Section 1 Short Title; Table of Contents

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

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

Subtitle I Funding

Section 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 wellbeing of residents of the United States;
(E) the wellbeing of residents of other nations; 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 stabilize greenhouse-gas concentrations in the atmosphere at a level that will prevent dangerous interference with the climate system;

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

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

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

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

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

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

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

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

(11) it is possible and desirable—
(A) to cap greenhouse-gas emissions, from the sources that together account for the majority of those emissions in the United States, at or below the current level in 2012;
(B) to lower the cap each year between 2012 and 2050; and
(C) to include in the system—
(i) measures to contain costs;
(ii) measures providing for periodic reviews of the system;
(iii) an aggressive program for deploying advanced technology that is developed and manufactured in the United States;
(iv) programs to assist low- and middle-income consumers; and
(v) programs to mitigate the impacts of that degree of global climate change that now is unavoidable;

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

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

(14) the smooth functioning of a national emissions trading market that is based upon a national emissions cap that comes into effect at the start of 2012 necessitates the establishment, not later than the start of 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 ones that Congress will need to enact over the decades-long program established by this Act in order to avert dangerous climate change and in order to avoid the imposition of hardship on United States residents;

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

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

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

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

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

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

(24) many existing fossil fuel-fired electric power generating facilities in the United States were exempted by Congress from emissions limitations applicable to new and modified such facilities 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.

Section 3 Purposes

The purposes of this Act are—
(1) to establish the core of a Federal program that will reduce United States greenhouse-gas emissions substantially enough to avert the catastrophic impacts of global climate change; and
(2) to accomplish that purpose while—
(A) preserving robust growth in the United States economy;
(B) creating new jobs in the United States;
(C) avoiding the imposition of hardship on United States residents;
(D) reducing the nation's dependence on petroleum produced in other nations;
(E) imposing no net cost on the Federal government;
(F) ensuring that the financial resources unleashed by the program established by this Act for technology deployment are predominantly invested in development, production, and construction of that technology in the United States; and
(G) encouraging complementary state and local government policies and programs that promote efficiency and technology deployment or otherwise reduce greenhouse-gas emissions.

Section 4 Definitions

In this Act:

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

(2) ADMINISTRATOR.—The term "Administrator" means the Administrator of the United States 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 rules prescribed by the Administrator under section 202(i) of the Clean Air Act (42 U.S.C. 7521(i)), or a lower-numbered Bin emission standard;
(B) any new emission standard for fine particulate matter prescribed by the Administrator under that Act; and
(C) standard of at least 125 percent of the average base year combined fuel economy, calculated on an energy-equivalent basis for vehicles other than advanced diesel light-duty motor vehicles, for vehicles of a substantially similar nature and footprint.

(4) AQUATIC SYSTEM.—The term “aquatic system” means any environment that is wet for at least part of the year, from pond to ocean, including groundwater, in which plants and animals interact with the chemical and physical features of the environment.

(5) ALLOWANCE.—The term “allowance” means an emission allowance, an offset allowance, or an international allowance.

(6) BASELINE.—The term “baseline” means the greenhouse gas flux or carbon stock scenario of what would have occurred under business as usual – i.e., in the absence of the GHG offset project.

(7) BIOLOGICAL SEQUESTRATION; BIOLOGICALLY SEQUESTERED.—The terms “biological sequestration” and “biologically sequestered” mean—
(A) the capture, separation, isolation, or removal of greenhouse gases from the atmosphere by biological means, such as by growing plants; and
(B) the storage of those greenhouse gases in plants or related soils.

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

(9) 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.

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

(11) COMBINED FUEL ECONOMY.—The term “combined fuel economy” means—
(A) the combined city-highway miles per gallon values, as reported in accordance with section 32908 of title 49, United States Code; and
(B) in the case of an electric drive vehicle with the ability to recharge from an off-board source, the reported mileage, as determined in a manner consistent with the Society of Automotive Engineers recommended practice for that configuration, or a similar practice recommended by the Secretary of Energy, using a petroleum equivalence factor for the off-board electricity (as defined by the Secretary of Energy).

(12) OFFSET PROJECT.—The term “offset project” means a project that reduces emissions or increases sequestration of greenhouse gas from sources or sinks that are not subject to a compliance obligation as a covered entity pursuant to section 202 of this Act.

(13) CORPORATION.—The term “Corporation” means the Climate Change Corporation established in this Act.

(14) COVERED ENTITY.—The term “covered entity” means—
(A) any entity that in a year uses more than 5,000 metric tons of coal in the United States;
(B) any entity that is a natural gas processing plant in the United States but not in the State of Alaska;
(C) any entity that produces natural gas in the State of Alaska or the Federal waters of the Alaska Outer Continental Shelf;
(D) any entity that holds title to natural gas, including liquefied natural gas, at the time it is imported into the United States;
(E) any entity that manufactures in the United States petroleum-based liquid or gaseous fuel, petroleum coke, or coal-based liquid or gaseous fuel, the combustion of which will, assuming no sequestration, emit a non-HFC greenhouse gas;
(F) any entity that holds title, at the time it is imported into the United States, to petroleum-based liquid or gaseous fuel, petroleum coke, or coal-based liquid or gaseous fuel, the combustion of which will, assuming no sequestration, emit a non-HFC greenhouse gas;
(G) any entity that in a year manufactures more than 10,000 carbon dioxide equivalents of non-HFC greenhouse gas in the United States;
(H) any entity that in any year holds title, at the time it is imported into the United States, to more than 10,000 carbon dioxide equivalents of non-HFC greenhouse gas; or
(I) any entity that manufactures any hydrochlorofluorocarbon in the United States.

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

(16) ECOLOGICAL PROCESS.—The term “ecological process” means a biological, chemical, or physical interaction between and among the biotic and abiotic components of an ecosystem, including—
(A) nutrient cycling;
(B) pollination;
(C) predator-prey relationships;
(D) soil formation;
(E) gene flow;
(F) larval dispersal and settlement;
(G) changes in hydrology;
(H) decomposition; and
(I) disturbance regimes, such as fire and flooding.

(17) EMISSION ALLOWANCE.—The term “emission allowance” means an allowance established by the Administrator pursuant to section 201 of this Act.

(18) ENGINEERING INTEGRATION COSTS.—The term “engineering integration costs” includes the cost of engineering tasks performed in the United States relating to—
(A) incorporating qualifying components into the design of advanced technology vehicles; and
(B) designing new tooling and equipment for production facilities that produce in the United States

qualifying components or advanced technology vehicles.

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

(20) FISH AND WILDLIFE.—The term “fish and wildlife” means—
(A) any species of wild fauna, including fish and other aquatic species; and
(B) any fauna in a captive breeding program the object of which is to reintroduce individuals of a depleted indigenous species into previously occupied range.

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

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

(23) HFC.—The term “HFC” means a hydrofluorocarbon.

(24) INDIAN TRIBE.—The term “Indian tribe” has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).

(25) INTERNATIONAL ALLOWANCE.—The term “international allowance” means an emission allowance from foreign greenhouse-gas emissions trading markets approved for use in the United States by the Administrator pursuant to subtitle B of Title III.

(26) INTERNATIONAL FOREST CARBON ACTIVITIES. – The term “international forest carbon activities” means activities in countries other than the United States directed at—
(1) reducing greenhouse gas emissions from deforestation and forest degradation; and
(2) increasing sequestration of carbon through –
(A) restoration of forests,
(B) restoration of degraded land that has not been forested prior to restoration,
(C) afforestation, using native species where practicable, and
(D) improved forest management;
(3) provided that such activities meet the eligibility requirements and quality criteria under section 1324 or section 1325 of this Act and any regulations promulgated pursuant thereto.
(27) LEAKAGE.—The term “leakage” means—
(A) as determined by the Administrator, a significant increase in greenhouse gas emissions, where the increase is caused by an offset project, and where the emissions increase occurs outside the boundary of the offset project; or
(B) as determined by the Administrator, a significant decrease in sequestration, where the decrease is caused by an offset project, and where the decrease occurs outside the bounds of the offset project..

(27) LOCAL DISTRIBUTION COMPANY.—The term “local distribution company” means an entity, whether public or private,—
(A) that has a legal, regulatory, or contractual obligation to deliver electricity or natural gas to retail consumers; and

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

(28) MANUFACTURE.—The term "manufacture" means make for sale or distribution through the application of technology and industrial processes. The term does not refer to the creation of greenhouse gas through anaerobic decomposition.

(29) NATURAL GAS PROCESSING PLANT.—The term "natural gas processing plant" means a facility that is designed to separate natural-gas liquids from natural gas or to fractionate mixed natural-gas liquids into natural-gas products, but that is not a wellhead or pipeline facility that removes natural-gas liquid condensate for operational or safety purposes.

(30) NON-HFC GREENHOUSE GAS.—The term "non-HFC greenhouse gas" means any of—
(A) carbon dioxide;
(B) methane;
(C) nitrous oxide;
(D) sulfur hexafluoride; or
(E) a perfluorocarbon.

(31) OFFSET ALLOWANCE.—The term "offset allowance" means an allowance established by the Administrator pursuant to subtitle A of Title III, section 321, or subtitle B of Title XIII of this Act.

(32) PLANT.—The term "plant" means any species of wild flora.

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

(34) 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 as specified in this section's definition of "advanced technology vehicle"; and
(C) manufactured in the United States.

(35) REGISTRY.—The term "Registry" means the Federal greenhouse-gas registry established pursuant to subtitle A of Title I of this Act.

(36) RETAIL RATE FOR DISTRIBUTION SERVICE.—
(A) IN GENERAL.—The term "retail rate for distribution service" means the rate that a local distribution company charges for the use of the system of the local distribution company.
(B) EXCLUSION.—The term "retail rate for distribution service" does not include any energy component of the rate.

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

(38) REVERSAL.—The term "reversal" means an intentional or unintentional loss of sequestered carbon

dioxide to the atmosphere in significant quantities, as determined by the Administrator, in order to accomplish the purposes of the Act in an effective and efficient manner.

(39) RURAL ELECTRIC COOPERATIVE.—The term "rural electric cooperative" means a cooperatively owned association that was in existence as of October 18, 2007, and that is eligible to receive loans under section 4 of the Rural Electrification Act of 1936 (7 U.S.C. 904).

(40) SEQUESTERED AND SEQUESTRATION.—The terms "sequestered" and "sequestration" mean the permanent capture, separation, isolation, or removal of greenhouse gas from the atmosphere.

(41) 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.

(42) 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.

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

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

Title I Immediate Action

Subtitle A Tracking Greenhouse-Gas Emissions

Section 111 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 caps and emissions trading market established pursuant to this Act.

Section 112 Federal Greenhouse-Gas Registry

(a) RULEMAKING.—Not later than two years after the date of enactment of this Act, the Administrator shall promulgate rules establishing a Federal Greenhouse-Gas Registry that achieves the purpose set forth in section 111.

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

(c) REQUIREMENTS.—The rules promulgated pursuant to subsection (a) shall—
(1) ensure the completeness, consistency, transparency, accuracy, precision, and reliability of data on greenhouse-gas emissions in the United States and on the production and manufacture in the United States, and importation into the United States, of fuels and other products whose uses emit 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 latest scientific research;
(3) require that, wherever feasible, submitted data are monitored using monitoring systems for fuel flow or emissions, such as continuous emissions monitoring systems or systems of equivalent precision, reliability, accessibility, and timeliness;
(4) require that, if an entity is already using a continuous emissions monitoring system to monitor mass emissions of a greenhouse gas under existing law that is consistent with the requirements of this Act, that system be used to monitor submitted data;
(5) include methods for avoiding the double-counting of greenhouse-gas emissions;
(6) include protocols to prevent entities from avoiding reporting requirements;
(7) include protocols for verification of submitted data;
(8) establish means for electronic reporting;
(9) ensure verification and auditing of submitted data;
(10) establish consistent policies for calculating carbon content and greenhouse-gas emissions for each type of fossil fuel reported;
(11) provide for public dissemination on the Internet of all verified data that is 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 where satisfactory data is not submitted to the Administrator for any period of time—
(A) replace the missing data with a conservative estimate of the highest emission levels that may have occurred during the period for which data are missing, in order to ensure emissions are not under-reported and to create a strong incentive for meeting data monitoring and reporting requirements; and
(B) take appropriate enforcement action;
(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 emissions trading market established by this Act and into another such market.

