the following:

SEC. 622. 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 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 calendar year 2012 through 2050, 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 calendar year 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.—For each calendar year 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).
SEC. 1102. ADDITIONAL AUCTIONS.

(a) In General.—Not later than 2 years after the date of enactment of this Act, the Administrator shall auction any 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.

Beginning on page 306, strike line 1 and all that follows through page 318, line 4, and insert the following:

SEC. 1102. ADDITIONAL AUCTIONS.

(a) In General.—Not later than 2 years after the date of enactment of this Act, the Administrator shall auction any 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.

Beginning on page 330, strike line 8 and all that follows through page 332, line 9, and insert the following:

SEC. 1102. ADDITIONAL AUCTIONS.

(a) In General.—Not later than 2 years after the date of enactment of this Act, the Administrator shall auction any 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.

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 0.5 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 paragraph (1), 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. 1111. AUCTIONS.

(a) In General.—For each of calendar years 2012 through 2050, the Administrator shall auction 0.5 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 paragraph (1), 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.
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) In general:—

(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. 1606 et seq.); and

(B) a resource management plan under the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 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.—

(i) CARBON OUTPUT REDUCTION PLANS.—

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.—

In developing a carbon output baseline under clause (i), the 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 for the most recent 5 calendar-year period for which data are available.

(c) PRESCRIBED BURNS AND WILDLAND FIRE USE FIRES.—In developing a carbon output baseline applicable to the National Forest under the jurisdiction of the forest supervisor a 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 resource management area under the jurisdiction of the forest supervisor 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, 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.—

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.

(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 on page 184, before line 1, and insert the following:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Percentage for auction for Deficit Reduction Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>4.75</td>
</tr>
<tr>
<td>2013</td>
<td>4.75</td>
</tr>
<tr>
<td>2014</td>
<td>4.75</td>
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<tr>
<td>2015</td>
<td>5.50</td>
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<tr>
<td>2016</td>
<td>5.75</td>
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<tr>
<td>2017</td>
<td>5.75</td>
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<tr>
<td>2018</td>
<td>6.25</td>
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<td>2019</td>
<td>7</td>
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<tr>
<td>2020</td>
<td>7</td>
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<tr>
<td>2021</td>
<td>8.5</td>
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<tr>
<td>2022</td>
<td>8.75</td>
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<tr>
<td>2023</td>
<td>9.75</td>
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<tr>
<td>2024</td>
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<tr>
<td>2049</td>
<td>16.75</td>
</tr>
<tr>
<td>2050</td>
<td>16.75</td>
</tr>
</tbody>
</table>

**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:
to the emissions the project would have achieved if that unit had combusted only bituminous coal during the particular calendar year.

(3) 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 of 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 technologies, 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—

(i) provide appropriate incentives for regulated investor-owned utilities, municipal utilities, electric cooperatives, and independent power producers, as determined by the Secretary of Energy;

(ii) ensure that a range of the domestic coal types is employed in the facilities that receive incentives under this paragraph;

(iii) provide appropriate incentives for centralized power producers, as determined by the Secretary of Energy;

(iv) enter into a binding contract for the installation 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.

(v) enter into a binding contract for the installation of the unit commenced prior to or after 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.

(vi) enter into a binding contract for the installation of the unit commenced prior to or after 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.

(vii) enter into a binding contract for the installation of the unit commenced prior to or after 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.

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 Act (16 U.S.C. 1533(d)) that was approved before the date of enactment of this Act.

SEC. 4585. 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 refiner that—

(A) does not meet the applicable criteria referred to in paragraph (1); and

(B) occurred before December 31, 2007.

SEC. 4586. 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 under the bill to small business refiners for those facilities to small business refiners in accordance with this subtitle.

(CALCULATIONS YEARS 2012 THROUGH 2030.—Notwithstanding any other provision of this Act, for each of calendar years 2012 through 2017, the Administrator shall—

(1) sequence 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. 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 4587. Mr. DORGAN submitted an amendment intended to be proposed by him to the bill S. 3096, 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 ATOMIC ANALYSIS 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 sequestering 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 an 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 competitive 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 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 accordance with 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 comments 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 made which was sought has been peer reviewed in accordance with such standards for peer review as the Commission shall establish.

SEC. 1776. TERMINATION OF AUTHORITY.

On page 304, after line 25, add the following:

(b) ADDITIONAL FUNDS.—

(1) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, 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—
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:

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-

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:

On page 254, strike lines 13 through 20 and insert the following:

On page 257, line 14, strike “(c)” and insert “(b)”.

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 the 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; and S. 2255, to authorize 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