Section 113 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 112.

(b) PENALTY.—Any person that has violated or is violating rules promulgated pursuant to section 112 shall be subject to a civil penalty of not more than $25,000 per day of each violation.

(c) PENALTY ADJUSTMENT.—The Administrator shall, by regulation, adjust the penalty specified in subsection (b) for inflation, based on the Consumer Price Index, on the date of enactment of this Act and annually thereafter.

Section 114 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 emissions data; or
(3) other relevant data.

Subtitle B Early Clean Technology Deployment

Section 121 Efficient Buildings Program

(a) IN GENERAL.—The Administrator shall establish and administer a program, to be known as the Efficient Buildings Program, for issuing grants to owners of buildings in the United States for constructing highly-efficient buildings in the United States and for increasing the efficiency of existing buildings in the United States.

(b) REQUIREMENTS – Grants shall be distributed to building owners to the extent their efficient building projects 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 Energy Star benchmarking tool or an equivalent score on an established energy performance benchmarking metric as determined by the regulations adopted pursuant to subsection (d); and
(2) in retrofitted existing buildings that demonstrate substantial improvement in their score or rating along the Energy Star benchmarking tool by a minimum of 30 points or an equivalent improvement using an established performance benchmarking metric as determined by the regulations adopted pursuant to subsection (d).

(c) PRIORITY.—In issuing grants, priority shall be given to projects—
(1) completed by building owners with a proven track record of building efficiency performance; or
(2) that result in measurable greenhouse-gas reduction benefits not encompassed within the Energy Star metrics.

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

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

Section 122 Super-Efficient Equipment and Appliances Deployment (SEAD) Program

(a) IN GENERAL.—The Administrator shall establish and administer a program, to be known as the "Super-Efficient Equipment and Appliances Development Program" or "SEAD Program," for issuing grants to retailers and distributors in the United States for increasing their sales of high-efficiency building equipment, high-efficiency consumer electronics, and high-efficiency household appliances through marketing strategies such as consumer rebates, with the goal of minimizing life-cycle costs for consumers and maximizing public benefit.

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

(c) REPORTING.—Participating retailers and distributors shall be required to report the number of products sold within each product-type and wholesale purchase-price data to the Administrator on a confidential basis for program-design purposes.

(d) COST-EFFECTIVENESS REQUIREMENT.—
(1) DEFINITIONS.—In this subsection—
(A) SAVINGS.—The term "savings" means megawatt-hours of electricity or million British thermal units of other fuels saved by a product, in comparison to projected energy consumption based on the efficiency performance of displaced new product sales.
(B) COST-EFFECTIVENESS.—The term "cost-effectiveness" means the product obtained by multiplying—
(i) the net number of highly-efficient pieces of equipment, electronics, and appliances sold by a retailer or distributor in a calendar year; by
(ii) the savings during the projected useful life, but not to exceed 10 years, of the pieces of equipment, electronics, and appliances, including the impact of any documented measures to retire low-performing devices at the time of purchase of highly-efficient substitutes.
(2) REQUIREMENT.—Cost-effectiveness shall be a top priority in making awards pursuant to this section.

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

Section 123 Clean Medium- and Heavy-Duty Hybrid Fleets Program

(a) IN GENERAL.—The Administrator shall establish and administer a program for issuing grants to entities in the United States for their purchase of advanced medium- and heavy-duty hybrid commercial vehicles, based on demonstrated increases in fuel efficiency.

(b) REQUIREMENTS.—The rules promulgated pursuant to subsection (a) shall provide that—
(1) only purchasers of commercial vehicles weighing at least 8,500 pounds shall be eligible for receipt of emission allowances under the program;
(2) the purchasers of qualifying vehicles will have certainty of magnitude of the reward and the speed of its delivery at the time they purchase such vehicles;
(2) rewards scale upwards with fuel efficiency;
(3) that the allocation be subdivided into at least three classes of vehicle weight, in order to ensure—
(A) adequate availability of rewards for different categories of commercial vehicles; and

(B) that the rewards for heavier, more expensive vehicles are proportional to those for lighter, less expensive vehicles;
(4) rewards decrease over time, in order to encourage early purchases of hybrid vehicles; and
(5) to the extent feasible, all emission allowances allocated to the program shall have been distributed as rewards no later than five years after the date of enactment of this Act.

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

Subtitle C Research

Section 131 Research on the Effect 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 administer a program of directed and applied research, to be conducted through a nonprofit water research foundation and sponsored by drinking water utilities, to assist suppliers of drinking water in adapting to the effects of climate change.

(b) RESEARCH AREAS.— The research conducted in accordance with subsection (a) shall include research into—
(1) water quality impacts and solutions, including research--
(A) to address probable impacts on raw water quality resulting from--
(i) erosion and turbidity from extreme precipitation events;
(ii) watershed vegetation changes; and
(iii) increasing ranges of pathogens, algae, and nuisance organisms resulting from warmer temperatures; and
(B) on mitigating increasing damage to watersheds and water quality by evaluating extreme events, such as wildfires and hurricanes, to learn and develop management approaches to mitigate--
(i) permanent watershed damage;
(ii) quality and yield impacts on source waters; and
(iii) increased costs of water treatment;
(2) impacts on groundwater supplies from carbon sequestration, including research to evaluate potential water quality consequences of carbon sequestration in various regional aquifers, soil conditions, and mineral deposits;
(3) water quantity impacts and solutions, including research--
(A) to evaluate climate change impacts on water resources throughout hydrological basins of the United States;
(B) to improve the accuracy and resolution of climate change models at a regional level;
(C) to identify and explore options for increasing conjunctive use of aboveground and underground storage of water; and
(D) to optimize operation of existing and new reservoirs in diminished and erratic periods of precipitation and runoff;
(4) infrastructure impacts and solutions for water treatment facilities and underground pipelines, including research--
(A) to evaluate and mitigate the impacts of sea level rise on--
(i) near-shore facilities;
(ii) soil drying and subsidence; and

(iii) reduced flows in water and wastewater pipelines; and
(B) on ways of increasing the resilience of existing infrastructure and development of new design standards for future infrastructure;
(5) desalination, water reuse, and alternative supply technologies, including research--
(A) to improve and optimize existing membrane technologies, and to identify and develop breakthrough technologies, to enable the use of seawater, brackish groundwater, treated wastewater, and other impaired sources;
(B) into new sources of water through more cost-effective water treatment practices in recycling and desalination; and
(C) to improve technologies for use in--
(i) managing and minimizing the volume of desalination and reuse concentrate streams; and
(ii) minimizing the environmental impacts of seawater intake at desalination facilities;
(6) efficiency and greenhouse gas minimization, including research--
(A) on optimizing the efficiency of water supply and improving water efficiency in energy production; and
(B) to identify and develop renewable, carbon-neutral options for the water supply industry;
(7) regional and hydrological basin cooperative water management solutions, including research into--
(A) institutional mechanisms for greater regional cooperation and use of water exchanges, banking, and transfers; and
(B) the economic benefits of sharing risks of shortage across wider areas;
(8) utility management, decision support systems, and water management models, including research--
(A) into improved decision support systems and modeling tools for use by water utility managers to assist with increased water supply uncertainty and adaptation strategies posed by climate change;
(B) to provide financial tools, including new rate structures, to manage financial resources and investments, because increased conservation practices may diminish revenue and increase investments in infrastructure; and
(C) to develop improved systems and models for use in evaluating--
(i) successful alternative methods for conservation and demand management; and
(ii) climate change impacts on groundwater resources;
(9) reducing greenhouse gas emissions and demand management, including research to improve efficiency in water collection, production, transmission, treatment, distribution, and disposal to provide more sustainability and means to assist drinking water utilities in reducing the production of greenhouse gas emissions in the collection, production, transmission, treatment, distribution, and disposal of drinking water;
(10) water conservation and demand management, including research--
(A) to develop strategic approaches to water demand management that offer the lowest-cost, noninfrastructural options to serve growing populations or manage declining supplies, primarily through--
(i) efficiencies in water use and reallocation of the saved water;
(ii) demand management tools;
(iii) economic incentives; and
(iv) water-saving technologies; and
(B) into efficiencies in water management through integrated water resource management that incorporates--
(i) supply-side and demand-side processes;
(ii) continuous adaptive management; and
(iii) the inclusion of stakeholders in decisionmaking processes; and
(11) communications, education, and public acceptance, including research--

(A) into improved strategies and approaches for communicating with customers, decisionmakers, and other stakeholders about the implications of climate change on water supply; and
(B) to develop effective communication approaches to gain--
(i) public acceptance of alternative water supplies and new policies and practices, including conservation and demand management; and
(ii) public recognition and acceptance of increased costs.

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

Section 132 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.

Section 133 Sun Grant Center for Research on Compliance with the Clean Air Act

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

(b) FUNDING.—The Administrator shall provide to the sun grant centers such funds as the Administrator determines are necessary to carry out 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.

Section 134 Study by Administrator of Black Carbon Emissions.

(a) STUDY.—The Administrator shall conduct a study on black carbon emissions, including—
(1) identification of the latest scientific information and data relevant to the climate impacts of black carbon emissions from diesel engines and other sources;
(2) determination of the major sources of black carbon emissions in the United States and throughout the world, and an estimate of black carbon emissions from those sources;
(3) identification of the diesel and other direct emission control technologies, operations or strategies that remove or reduce black carbon, including estimates of their costs and their effectiveness;
(4) determination of the full life cycle and net climate impacts of installation of diesel particulate filters on existing heavy-duty diesel engines;
(5) recommendations on areas of focus for additional research for technologies, operations and strategies with the highest potential to reduce emissions; and
(6) recommendations of actions that the Federal Government could take 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.

Title II Capping Greenhouse-Gas Emissions

Section 201 Emission Allowances

(a) ESTABLISHMENT.—Not later than 60 days after the date of enactment of this Act, the Administrator shall establish the following quantities of emission allowances for the following calendar years:

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

2046	2,158
2047	2,052
2048	1,945
2049	1,839
2050	1,732

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

(c) LEGAL STATUS.—
(1) IN GENERAL.—An emission allowance shall not be a property right.
(2) TERMINATION OR LIMITATION.—Nothing in this Act or any other provision of law shall limit the authority of the Administrator to terminate or limit an emission allowance.
(3) OTHER PROVISIONS UNAFFECTED.—Nothing in this Act relating to emission allowances shall affect the application of, or compliance with, any other provision of law to or by a covered entity.

Section 202 Compliance Obligation

(a) IN GENERAL.—Not later than 90 days after the end of each calendar year from 2012 through 2050, the owner or operator of a covered entity shall submit to the Administrator an emission allowance, an offset allowance, or an international allowance for each carbon dioxide equivalent of –
(1) non-HFC greenhouse gas that was emitted by that covered entity in the United States in the preceding calendar year through the use of coal;
(2) non-HFC greenhouse gas that will be emitted through the use of any petroleum-based liquid or gaseous fuel, petroleum coke, or coal-based liquid or gaseous fuel that was, in 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, in the preceding calendar year, manufactured by that covered entity in the United States or imported into the United States by that covered entity, where the non-HFC greenhouse gas is not itself petroleum- or coal-based gaseous fuel or natural gas;
(4) HFC that was, in the preceding year, emitted as a byproduct of hydrochlorofluorocarbon manufacture in the United States by that covered entity; and
(5) non-HFC greenhouse gas that will be emitted—
(A) through the use of natural gas that was, in the preceding calendar year, processed in the United States by that covered entity, imported into the United States by that covered entity, or produced in the State of Alaska or the Federal waters of the Alaska Outer Continental Shelf by that covered entity and not re-injected into the field; or
(B) through the use of natural-gas liquids that were, in 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) of this subsection, for the purpose of calculating any submission requirement under subsection (a), the Administrator shall assume that no sequestration, destruction, or retention of greenhouse gas has occurred or will occur.
(2) EXCEPTION.—Notwithstanding paragraph (1) of this subsection, 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, where 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 substance as a feedstock.

(c) EXCLUDING PETROLEUM-BASED LIQUID FUEL IMPORTED FROM A CAPPED NAFTA COUNTRY.—The rules promulgated pursuant to section 204 shall provide for the exclusion from the compliance obligation set forth in paragraph (2) of subsection (a) petroleum-based liquid fuel imported into the United States from a country that is a party to the North American Free Trade Agreement (referred to hereinafter as "the NAFTA country"), where 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 no less stringent than those established for the United States by this Act; and
(2) the petroleum-based liquid fuel imported into the United States from the NAFTA country was produced or manufactured at or by an entity that was, at the time of the production or manufacture, directly subject to regulatory requirements pursuant to the NAFTA country's enacted greenhouse-gas emissions reduction requirements.

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

(e) DESTRUCTION CREDIT.—Not later than 90 days after the end of each calendar year from 2012 through 2050, the Administrator shall establish and distribute to any entity in the United States that the Administrator determines destroyed greenhouse gas in that calendar year in the United States a quantity of emission allowances equal to the quantity of carbon dioxide equivalents of non-HFC greenhouse gas that the Administrator determines the entity destroyed in the United States in that calendar year. This subsection shall not apply to the destruction of methane through combustion.

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

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

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

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

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

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

Section 203 Penalty for Noncompliance

(a) CASH PENALTY.—
(1) In general.—The owner or operator of any covered entity that fails for any year to submit to the Administrator by the deadline described in section 202 1 or more of the allowances due pursuant to that section shall be liable for the payment to the Administrator of a cash penalty.
(2) Amount.—The amount of a cash penalty required to be paid under paragraph (1) shall be, as determined by the Administrator, an amount equal to the product obtained by multiplying—
(A) the quantity of allowances that the owner or operator failed to submit; and
(B) the greater of—
(i) $200; or
(ii) a dollar figure representing 3 times the mean market value of an emission allowance in the calendar year for which the allowances were due.
(3) Timing.—A cash penalty required under this subsection shall be immediately due and payable to the Administrator, without demand.
(4) Deposit.—The Administrator shall deposit each cash penalty paid under this subsection into the Treasury of the United States.
(5) No effect on liability.—A cash penalty due and payable by the owner or operator of a covered entity under this subsection shall not diminish the liability of the owner or operator for any fine, penalty, or assessment against the owner or operator for the same violation under any other provision of this Act or any other law.

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

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

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

Section 204 Rulemaking

Not later than two years after the date of enactment of this Act, the Administrator shall promulgate rules to implement this Title.

Section 205 Report to Congress

Not later than two years after the date of enactment of this Act, the Administrator shall submit to the President and Congress a report on this Act's regulation of greenhouse gas emitted through the use of natural gas in the United States. The report shall present options for increasing the percentage of the natural gas used in the United States that is subject to greenhouse-gas emissions-reduction measures while minimizing regulatory complexity.

Title III Reducing Emissions Through Offsets and International Allowances

Subtitle A Offsets in the United States

Section 311 Outreach Initiative on Revenue Enhancement for Agricultural Producers

(a) IN GENERAL.—The Secretary of Agriculture, acting through the Chief of the Natural Resources Conservation Service, the Chief of the Forest Service, the Administrator of the Cooperative State Research, Education, and Extension Service, and land-grant colleges and universities, in consultation with the Administrator and the heads of other appropriate departments and agencies, shall establish an outreach initiative to provide information to agricultural producers, agricultural organizations, foresters, state and local officials, leaders from small business and non-profit groups that might engage in forest or natural resource projects, forest workers, tribes, and other landowners about opportunities under this subtitle to earn new revenue.

(b) COMPONENTS.—The initiative under this section—
(1) shall be designed to ensure that, to the maximum extent practicable, agricultural organizations and individual agricultural producers, foresters, and other landowners 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;
(3) may include the creation and development of regional marketing centers or coordination with existing centers (including centers within the Natural Resources Conservation Service or the Cooperative State Research, Education, and Extension Service or at land-grant colleges and universities).

(c) HANDBOOK.—
(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary of Agriculture, in consultation with the Administrator and after an opportunity for public comment, shall publish a handbook for use by agricultural producers, agricultural cooperatives, foresters, other landowners, offset buyers, and other stakeholders that provides easy-to-use guidance on achieving, reporting, registering, and marketing offsets.
(2) DISTRIBUTION.—The Secretary of Agriculture shall ensure, to the maximum extent practicable, that the handbook—
(A) is made available through the Internet and in other electronic media;
(B) includes, with respect to the electronic form of the handbook described in subparagraph (A), electronic forms and calculation tools to facilitate the petition process for new methodologies; and
(C) is distributed widely through land-grant colleges and universities and other appropriate institutions;
(3) UPDATING. – The Secretary of Agriculture shall update the handbook at least every 5 years, or more frequently as needed to reflect the developments in the science, practices, methodologies, measurement protocols and emerging markets.

Section 312 Establishment of a Domestic Offset Program

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

(b) USE. —
(1) IN GENERAL.—Subject to paragraph (3), the quantity of offset allowances distributed pursuant to paragraph (d) in a calendar year shall not exceed 15 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201.
(2) USE OF INTERNATIONAL ALLOWANCES.—
(A) If the quantity of offset allowances distributed 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 subsection (a) of section 201, then the Administrator shall allow the use, by covered facilities in that year, of international allowances under section 322 and international forest carbon credits under section 1325.
(B) The aggregate quantity of international allowances plus international forest carbon credits whose use the Administrator shall allow under subparagraph (A) shall be equal to the quantity by which the quantity of offset allowances distributed in that year pursuant to subsection (d) is less than 15 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201.
(3) CARRY-OVER.—
(A) If the sum of the quantity of offset allowances distributed in that year pursuant to subsection (d) and the quantity of international allowances and international forest carbon credits used in that year pursuant to paragraph (2) is less than 15 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201, then, notwithstanding paragraph (1), the quantity of offset allowances distributed pursuant to subsection (d) in the subsequent calendar year shall not exceed the sum of—
(i) 15 percent of the quantity of emission allowances established for that subsequent year pursuant to subsection (a) of section 201; and
(ii) the quantity by which the sum of the quantity of offset allowances distributed 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) is less than 15 percent of the quantity

of emission allowances established for that year pursuant to subsection (a) of section 201.
(4) EXCHANGE FOR REGIONAL GREENHOUSE-GAS INITIATIVE OFFSETS.—The Administrator shall—
(A) issue offset allowances, at an appropriate discount rate, for offset allowances issued under the Regional Greenhouse Gas Initiative; and
(B) ensure that enough capacity remains within the limit set forth in paragraph (1) to perform exchanges with all those interested.

(c) REQUIREMENTS.—The rules promulgated pursuant to subsection (a) shall—
(1) authorize the issuance and certification of offset allowances for greenhouse gas emission reductions below the project baseline;
(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 emission reduction offsets projects, establish the project baseline and register emissions under the Federal Greenhouse Gas Registry established under section 112; and
(4) specify the types of offset projects eligible to generate offset allowances, in accordance with section 313;
(5) establish procedures to monitor, quantify, and discount reductions in greenhouse gas emissions or increases in biological sequestration, in accordance with section 313;
(6) establish procedures for project initiation and approval, in accordance with section 314;
(7) establish procedures for third-party verification, registration, and issuance of offset allowances, in accordance with section 315;
(8) ensure permanence of offsets by mitigating and compensating for reversals, in accordance with section 316; and
(9) assign a unique serial number to each offset allowance issued under this section.

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

(d) TRANSFERABILITY.—
(1) An offset allowance generated pursuant to this subtitle may be sold, traded, or transferred, on the conditions that the offset allowance has not expired or been retired or canceled; and
(2) For biological sequestration projects the project developer is responsible for mitigating and compensating for reversals of registered offset allowances unless a different responsible party is pecified in a legally-binding contract or agreement.

(e) ACCOUNTING PERIOD.-
(1) The Administrator shall issues offset allowances on an annual basis, beginning at the date of project initiation approval. The annual issuance of offsets allowances shall be equal to the verified and certified emissions reductions or increases in sequestration.
(2) Approved baselines shall be valid for a period of 5 years before being subject to revision.

Section 313 Eligible Offset Project Types

(a) IN GENERAL.—Offset allowances from agricultural, forestry, and other land use-related projects shall be limited to those allowances 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.— The Administrator shall, after notice and opportunity for comment, issue and from time to time revise a list of categories of offset projects for which he shall issue an offset methodology. The Administrator shall consider including on such list—
(1) agricultural and rangeland sequestration and management practices, including—
(A) altered tillage practices;
(B) winter cover cropping, continuous cropping, and other means to increase biomass returned to soil in lieu of planting followed by fallowing;
(C) 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;
(D) reduction of nitrogen fertilizer use or increase in nitrogen use efficiency;
(E) reduction in the frequency and duration of flooding of rice paddies; and
(F) reduction in carbon emissions from organic soils;
(2) changes in carbon stocks attributed to land use change and forestry activities limited to—
(A) afforestation or reforestation of acreage not forested as of October 18, 2007; and
(B) forest management resulting in an increase in forest stand volume;
(3) manure management and disposal, including—
(A) waste aeration; and
(B) methane capture and combustion;
(4) subject to the requirements of this subtitle, any other terrestrial offset practices identified by the Administrator, including—
(A) the capture or reduction of fugitive greenhouse gas emissions for which no covered facility is required under section 202(a) to submit any emission allowances, offset allowances, or international emission allowances;
(B) methane capture and combustion at nonagricultural facilities; and
(C) other actions that result in the avoidance or reduction of greenhouse gas emissions in accordance with section 312; and
(5) combinations of any of the offset practices described in paragraphs (1) through (4).
(6) Categories proposed to the Administrator by petition.

(c) REQUIREMENTS FOR OFFSET METHODOLOGIES. —
(1) Not later than three years after enactment, and after notice and opportunity for comment, the Administrator shall issue a methodology for each category listed pursuant to subsection (b). The methodology for each category shall specify requirements for determining the eligibility of a project, for determining additional emission reductions or sequestrations from such project, for preventing emissions leakage associated with such project, for preventing the reversal of sequestrations from such project, and for monitoring, verifying, and reporting the operation of such project. In the case of projects related to agriculture or forestry, the Administrator shall consult with the Secretary of Agriculture.
(2) The Administrator shall revise each such methodology, after notice and opportunity for comment, at least every five years. Beginning one year after the date by which a methodology is required to be revised, no further offset allowances shall be issued to projects approved under the prior methodology unless such project demonstrates that it is in conformity with the applicable revised methodology.
(3) Each methodology shall include:
(A) A procedure for determining that a project does not receive support from an allowance allocation under this Act or from any other government incentive, subsidy, or mandate, and for determining that

the emission reductions or sequestrations from such project are not double-counted in any other program,
(B) A procedure for delineating the boundaries of a project and determining the extent, if any, of emissions leakage from such project, based on scientifically sound methods as determined by the Administrator;
(C) Scientifically sound methods, as determined by the Administrator, for monitoring, measuring, and quantifying changes in emissions or sequestrations resulting from a project, including a method for quantifying the uncertainty in such measurements and a description of site-specific data that will be used in such monitoring, measurement, and quantification;
(D) A procedure for establishing the baseline for a project that assures that offset allowances will be issued only for emission reductions or sequestrations that are additional;
(E) A threshold of uncertainty in the quantification of emission reductions or sequestrations and for baseline emission levels above which the project shall not be eligible to receive offset allowances. A project developer may petition for different uncertainty factors if the developer demonstrates to the Administrator that that the measurement methods used by the project have less uncertainty than assumed by the default methodology.
(G) Clear and objective tests specified by the Administrator to assure that a project will be eligible to generate offset allowances only if, in the judgment of the Administrator, the project is additional. Such tests shall be sufficient to ensure—
(1) that no part of the project is required by existing government regulations or commonly accepted industry standards, as determined by the Administrator;
(2) that the project uses technologies or practices that are not in common use within a relevant jurisdiction or industry, as defined by the Administrator; and
(3) that the project would not take place in the absence of the revenue generated by the sale of offset allowances.
(H) A procedure to quantify leakage and to assure that the issuance of offset allowances is reduced by the amount of such leakage,
(I) A methodology for assessing the risk that a sequestration will be reversed, a description of measures that will be taken to reduce such risk, and a description of procedures that will be followed to measure, report, and compensate for any reversal that does occur.
(J) A procedure to determine whether the amount of carbon sequestered on or in land where a project is undertaken was significantly changed during the 10 year period prior to initiation of the project, and to exclude such project from eligibility or adjust its baseline accordingly ;
(K) A protocol for reporting emissions reductions or sequestrations (and any reversal thereof) at least annually.

(d) TECHNOLOGIES.—The Administrator may issue, after notice and comment, a list of technologies and associated performance benchmarks the achievement of which he has determined shall be considered to be additional in specific project applications. Any such determination shall be valid only for a maximum of five years.

(e)METHODOLOGY TESTING.— The Administrator may not issue a methodology until he determines that such methodology has been tested by three independent expert teams on at least three different projects to which that methodology applies and that the emission reductions or sequestrations estimated by such expert teams for the same project do not differ by more than 10 per cent.

Section 314 Project Initiation and Approval

(a) PROJECT APPROVAL.—A project developer—
(1) may submit a petition for offset project approval at any time following the effective date of rules promulgated under section 312; but
(2) may not register or issue offset allowances until such approval is received and until after the emission reductions or sequestrations supporting the offset allowances have actually occurred.

(b) PETITION PROCESS.—Prior to offset registration and issuance of offset allowances, a project developer shall submit a petition to the Administrator, consisting of—
(1) a copy of the monitoring and quantification plan prepared for the offset project, as described under subsection (d);
(2) a greenhouse gas initiation certification, as described under subsection (e); and
(3) subject to the requirements of this subtitle, any other information identified by the Administrator in the regulations promulgated under section 312 as necessary to meet the objectives of this subtitle.

(c) APPROVAL AND NOTIFICATION.—
(1) IN GENERAL.—Not later than 180 days after the date on which the Administrator receives a complete petition under subsection (b), the Administrator shall—
(A) determine whether the monitoring and quantification plan satisfies the applicable requirements of this subtitle;
(B) determine whether the greenhouse gas initiation certification indicates a significant deviation in accordance with subsection (e)(3);
(C) notify the project developer of the determinations under subparagraphs (A) and (B); and
(D) issue offset allowances for approved projects.
(2) APPEAL.—The Administrator shall establish mechanisms for appeal and review of determinations made under this subsection.

(d) MONITORING AND QUANTIFICATION.—
(1) IN GENERAL.—A project developer shall make use of the standardized tools and methods described in this section to monitor, quantify, and discount reductions in greenhouse gas emissions or increases in sequestration.
(2) MONITORING AND QUANTIFICATION PLAN.—A monitoring and quantification plan shall be used to monitor, quantify, and discount reductions in greenhouse gas emissions or increases in sequestration as described by this subsection.
(3) PLAN COMPLETION AND RETENTION.—A monitoring and quantification plan shall be—
(A) completed for all offset projects prior to offset project initiation; and
(B) retained by the project developer for the duration of the offset project.
(4) PLAN REQUIREMENTS.—Subject to section 312, the Administrator, in conjunction with the Secretary of Agriculture, shall specify the required components of a monitoring and quantification plan, including—
(A) a description of the offset project, including project type;
(B) a determination of accounting periods;
(C) an assignment of reporting responsibility;
(D) the contents and timing of public reports, including summaries of the original data, as well as the results of any analyses;
(E) a delineation of project boundaries, based on acceptable methods and formats;
(F) a description of which of the monitoring and quantification tools developed under subsection (f) are to be used to monitor and quantify changes in greenhouse gas fluxes or carbon stocks associated with a project;

(G) a description of which of the standardized methods developed under subsection (g) to be used to determine additionality, estimate the baseline carbon, and discount for leakage;
(H) based on the standardized methods chosen in subparagraphs (F) and (G), a determination of uncertainty in accordance with subsection (h);
(I) what site-specific data, if any, will be used in monitoring, quantification, and the determination of discounts;
(J) a description of procedures for use in managing and storing data, including quality-control standards and methods, such as redundancy in case records are lost;
(K) subject to the requirements of this subtitle, any other information identified by the Administrator or the Secretary of Agriculture as being necessary to meet the objectives of this subtitle; and
(L) a description of the risk of reversals for the project, including any way in which the proposed project may alter the risk of reversal for the project or other projects in the area.

(e) GREENHOUSE GAS INITIATION CERTIFICATION.—
(1) IN GENERAL.—In reviewing a petition submitted under subsection (b), the Administrator shall seek to exclude each activity that undermines the integrity of the offset program established under this subtitle, such as the conversion or clearing of land, or marked change in management regime, in anticipation of offset project initiation.
(2) GREENHOUSE GAS INITIATION CERTIFICATION REQUIREMENTS.—A greenhouse gas initiation certification developed under this subsection shall include—
(A) the estimated greenhouse gas flux or carbon stock for the offset project for each of the 4 complete calendar years preceding the effective date of the rules promulgated under section 312; and
(B) the estimated greenhouse gas flux or carbon stock for the offset project, averaged across each of the 4 calendar years preceding the effective date of the rules promulgated under section 312.
(3) Determination of significant deviation.—Based on standards developed by the Administrator, in conjunction with the Secretary of Agriculture—
(A) each greenhouse gas initiation certification submitted pursuant to this section shall be reviewed; and
(B) a determination shall be made as to whether, as a result of activities or behavior inconsistent with the purposes of this title, a significant deviation exists between the average annual greenhouse gas flux or carbon stock and the greenhouse gas flux or carbon stock for a given year.
(4) Adjustment for projects with significant deviation.—In the case of a significant deviation, the Administrator shall adjust the number of allowances awarded in order to account for the deviation.

(f) DEVELOPMENT OF MONITORING AND QUANTIFICATION TOOLS FOR OFFSET PROJECTS.—
(1) IN GENERAL.—Subject to section 312, the Administrator, in conjunction with the Secretary of Agriculture, shall develop standardized tools for use in the monitoring and quantification of changes in greenhouse gas fluxes or carbon stocks for each offset project type listed under section 313(b).
(2) TOOL DEVELOPMENT.—The tools used to monitor and quantify changes in greenhouse gas fluxes or carbon stocks shall, for each project type, include applicable—
(A) statistically-sound field and remote sensing sampling methods, procedures, techniques, protocols, or programs;
(B) models, factors, equations, or look-up tables; and
(C) any other process or tool considered to be acceptable by the Administrator, in conjunction with the Secretary of Agriculture.

(g) DEVELOPMENT OF ACCOUNTING AND DISCOUNTING METHODS.—
(1) IN GENERAL.—The Administrator, in consultation with the Secretary of Agriculture, shall—
(A) develop standardized methods for use in accounting for additionality and uncertainty, estimating the

baseline, and discounting for leakage for each offset project type listed under section 313(b); and
(B) require that leakage be subtracted from reductions in greenhouse gas emissions or increases in sequestration attributable to a project.
(2) ADDITIONALITY DETERMINATION AND BASELINE ESTIMATION.—The standardized methods used to determine additionality and establish baselines shall, for each project type, at a minimum—
(A) in the case of a sequestration project, determine the greenhouse gas flux and carbon stock on comparable land identified on the basis of—
(i) similarity in current management practices;
(ii) similarity of regional, State, or local policies or programs; and
(iii) similarity in geographical and biophysical characteristics;
(B) in the case of an emission reduction project, use as a basis emissions from comparable land or facilities; and
(C) in the case of a sequestration project or emission reduction project, specify a selected time period.
(3) LEAKAGE.—The standardized methods used to determine and discount for leakage shall, at a minimum, take into consideration—
(A) the scope of the offset system in terms of activities and geography covered;
(B) the markets relevant to the offset project;
(C) emission intensity per unit of production, both inside and outside of the offset project; and
(D) a time period sufficient in length to yield a stable leakage rate.

(h) UNCERTAINTY FOR AGRICULTURAL AND FORESTRY PROJECTS.—
(1) IN GENERAL.—The Administrator, in conjunction with the Secretary of Agriculture, shall develop standardized methods for use in determining and discounting for uncertainty for each offset project type listed under section 313(b).
(2) BASIS.—The standardized methods used to determine and discount for uncertainty shall be based on—
(A) the robustness and rigor of the methods used by a project developer to monitor and quantify changes in greenhouse gas fluxes or carbon stocks;
(B) the robustness and rigor of methods used by a project developer to determine additionality and leakage; and
(C) an exaggerated proportional discount that increases relative to uncertainty, as determined by the Administrator, in conjunction with the Secretary of Agriculture, to encourage better measurement and accounting.

(i) ACQUISITION OF NEW DATA AND REVIEW OF METHODS FOR AGRICULTURAL AND FORESTRY PROJECTS.—The Administrator, in conjunction with the Secretary of Agriculture, shall—
(1) establish a comprehensive field sampling program to improve the scientific bases on which the standardized tools and methods developed under this section are based; and
(2) review and revise the standardized tools and methods developed under this section, based on—
(A) validation of existing methods, protocols, procedures, techniques, factors, equations, or models;
(B) development of new methods, protocols, procedures, techniques, factors, equations, or models;
(C) increased availability of field data or other datasets; and
(D) any other information identified by the Administrator, in conjunction with the Secretary of Agriculture, that is necessary to meet the objectives of this subtitle.

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

Section 315 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 314, by submitting a verification report for an offset project to the Administrator.

(b) OFFSET VERIFICATION.—
(1) SCOPE OF VERIFICATION.—A verification report for an offset project shall—
(A) be completed by a verifier accredited in accordance with paragraph (3); and
(B) shall be 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 clauses (II) through (V); and
(iii) subject to the requirements of this subtitle, any other information identified by the Administrator as being necessary to achieve the purposes of this subtitle.
(2) VERIFICATION REPORT REQUIREMENTS.—The Administrator shall specify the required components of a verification report, including—
(A) the quantity of offsets generated;
(B) the amount of discounts applied;
(C) an assessment of methods (and the appropriateness of those methods);
(D) an assessment of quantitative errors or omissions (and the effect of the errors or omissions on offsets);
(E) any potential conflicts of interest between a verifier and project developer; and
(F) any other provision that the Administrator considers to be necessary to achieve the purposes of this subtitle.
(3) VERIFIER ACCREDITATION.—
(A) IN GENERAL.—The rules promulgated pursuant to section 312 shall establish a process and requirements for accreditation by a third-party verifier that has no conflicts of interest.
(B) PUBLIC ACCESSIBILITY.—Each verifier meeting the requirements for accreditation in accordance with this paragraph shall be listed in a publicly-accessible database, which shall be maintained and updated by the Administrator.

(c) REGISTRATION AND AWARDING OF OFFSETS.—
(1) IN GENERAL.—Not later than 90 days after the date on which the Administrator receives a verification report required under subsection (b), the Administrator shall—
(A) determine whether the offsets satisfy the applicable requirements of this subtitle; and
(B) notify the project developer of that determination.
(2) AFFIRMATIVE DETERMINATION.—In the case of an affirmative determination under paragraph (1), the Administrator shall—
(A) register the offset allowances in accordance with this subtitle; and
(B) issue the offset allowances.
(3) APPEAL AND REVIEW.—The Administrator shall establish mechanisms for the appeal and review of

determinations made under this subsection.

Section 316 Tracking of Reversals For Sequestration Projects

(a) REVERSAL CERTIFICATION.—
(1) In general.—The rules promulgated pursuant to section 312 shall require the submission of a reversal certification for each offset project on an annual basis following the registration of offset allowances.
(2) REQUIREMENTS.—A reversal certification submitted in accordance with this subsection shall state—
(A) whether any unmitigated reversal relating to the offset project has occurred in the year preceding the year in which the certification is submitted; and
(B) the quantity of each unmitigated reversal.
(b) EFFECT ON OFFSET ALLOWANCES.—
(1) INVALIDITY.—The Administrator shall declare invalid all offset allowances issued for any offset project that has undergone a complete reversal.
(2) PARTIAL REVERSAL.—In the case of an offset project that has undergone a partial reversal, the Administrator shall render invalid offset allowances issued for the offset project in direct proportion to the degree of reversal.

(c) ACCOUNTABILITY FOR REVERSALS.—Liability and responsibility for compensation of a reversal of a registered offset allowance under subsection (a) shall lie with the owner of the offset allowance, as described in section 312.

(d) COMPENSATION FOR REVERSALS.—The unmitigated reversal of 1 or more registered offset allowances that were submitted for the purpose of compliance with section 202(a) shall require the submission of—
(1) an equal number of offset allowances; or
(2) a combination of offset allowances and emission allowances equal to the unmitigated reversal.
(e) Project Termination.—A project developer may cease participation in the domestic offset program established under this subtitle at any time, on the condition that any registered allowances awarded for increases in sequestration have been compensated for by the project developer through the submission of an equal number of any combination of offset allowances and emission allowances.

Section 317 Examinations

(a) REGULATIONS.—The rules promulgated pursuant to section 312 shall govern the examination and auditing of offset allowances.

(b) REQUIREMENTS.—The governing rules described in subsection (a) shall specifically consider—
(1) principles for initiating and conducting examinations;
(2) the type or scope of examinations, including—
(A) reporting and recordkeeping; and
(B) site review or visitation;
(3) the rights and privileges of an examined party; and
(4) the establishment of an appeal process.

Section 318 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 rules described in section 317(a) shall be eligible to generate offset allowances under this subtitle if the offset project meets the other applicable requirements of this subtitle.

(b) PRE-EXISTING PROJECTS.—
(1) IN GENERAL.—The Administrator may 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 317(a), are registered under or meet the standards of the Climate Registry, the California Action Registry, the GHG Registry, the Chicago Climate Exchange, the GHG Clean Projects Registry, or any other Federal, State, or private reporting programs or registries if the Administrator determines that such other offset projects and banked offset allowances under those other programs or registries satisfy the applicable requirements of this subtitle.
(2) EXCEPTION.—An offset allowance that is expired, retired, or canceled under any other offset program, registry, or market as of the effective date of the governing rules described in section 317(a) shall be ineligible for transition into the Registry.

Section 319 Offset Registry

In addition to the requirements established by section 314, an offset allowance registered under this subtitle shall be accompanied in the Registry by—
(1) a verification report submitted pursuant to section 315(a);
(2) a reversal certification submitted pursuant to section 316(b); and
(3) subject to the requirements of this subtitle, any other information identified by the Administrator as being necessary to achieve the purposes of this subtitle.

Section 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—
(1) 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
(2) the cost of those incentives, programs, or policies.

(c) USE OF NATIVE PLANT SPECIES IN OFFSET PROJECTS.—Not later than 2 years after the date of enactment of this Act, the Administrator, in conjunction with the Secretary of Agriculture, shall promulgate rules for the selection, use, and storage of native and nonnative plant materials—
(1) to ensure native plant materials are given primary consideration, in accordance with applicable Department of Agriculture guidance for use of native plant materials;
(2) to prohibit the use of Federal- or State-designated noxious weeds; and
(3) to prohibit the use of a species listed by a regional or State invasive plant council within the applicable region or State.

Subtitle B Offsets and Emission Allowances From Other Nations

Section 321 Offset Allowances Originating From Projects in Other Nations

(a) RULEMAKING.— Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules establishing a system whereby the Administrator issues offset allowances for projects that reduce greenhouse-gas emissions or increase sequestration of carbon dioxide in nations other than the United States.

(b) USE. —
(1) IN GENERAL.—Subject to paragraph (3), the quantity of offset allowances distributed pursuant to this section in a calendar year shall not exceed 5 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201.
(2) USE OF INTERNATIONAL ALLOWANCES.—
(A) If the quantity of offset allowances distributed in a calendar year pursuant to this section is less than 5 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201, then the Administrator shall allow the use, by covered facilities in that year, of international allowances under section 322.
(B) The aggregate quantity of international allowances whose use the Administrator shall allow under subparagraph (A) shall be equal to the quantity by which the quantity of domestic offset allowances distributed in that year pursuant to this section is less than 5 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201.
(3) CARRY-OVER.—
(A) If the sum of the quantity of offset allowances distributed in that year pursuant to this section and the quantity of international allowances used in that year pursuant to paragraph (2) is less than 5 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201, then, notwithstanding paragraph (1), the quantity of offset allowances distributed pursuant to this section in the subsequent calendar year shall not exceed the sum of—
(i) 5 percent of the quantity of emission allowances established for that subsequent year pursuant to subsection (a) of section 201; and
(ii) the quantity by which the sum of the quantity of offset allowances distributed in the preceding calendar year pursuant to this section and the quantity of international allowances used in that year pursuant to paragraph (2) is less than 5 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201.

(c) REQUIREMENTS.— The rules promulgated pursuant to subsection (a) shall—
(1) take into consideration protocols adopted in accordance with the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992; and
(2) require that, in order to be approved for use under this subtitle—
(A) project shall have been approved by the Administrator based on a finding that it represents real, verifiable, additional, and permanent reductions in greenhouse-gas emissions in a foreign country with a degree of certainty comparable to that achieved by the regulations established pursuant to subtitle A of this Title.
(B) the emission allowance shall not come from a project at facility a that competes directly with a United States facility.

(d) FACILITY CERTIFICATION.—The owner or operator of a covered facility who submits an offset allowance generated under this section shall certify that the allowance has not been retired from use in the registry of the applicable foreign country.

Section 322 Emission Allowances From Other Nations

(a) RULEMAKING.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules, 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 nations other than the United States.

(b) REQUIREMENTS.—The rules promulgated pursuant to subsection (a) shall require that, in order to be approved for use in the United States—
(1) an emission allowance shall have been issued by a foreign country pursuant to a governmental program that imposes mandatory absolute tonnage limits on greenhouse gas emissions from the foreign country, or 1 or more industry sectors in that country, pursuant to protocols described in subsection (a); and
(2) the governmental program be of comparable stringency to the program established by this Act, including comparable monitoring, compliance, and enforcement.

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

Subtitle C Agriculture and Forestry Program in the United States

Section 331 Allocation

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

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

Section 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 rules establishing a program for distributing emission allowances allocated pursuant to section 331 to entities in the agriculture and forestry sectors of the United States, as reward for—
(1) achieving real, verifiable, additional, permanent, and enforceable reductions in greenhouse gas emissions from their operations;
(2) achieving real, verifiable, additional, permanent, and enforceable increases in greenhouse gas

sequestration on land that they own or manage; and
(3) pilot projects or other research regarding innovative practices for measuring greenhouse-gas emissions reductions, sequestration, or other benefits and associated costs of the pilot projects.

(b) NEW METHODOLOGY INCUBATOR.—
(1) The Secretary of Agriculture shall ensure that, during any 5-year period, the average annual percentage of the quantity of emission allowances established for a calendar year that is distributed to entities under the program established under subsection (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 – the Administrator shall establish programs that use allocation support for the:
(A) Acquisition of New Data, Improvement of Methodologies, and Development of New Tools for Designated Offsets Activity Types.—The Administrator, in conjunction with the Secretary of Agriculture, shall establish a comprehensive field sampling and pilot project program to improve the scientific data and calibration of standardized tools and methodologies used to measure greenhouse gas reductions or sequestration and baseline for uncapped activity types that are likely to provide significant emissions reductions or sequestration; and
(B) Targeted Support for Development and Deployment of New Technologies.- The Administrator shall establish a program for development and deployment of new technologies and methods in greenhouse gas reductions or sequestration for uncapped activities. Activities would be selected based on their potential emissions reductions or sequestration (and a market penetration review). Funding would provide support for a select number of projects to cover research on technological other barriers, prototypes, first of the kind risk coverage, and initial market barriers. Funding for selected activity types would be limited and dependent on forward progress.

(c) REQUIREMENT.—The Secretary of Agriculture shall distribute emission allowances under this section in a manner that maximizes the avoidance or reduction of greenhouse gas emissions and ensures that entities in this program do not receive more compensation for reductions in this program than they would for the same reductions as a compliance offset project under Subtitle A.

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

Section 333 Agricultural and Forestry Greenhouse-Gas Management Research

(a) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary of Agriculture, in consultation with the Administrator and scientific and 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 reductions, sequestration, or other benefits and associated costs;
(3) the proposed priority for additional research;
(4) the most appropriate approaches for conducting the additional research; and
(5) the extent to which and the manner in which allowances that are specific to agricultural and forestry

operations, including harvested wood products and the reduction of hazardous fuels to reduce the risk of uncharacteristically severe wildfires, should be valued and allotted.

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

Title IV Establishing a Greenhouse-Gas Emissions Trading Market

Subtitle A Trading

Section 411 Sale, Exchange, and Retirement of Allowances

Except as otherwise provided in this Act, and subject to the rules promulgated pursuant to subtitle B of this Title, the lawful holder of an allowance may, without restriction, sell, exchange, or transfer the allowance, or submit it for compliance in accordance with section 202.

Section 412 No Restriction on Transactions

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

Section 413 Allowance Transfer and Tracking System

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

(b) REQUIREMENTS.—The rules promulgated pursuant to subsection (a) shall—
(1) specify all necessary procedures and requirements for an orderly and competitive functioning of the allowance trading system; and
(2) provide that the transfer of allowances shall not be effective until such date as a written certification of the transfer, signed by a responsible official of each party to the transfer, is received and recorded by the Administrator in accordance with the rules promulgated pursuant to subsection (a).

Subtitle B Market Oversight and Enforcement

Section 421 Finding

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

(a) the market--
(1) is designed to prevent fraud and manipulation, which could potentially arise from many sources, including—

(A) the concentration of market power within the control of a limited number of individuals or entities; and
(B) the abuse of material, nonpublic information;
(2) (A) it appropriately transparent, with real-time reporting of quotes and trades; and
(B) makes information on price, volume, and supply, and other important statistical information available to the public on fair, reasonable, and nondiscriminatory terms; and
(C) is subject to appropriate recordkeeping and reporting requirements regarding transactions; and
(D) has the confidence of investors;

(b) the market—
(1) functions smoothly and efficiently, generating prices that accurately reflect supply and demand for emission allowances; and
(2) promotes just and equitable principles of trade;

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

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

(e) an appropriate interagency forum exists—
(1) for ongoing assessment of emerging regulatory matters and information sharing; and
(2) to ensure regulatory coordination of the market;

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

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

Section 422 CARBON MARKET OVERSIGHT AND REGULATION

(a) Delegation of Authority by President.—The President, taking into consideration the recommendations of the Working Group established by subsection (b), shall delegate to members of the Working Group and the heads of other appropriate Federal entities the authority to promulgate regulations to enhance the integrity, efficiency, orderliness, fairness, and competitiveness of the development by the United States of a new financial market for emission allowances, based on the following core principles:
(1) The market shall—
(A) be designed to prevent fraud and manipulation relating to the trading of emission allowances and related markets, which could potentially arise from many sources, including—
(i) the concentration of market power within the control of a limited number of individuals or entities; and
(ii) the abuse of material, nonpublic information;
(B)(i) be appropriately transparent, with real-time reporting of quotes and trades; and
(ii) make information on price, volume, and supply, and other important statistical information available to the public on fair, reasonable, and nondiscriminatory terms;
(C) be subject to appropriate recordkeeping and reporting requirements regarding transactions; and
(D) have the confidence of investors.

(2) The market shall—
(A) function smoothly and efficiently, generating prices that accurately reflect supply and demand for emission allowances;
(B) be designed to prevent excessive speculation that could cause sudden or unreasonable fluctuations or unwarranted changes in the price of emission allowances; and
(C) promote just and equitable principles of trade.
(3) The need of market participants and regulators for transparency shall be balanced against legitimate business concerns concerning the release of confidential, proprietary information.
(4) The market shall be subject to effective and comprehensive oversight, which integrates strong enforcement mechanisms, including mechanisms for cooperation with other national and international oversight regimes.
(5) There shall be an appropriate interagency forum—
(A) for ongoing assessment of emerging regulatory matters and information sharing; and
(B) to ensure regulatory coordination of the market.
(6) The market shall establish an equitable system for best execution of customer orders.
(7) The market shall protect investors and the public interest.

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

(c) Membership.—The Working Group shall be composed of the following members (or their designees):
(1) The Administrator, who shall serve as Chairperson of the Working Group.
(2) The Secretary of the Treasury.
(3) The Chairman of the Securities and Exchange Commission.
(4) The Chairman of the Commodity Futures Trading Commission.
(5) The Chairman of the Federal Energy Regulatory Commission.
(6) Such other Executive branch officials as may be appointed by the President.

(d) Duties.—
(1) IDENTIFICATION OF ISSUES AND APPROPRIATE ACTIVITIES.—
(A) IN GENERAL.—The Working Group shall identify—
(i) the major issues related to the integrity, efficiency, orderliness, fairness, and competitiveness of the development by the United States of a new financial market for emission allowances under the cap-and-trade system for emission allowances established under this Act;
(ii) any relevant recommendations provided to the Working Group by Federal, State, or local governments, organizations, individuals, and entities; and
(iii) the activities, such as market regulation, policy coordination, and contingency planning, that are appropriate to carry out those recommendations.
(B) CONSULTATION.—In identifying appropriate activities under subparagraph (A)(iii), the Working Group shall consult with representatives of, as appropriate—
(i) various information exchanges and clearinghouses;
(ii) self-regulatory entities, securities exchanges, transfer agents, and clearing entities;
(iii) participants in the emission allowance trading market; and
(iv) other Federal entities, including—
(I) the Federal Reserve; and
(II) the Federal Trade Commission.
(2) STUDY.—The Working Group shall conduct a study of the major issues relating to the regulation of the emission allowance trading market and other carbon markets.

(3) REPORT.—Not later than 270 days after the date of enactment of this Act, and annually thereafter, the Working Group shall submit to the President and Congress a report describing—
(A) the progress made by the Working Group;
(B) recommendations of the Working Group regarding any regulations proposed pursuant to subsection (a);
(C) recommendations for additional legislative action, if necessary; and
(D) a timetable for the implementation of the new regulations to ensure that the regulations take effect before the effective date of regulations governing the emission allowance trading system.
(4) MEMORANDA OF UNDERSTANDING.—Not later than 270 days after the date of enactment of this Act, the Administrator shall enter into a memorandum of understanding with the head of each appropriate Federal entity (including each appropriate Federal entity represented by a member of the Working Group, as applicable) relating to regulatory and enforcement coordination, information sharing, and other related matters to minimize duplicative or conflicting regulatory efforts.
(5) RULEMAKING.—Not later than 270 days after the date or enactment of this Act, the heads of other appropriate Federal entities to whom the President has delegated rulemaking authority under subsection (a), shall promulgate rules under subsection (a).

(e) Administration.—
(1) INFORMATION FROM FEDERAL AGENCIES.—
(A) IN GENERAL.—The Working Group may secure directly from any Federal agency such information as the Working Group considers necessary to carry out this section.
(B) PROVISION OF INFORMATION.—On request of the Chairperson of the Working Group, the head of the agency shall provide the information to the Working Group.
(2) COMPENSATION OF MEMBERS.—A member of the Working Group who is an officer or employee of the Federal Government shall serve without compensation in addition to the compensation received for the services of the member as an officer or employee of the Federal Government.
(3) ADMINISTRATOR SUPPORT.—To the extent permitted by law and subject to the availability of appropriations, the Administrator shall provide to the Working Group such administrative and support services as are necessary to assist the Working Group in carrying out the duties described in subsection (d).

(f) Effect of Section.—Nothing in this section limits or restricts any regulatory authority of a Federal entity as in effect on the date of enactment of this Act.

(g) 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 431 Establishment

There is established a Carbon Market Efficiency Board (referred to in this subtitle as “the Board”).

Section 432 Composition and Administration

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

(A) 7 members who are citizens of the United States, to be appointed by the President, by and with the advice and consent of the Senate; and
(B) an advisor who is a scientist with expertise in climate change and the effects of climate change on the environment, to be appointed by the President, by and with the advice and consent of the Senate.
(2) REQUIREMENTS.—In appointing members of the Board under paragraph (1), the President shall—
(A) ensure fair representation of the financial, agricultural, industrial, and commercial sectors, and the geographical regions, of the United States, and include a representative of consumer interests;
(B) appoint not more than 1 member from each such geographical region; and
(C) ensure that not more than 4 members of the Board serving at any time are affiliated with the same political party.
(3) COMPENSATION.—
(A) IN GENERAL.—A member of the Board shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for level II of the Executive Schedule under section 5313 of title 5, United States Code, for each day (including travel time) during which the member is engaged in the performance of the duties of the Board.
(B) CHAIRPERSON.—The Chairperson of the Board shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for level I of the Executive Schedule under section 5312 of title 5, United States Code, for each day (including travel time) during which the member is engaged in the performance of the duties of the Board.
(4) PROHIBITIONS.—
(A) CONFLICTS OF INTEREST.—An individual employed by, or holding any official relationship (including any shareholder) with, any entity engaged in the generation, transmission, distribution, or sale of energy, an individual who has any pecuniary interest in the generation, transmission, distribution, or sale of energy, or an individual who has a pecuniary interest in the implementation of this Act, shall not be appointed to the Board under this subsection.
(B) NO OTHER EMPLOYMENT.—A member of the Board shall not hold any other employment during the term of service of the member.

(b) TERM; VACANCIES.—
(1) TERM.—
(A) IN GENERAL.—The term of a member of the Board shall be 14 years, except that the members first appointed to the Board shall be appointed for terms in a manner that ensures that—
(i) the term of not more than 1 member shall expire during any 2-year period; and
(ii) no member serves a term of more than 14 years.
(B) OATH OF OFFICE.—A member shall take the oath of office of the Board by not later than 15 days after the date on which the member is appointed under paragraph (1) of subsection (a).
(C) REMOVAL.—
(i) IN GENERAL.—A member may be removed from the Board on determination of the President for cause.
(ii) NOTIFICATION.—Not later than 30 days before removing a member from the Board for cause under clause (i), the President shall provide to Congress an advance notification of the determination by the President to remove the member.
(2) VACANCIES.—
(A) IN GENERAL.—A vacancy on the Board—
(i) shall not affect the powers of the Board; and
(ii) shall be filled in the same manner as the original appointment was made.
(B) SERVICE UNTIL NEW APPOINTMENT.—A member of the Board the term of whom has expired or otherwise been terminated shall continue to serve until the date on which a replacement is appointed

under subparagraph (A)(ii), if the President determines that service to be appropriate.

(c) CHAIRPERSON AND VICE-CHAIRPERSON.—Of members of the Board, the President shall appoint—
(1) 1 member to serve as Chairperson of the Board for a term of 4 years; and
(2) 1 member to serve as Vice-Chairperson of the Board for a term of 4 years.

(d) MEETINGS.—
(1) INITIAL MEETING.—The Board shall hold the initial meeting of the Board as soon as practicable after the date on which all members have been appointed to the Board under paragraph (1) of 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.
(3) QUORUM.—Four members of the Board shall constitute a quorum for a meeting of the Board.
(4) OPEN MEETINGS.—The Board shall be subject to section 552b of title 5, United States Code (commonly known as the "Government in the Sunshine Act").

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

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

Section 433 Duties

The Board shall—

(a) 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—
(1) allowance allocation and availability;
(2) the price of allowances;
(3) macro- and micro-economic effects of unexpected significant increases and decreases in allowance prices, or shifts in the allowance market, should those increases, decreases, or shifts occur; and
(4) the success of the market in promoting achievement of the purposes of this Act;
(5) economic effect thresholds that could warrant implementation of cost relief measures described in section 531;
(6) in the event any cost relief measures described in section 531 are taken, the effects of those measures on the market; and
(7) the minimum levels of cost relief measures that are necessary to achieve avoidance of economic harm and preserve achievement of the purposes of this Act.

(b) Employ cost relief measures in accordance with section 531.

(c) submit to the President and Congress, and publish on the Internet, quarterly reports—
(A) describing—
(i) the status of the allowance market established under this Act;

(ii) regional, industrial, and consumer responses to the market and the economic costs and benefits of the market;
(iii) where practicable, investment responses to the market;
(iv) any corrective measures that Congress should take to relieve excessive net costs of the market; and
(v) plans to compensate for any such measures, to ensure that the long-term emissions-reduction goals of this Act are achieved;
(B) that are timely and succinct, to ensure regular monitoring of market trends; and
(C) that are prepared independently by the Board.

Subtitle D Climate Change Technology Board

Section 441 Establishment

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

Section 442 Purpose

The purpose of the board established by section 441 is to advance the purposes of this Act by using the funds made available to the board under Titles VIII through XI to accelerate the commercialization and diffusion of low- and zero-carbon technologies and practices.

Section 443 Independence

The board established by section 441 shall have the authority to distribute funds made available to the board under this Act.

Section 444 Advance Notification of Distributions of Funds

Not less than 60 days before distributing any funds made available to it under this Act, the board established by section 441 shall—
(a) publish detailed notification of that distribution in the Federal Register; and
(b) provide detailed notification of that distribution to—
(1) the President;
(2) the Committees on Appropriations; Banking, Housing, and Urban Affairs; Budget; Commerce, Science, and Transportation; Energy and Natural Resources; Environment and Public Works, Finance; and Homeland Security and Governmental Affairs; and Small Business and Entrepreneurship in the Senate;
(3) the Committees on Appropriations; Budget; Energy and Commerce; Natural Resources; Oversight and Government Reform; Science and Technology; Small Business; Transportation and Infrastructure; Ways and Means; and the Select Committee on Energy Independence and Global Warming in the House; and
(4) the Joint Economic Committee and Joint Committee on Taxation in Congress.

Section 445 Congressional Oversight of Board Expenditures

(a) DISAPPROVAL.—An obligation of funds for which a notification us submitted pursuant to section 444 shall not occur if Congress enacts legislation disapproving the obligation of funds not later than 30 days after the notification.

(b) REPORTS.—Not later than 90 days after the end of each calendar year from 2012 through 2050, the board shall submit to each committee of Congress identified in section 444 a report describing, with respect to that year—
(1) the actual amounts obligated in that year;
(2) the purposes for which the amounts were obligated; and
(3) the balance, if any, of the amounts that were obligated in that year but that remain unexpended as of the date of submission of the report.

Section 446 Requirements

(a) APPLICABILITY.—The provisions set forth in this section shall apply to the board established by section 441.

(b) IN GENERAL.—The board shall be composed of 5 directors who are citizens of the United States, of whom 1 shall be elected annually by the board to serve as Chairperson.

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

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

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

(f) PROHIBITIONS.—
(1) CONFLICTS OF INTEREST.—No individual employed by, or holding any official relationship with (including as a shareholder), any entity engaged in the sector in which businesses receive distributions of funds by the board, and no individual who has a pecuniary interest in the implementation of this Act, shall be appointed director.
(2) NO OTHER EMPLOYMENT.—A director shall not hold any other employment during the term of service of the director.

(g) VACANCIES.—
(1) IN GENERAL.—A vacancy on the board—
(A) shall not affect the powers of the board, provided that the board has enough directors to establish a quorum; and
(B) shall be filled in the same manner as the original appointment was made.
(2) SERVICE UNTIL NEW APPOINTMENT.—A director whose term has expired or been removed from the board shall continue to serve until the date on which a replacement is appointed, if the President determines that service to be appropriate.

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

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

Section 447 Reviews and Audits by Comptroller General

The Comptroller General of the United States shall conduct periodic reviews and audits of the efficacy of the distributions of funds made by the board established by section 441.

Subtitle E Auction on Consignment

Section 451 Rulemaking

Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules whereby the Administrator shall, at the request of a recipient of a distribution of emission allowances allocated under this Act, include those emission allowances among the quantity that the Administrator sells at Regular Auctions under this Act and transfer the proceeds of the sale of those allowances to the recipient.

Title V Federal Program to Prevent Economic Hardship

Subtitle A Banking

Section 511 Indication of Calendar Year

An allowance submitted for compliance under section 202 for a calendar year need not have been established for that calendar year.

Section 512 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

Section 521 Regulations

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules under which, subject to subsection (b), the owner or operator of a covered entity may—
(1) borrow emission allowances from the Administrator; and
(2) for a calendar year, submit borrowed emission allowances to the Administrator in satisfaction of up to 15 percent of the compliance obligation under section 202.

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

Section 522 Term

The owner or operator of a covered entity shall not submit, and the Administrator shall not accept, a borrowed emission allowance in partial satisfaction of the compliance obligation under section 202 for any calendar year that is more than 5 years earlier than the calendar year included in the identification number of the borrowed emission allowance.

Section 523 Repayment with Interest

For each borrowed emission allowance submitted in partial satisfaction of the compliance obligation under section 202 for a particular calendar year (referred to in this section as the "use year"), the quantity of emission allowances that the owner or operator is required to submit under section 202 for the year from which the borrowed emission allowance was taken (referred to in this section as the "source year") shall be equal to 1.1 raised by an exponent equal to the difference between the source year and the use year expressed as a positive whole number.

Subtitle C Emergency Off-Ramps

Section 531 Emergency Off Ramps Triggered by the Carbon Market Efficiency Board

(a) POWERS OF THE BOARD.— the Board established in section 431 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 facilities may borrow from the prescribed allocations of the covered facilities for future years.
(2) Expand the period during which a covered facility may repay the Administrator for an emission allowance as described in subparagraph (A).
(3) Increase the quantity of emission allowances obtained on a foreign greenhouse gas emissions trading market that the owner or operator of any covered facility may use to satisfy the allowance submission requirement of the covered facility under section 202, on the condition that the Administrator has certified the market in accordance with the regulations promulgated pursuant to section 322.
(4) Increase the quantity of offset allowances generated in accordance with section 313 that the owner or operator of any covered facility may use to satisfy the total allowance submission requirement of the covered facility under section 202.

(b) SUBSEQUENT ACTIONS.—On determination by the Board to carry out a cost relief measure pursuant to subsection (a), the Board shall—
(1) allow the cost relief measure to be used only during the applicable allocation year;
(2) exercise the cost relief measure incrementally, and only as needed to avoid significant economic harm during the applicable allocation year;
(3) specify the terms of the relief to be achieved using the cost relief measure, including requirements for entity-level or national market-level compensation to be achieved by a specific date or within a specific time period;
(4) in accordance with section 433, submit to the President and Congress a report describing the actions carried out by the Board and recommendations for the terms under which the cost relief measure

should be authorized by Congress and carried out by Federal entities; and
(5) evaluate, at the end of the applicable allocation year, actions that need to be carried out during subsequent years to compensate for any cost relief measure carried out during the applicable allocation year.

(c) LIMITATIONS.—Nothing in this section gives the Board the authority—
(1) to consider or prescribe entity-level petitions for relief from the costs of an emission allowance allocation or trading program established under Federal law;
(2) to carry out any investigative or punitive process under the jurisdiction of any Federal or State court;
(3) to interfere with, modify, or adjust any emission allowance allocation scheme established under Federal law; or
(4) to modify the total quantity of emission allowances issued under this Act for the period of calendar years 2012 through 2050.

Section 532 Cost-Containment Auctions and Regular Auctions

(a) COST-CONTAINMENT AUCTIONS.—In December of each calendar year from 2012 through 2027, the Administrator shall auction off emission allowances at an auction that shall be called a "Cost-Containment Auction."

(B) REGULAR AUCTIONS.—Each auction of emission allowances conducted by the Administrator pursuant to this Act, where the auction is not a Cost-Containment Auction, shall be called a "Regular Auction."

Section 533 Cost-Containment Auction Price

(a) GENERALLY.—At each Cost-Containment Auction, the Administrator shall offer emission allowances for sale beginning at a minimum price, which shall be called the "Cost-Containment Auction Price."

(b) COST-CONTAINMENT AUCTION PRICE IN 2012.—At the Cost-Containment Auction that takes place in December 2012, the Cost-Containment Auction Price shall be the price established pursuant to subsection (c).

(b) COST-CONTAINMENT AUCTION PRICE IN SUBSEQUENT YEARS.—At the Cost-Containment Auction in each of calendar years 2013 through 2027, the Cost-Containment Auction Price shall be—
(1) the Cost-Containment Auction Price that applied to the Cost-Containment Auction that took place in the preceding calendar year; multiplied by—
(2) the sum of—
(A) the annual rate of inflation; and
(B) 1.05.

(c) INITIAL COST-CONTAINMENT AUCTION PRICE.—
(1) RANGE.—At the Cost-Containment Auction that takes place in December 2012, the Cost-Containment Auction Price shall be no lower than $22 and no higher than $30.
(2) SELECTION.—Not later than 2 years after the date of enactment of this Act, the President shall select the Cost-Containment Auction Price for calendar year 2012 from within the range established by paragraph (1).

(3) ECONOMIC MODELING.—The President shall make the selection required by paragraph (2) based upon economic computer modeling of the provisions of this Act conducted by the Administrator and the Administrator of the United States Energy Information Administration.
(4) PUBLIC INPUT.—The Administrator and the Administrator of the United States Energy Information Administration shall provide public notice of, and an opportunity to comment on, the computer models, assumptions, and protocols that they plan to use in modeling the provisions of this Act pursuant to paragraph (3).

Section 534 Regular Auction Reserve Price

(a) GENERALLY.—At any Regular Auction, there shall be a price, which shall be called the "Regular Auction Reserve Price," below which the Administrator shall not sell any emission allowance.

(b) REGULAR AUCTION RESERVE PRICE IN 2012.—At any Regular Auction that takes place in calendar year 2012, the Regular Auction Reserve Price shall be $10.

(b) REGULAR AUCTION RESERVE PRICE IN SUBSEQUENT YEARS.—In each of calendar years 2013 through 2027, the Regular Auction Reserve Price at any Regular Auction that takes place in that year shall be—
(1) the Regular Auction Reserve Price that applied to each Regular Auction that took place in the preceding calendar year; multiplied by—
(2) the sum of—
(A) the annual rate of inflation; and
(B) 1.05.

Section 535 Pool of Emission Allowances for the Cost-Containment Auctions

(a) GENERALLY.—Not later than 2 years after the date of enactment of this Act, the Administrator shall establish a pool , which shall be called the "Cost-Containment Auction Pool," to contain the emission allowances that shall be offered for sale at the annual Cost-Containment Auctions.

(b) FILLING THE COST-CONTAINMENT AUCTION POOL.—
(1) GENERALLY.—Notwithstanding subsection (a) of section 201, the Administrator shall, not later than 2 years after the date of enactment of this Act, take a total of 6,000,000,000 of the emission allowances established for calendar years 2030 through 2050 pursuant to that subsection and move them into the Cost-Containment Auction Pool.
(2) GRADUATED REMOVAL.— In each of calendar years 2031 through 2050, the quantity of emission allowances taken pursuant to paragraph (1) from the quantity established for that year pursuant to subsection (a) of section 201 shall be greater, by an amount that remains constant from calendar year to calendar year, than the quantity taken from the preceding year.

(c) SUPPLEMENTING THE COST-CONTAINMENT AUCTION POOL.—The Administrator shall place into the Cost-Containment Auction Pool each emission allowance that was not sold at a Regular Auction due to the operation of the Regular Auction Reserve Price.

Section 536 Limit on the Quantity of Emission Allowances Sold at Any Cost-Containment Auction

(a) GENERALLY.—At each Cost-Containment Auction, there shall be a limit, which shall be called the "Cost-Containment Auction Limit," to the quantity of emission allowances that the Administrator may sell at that auction.

(b) COST-CONTAINMENT AUCTION LIMIT IN 2012.— At the Cost-Containment Auction that takes place in December 2012, the Cost-Containment Auction Limit shall be 450,000,000 emission allowances.

(c) COST-CONTAINMENT AUCTION LIMIT IN SUBSEQUENT YEARS.— At the Cost-Containment Auction in each of calendar years 2013 through 2027, the Cost-Containment Auction Limit shall be—
(1) the Cost-Containment Auction Limit that applied to the Cost-Containment Auction that took place in the preceding calendar year; multiplied by—
(2) 0.99.

Section 537 Using the Proceeds of the Annual Cost-Containment Auctions

(a) ACHIEVING ADDITIONAL EMISSIONS REDUCTIONS FROM UN-CAPPED SOURCES.—
(1) GENERALLY.—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 set forth in 202 of this Act.
(2) RULEMAKING.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules to implement this subsection.

(b) PROVIDING ADDITIONAL RELIEF TO CONSUMERS.—The Administrator shall deposit 30 percent of the proceeds from each Cost-Containment Auction into the Climate Change Consumer Assistance Fund established by section 591.

Section 538 Returning Emission Allowances Not Sold at the Annual Cost-Containment Auctions

(a) ORDER OF SALE OF EMISSION ALLOWANCES IN THE COST-CONTAINMENT AUCTION POOL.—The Administrator shall never sell at a Cost-Containment Auction an emission allowances taken pursuant to subsection (b) of section 535 from the quantity of emission allowances established for a certain calendar year until the Administrator already has sold all emission allowances taken from earlier calendar years.

(b) RETURN OF UNSOLD EMISSION ALLOWANCES IN THE COST-CONTAINMENT AUCTION POOL.—
Immediately prior to the Cost-Containment Auction in each calendar year from 2022 through 2027, the Administrator shall remove from the Cost-Containment Auction Pool, and make subject again to allocation or sale at Regular Auction in the normal course provided for under this Act, each emission allowance that—
(1) has, by that point, remained in the Cost-Containment Auction Pool for more than 9 years; and
(2) was established pursuant to subsection (a) of section 201 for a calendar year that is fewer than 10 years subsequent to the calendar year in which the impending Cost-Containment Auction will occur.

Section 539 Discontinuing the Annual Cost-Containment Auctions

(a) GENERALLY.—Notwithstanding subsection (a) of section 531, if ever the Cost-Containment Auction Pool is exhausted at a Cost-Containment Auction, the Administrator shall conduct no more 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 the final Cost-Containment Auction, the Administrator shall retire any emission allowances not sold at that Regular Auction due to the operation of the Regular Auction Reserve Price.

Subtitle D Transition Assistance for Workers

Section 541 Establishment

There is established in the Treasury a Fund to be known as the "Climate Change Worker Training and Assistance Fund."

Section 542 Auctions

(a) AUCTIONING.— Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2012 through 2050, the Administrator shall, for the purpose of raising cash to deposit into the Climate Change Worker Training and Assistance Fund, auction a quantity of the emission allowances established for that year pursuant to subsection (a) of section 201.

(b) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—The quantities of emission allowances auctioned pursuant to subsection (a) shall be the quantities represented by the following percentages:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Auction in Order to Raise Cash for the Climate Change Worker Training and Assistance Fund
2012	1
2013	1
2014	1
2015	1
2016	1
2017	1
2018	2
2019	2
2020	2
2021	2
2022	2
2023	2
2024	2
2025	2
2026	2
2027	2
2028	3
2029	3
2030	3

2031	4
2032	4
2033	4
2034	4
2035	4
2036	4
2037	4
2038	4
2039	3
2040	3
2041	3
2042	3
2043	3
2044	3
2045	3
2046	3
2047	3
2048	3
2049	3
2050	3

Section 543 Deposits

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 542, immediately upon receipt of those proceeds, into the Climate Change Worker Training and Assistance Fund.

Section 544 Use of Funds

(a) EFFICIENCY AND RENEWABLE ENERGY WORKER TRAINING PROGRAM.—In each calendar year from 2012 through 2050, 30 percent of the funds deposited into the Climate Change Worker Training and Assistance Fund in the preceding year pursuant to section 543 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 the Green Jobs Act of 2007 (28 U.S.C. 2801).

(b) CLIMATE CHANGE WORKER ADJUSTMENT PROGRAM.—In each calendar year from 2012 through 2050, 60 percent of the funds deposited into the Climate Change Worker Training and Assistance Fund in the preceding year pursuant to section 543 shall be made available to the Energy Efficiency and Renewable Energy Worker Training Program pursuant to subsection (a), shall be made available, without further appropriation or fiscal year limitation, to carry out the Climate Change Worker Assistance Program established pursuant to section 545.

(c) WORKFORCE TRAINING AND SAFETY.—In each calendar year from 2012 through 2050, 10 percent of the funds deposited into the Climate Change Worker Training and Assistance Fund in the preceding year pursuant to section 543 shall be made available, without further appropriation or fiscal year limitation, to carry out section 546.

Section 545 Climate Change Worker Assistance Program

(a) PURPOSE.—The purpose of this section is to ensure that, if any individual workers and groups of employees are adversely affected by federal policy and climate change legislation, those individual workers and groups of employees will receive the benefits, skill training, retraining, and job search assistance that will enable them 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 Americans.

(b) ESTABLISHEMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary of Labor (referred to in this subtitle as the "Secretary"), in consultation with the Administrator, the Secretary of Energy, and the Secretary of Commerce, shall promulgate rules to establish a Climate Change Worker Adjustment Assistance Program (hereinafter in this subtitle referred to as the "Program") to achieve the purpose of this section.

(c) MULTI-AGENCY STEERING COMMITTEE.—
(1) IN GENERAL.—The Secretary shall establish a Multi-Agency Steering Committee (referred to in this subtitle as the "MASC").
(2) COMPOSITION.—The MASC shall be composed of representatives of the Secretary, the Secretary of Commerce, and the Secretary of Energy, and shall be chaired the Administrator.
(3) ACTIVITIES.—The members of the MASC shall—
(A) not later than 60 days after the enactment of this Act, negotiate and sign a Memorandum of Understanding (MOU) which affirms the commitment of all federal agencies to work together to carry out the activities of the Program;
(B) not later than 120 days after the enactment of this Act, establish a National Climate Change Advisory Committee (hereinafter referred to as the "Advisory Committee"), which shall be composed of an equal number of representatives of labor organizations, as defined in 29 C.F.R. 401.9, nominated by the Speaker of the House and the Majority Leader in the Senate, and representatives of business organizations, nominated by the Speaker of the House and the Majority Leader of the Senate, to advise the MASC on the strategic plan and the structure and operation of the Program, provide input into the content of the regulations, and advise the MASC regarding industry trends, workforce developments, and other matters pertaining to the impact of Federal climate change legislation;
(C) not later than 120 days after the enactment of this Act, hold planning meetings and, not later than 270 days after the enactment of this Act, formulate a comprehensive strategic plan for addressing impacts of climate change legislation on all segments of the workforce;
(D) report the results of this strategic plan to the Committee on Ways and Means and Committee on Education and Labor of the House of Representatives and the Committee on Finance and committee on Health, Education, Labor and Pensions of the Senate;
(E) prepare an annual report to the President and Congress on the performance, achievements and challenges of the program; and
(F) meet as often as necessary, but not less than one time per quarter in a face-to-face meeting, to monitor the administration of the program and ensure that it is being carried out by the Office established in paragraph (b) in a manner consistent with the purposes.

(d) OFFICE OF CLIMATE CHANGE ADJUSTMENT ASSISTANCE.—
(1) ESTABLISHMENT.—There shall be established in the Department of Labor an office to be known as the Office of Climate Change Adjustment Assistance (hereinafter in this subtitle referred to as the "Office").

(2) HEAD OF OFFICE.—The head of the Office shall be the Deputy Assistant Secretary for Climate Change Adjustment Assistance (hereinafter in this subtitle referred to as the "Deputy Assistant Secretary"), who shall be appointed by the President, by and with the advise and consent of the Senate.
(3) PRINCIPLE FUNCTIONS.—The principle functions of the Deputy Assistant Secretary shall be—
(A) to oversee and implement the administration of the Program created under this subtitle; and
(B) to carry out functions delegated to the Secretary under this subtitle.

(e) PROGRAM ADMINISTRATION.—
(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall issue regulations for administration of the program.
(2) COORDINATION.—The Secretary shall develop such regulations in consultation with the MASC, the advisory committee, the Committee on Ways and Means and Committee on Education and Labor of the House of Representatives and the Committee on Finance and committee on Health, Education, Labor and Pensions of the Senate.
(3) INCLUSIONS.—The regulations shall include definitions of and procedures for:
(A) providing full information to workers about the benefit allowances, training, and other employment services available under this section and application procedures, and the appropriate filing dates, for such allowances, training and services;
(B) the filing of petitions for certification of eligibility for workers to apply for climate change adjustment assistance, including mechanisms to ensure rapid response to filed petitions;
(C) the eligibility requirements for eligible climate change training and assistance benefits and the terms of the disbursal of any assistance benefits;
(D) requests for a hearing by the petitioner, or any other person or organization with a substantial interest in the proceedings;
(E) providing for an appeals process;
(F) termination of any certification eligibility;
(G) certification of eligibility requirements for a group of workers, adversely affected secondary workers, and industry-wide certification, including a mechanism by which the Secretary will notify each Governor of a State in which workers are located of the certification; and
(H) ensuring publication of any determinations in the Federal Register and on the website of the Department of Labor.

(f) DEFINITIONS.—In this subtitle—
(1) BASE REPLACEMENT WAGE AMOUNT.—The term "base replacement wage amount" or "BRWA", as determined by an applicant's case manager, means the total weekly wages or salary of applicants at the last job working for the firm or public agency prior to the partial or total separation upon which eligibility for CCRA was determined.
(2) CLIMATE CHANGE READJUSTMENT ALLOWANCE.—The term "climate change readjustment allowance" or "CCRA" means, with respect to an individual who has been determined eligible for climate change readjustment assistance, a regular payment such that, in combination with Unemployment Insurance payments, the individual applicant receives payments equal to the Base Replacement Wage Amount.
(3) HEALTH CARE REPLACEMENT AMOUNT.—The term "health care replacement amount" or "HCRA", as determined by an applicant's case manager, means a regular payment made to a health-care provider that enables the CCRA-eligible individual to maintain health-care benefits for themselves and their families with no loss of services, during the period in which the individual remains eligible for CCRA.

(g) PROGRAM BENEFITS.—

(A) CLIMATE CHANGE ADJUSTMENT ASSISTANCE.—The Secretary shall determine, in consultation with MASC and the Advisory Committee what climate change training and assistance benefits should be provided under this program.
(B) TYPES OF ELIGIBLE ASSISTANCE. – Benefits eligible to be disbursed under the program include:
(1) payment of a climate change readjustment allowance; and

(2) Health Care Benefit Replacement Amount;
(C) LIMITATIONS ON CLIMATE CHANGE READJUSTMENT ALLOWANCES.— Eligible workers may receive the Climate Change Readjustment Allowance and the Health Care Replacement Amount for a total of 36 months.
(D) PAYMENTS AS A BRIDGE TO RETIREMENT.—A climate change assistance eligible worker 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.
(E) EMPLOYMENT AND CASE MANAGEMENT SERVICES.— The Secretary shall provide, through agreements with SES agencies, to adversely affected workers covered by a certification for eligibility for climate change readjustment assistance, the following employment and case management services:
(i) comprehensive and specialized assessment of skill levels and service needs, including through—
(I) diagnostic testing and use of other assessment tools; and
(II) in-depth interviewing and evaluation to identify employment barriers and appropriate employment goals;
(ii) development of an individual employment plan to identify employment goals and objective, and appropriate training to achieve those goals and objectives;
(iii) Information on training available in local and regional areas, information on individual counseling to determine which training is suitable training, and information to apply for such training;
(iv) Information on how to apply for financial aid, including referring workers to educational opportunity centers under section 402F of the Higher Education Act of 1965, where applicable, and notifying workers that the workers may ask financial aid administrators at institutions of higher education to allow use of their current year income in the financial aid process;
(v) Short-term provisional services, including development of learning skills, communications skills, interviewing skills, punctuality, personal maintenance skills, and professional conduct to prepare individuals for employment or training;
(vi) Individual career counseling, including job search and placement counseling, during the period in which the individual is receiving climate change readjustment allowances under this section, and for the purposes of job placement after receiving such training;
(vii) provision of employment statistics information, including the provision of accurate information relating to local, regional, and national labor market areas, including—
(I) job vacancy listings in such labor market areas;
(II) information on job skills necessary to obtain jobs identified in job vacancy listings described in subparagraph (I);
(III) information relating to local occupations that are in demand and earnings potential of such occupations; and
(IV) skill requirements for local occupations described in subparagraph (III); and
(viii) supportive services, including services relating to child care, transportation, dependent care, housing assistance, and need-related payments that are necessary to enable an individual to participate in training.
(F) STATE ADMINISTRATION OF WORKER ASSISTANCE.—The State Employment Security Agencies, through agreements with the Secretary, shall provide for such methods of administration (including utilizing State agency personnel employed in accordance with the current standards for a merit system

of personnel administration) as are necessary for the proper and efficient operation of the program, including the determination of eligibility for and payment of CCRA and HCRA benefits, recommendations on payments as a bridge to retirement, pursuant to the provisions of this subtitle, and the provision of employment and case-management services to eligible workers

(h) TRAINING.—
(1) IN GENERAL.—Not later than 120 days after the enactment of this Act, the Administrator shall establish procedures for the allocation among States in each fiscal year of funds available to pay the costs of training for climate change adjustment assistance eligible persons under this section. These procedures shall be described in the strategic plan, as formulated in subsection (c)(3)(C).
(2) DISTRIBUTION.—In establishing and implementing the procedures under paragraph (1), the Secretary shall provide for at least 3 distributions of funds available for training in the fiscal year, and, in the first such distribution, disburse not more than 50 percent of the total amount of funds available to a State for training in that fiscal year.
(3) APPROVAL OF TRAINING.—If the Secretary determines that—
(A) the worker would benefit from appropriate training,
(B) there is reasonable expectation of employment following completion of such training,
(C) training approved by the Secretary is reasonably available to the worker from either government agencies or private source,
(D) the worker is qualified to undertake and complete such training, and
(E) such training is suitable for the worker and available at a reasonable cost,
the Secretary shall approve such training for the worker. Upon such approval, the worker shall be entitled to have payment of the costs of such training (subject to the limitations of this section) paid on behalf of the Secretary directly or through a voucher system.
(4) TRAINING PROGRAMS.—The training programs that may be approved under paragraph (3) include, but are not limited to—
(A) employer-based training, including on-the-job training, customized training, and skill upgrading for incumbent workers,
(B) any training program provided by a State pursuant to Title I of the Workforce Investment Act of 1998,
(C) any training program provided by a Workforce Investment Board established under section 111 of such Act,
(D) any program of remedial education,
(E) skill development and training for jobs related to renewable energy, low- or zero-carbon technologies, energy efficiency, and the remediation and cleanup of environmentally distressed areas; and
(F) any other training program approved by the Secretary.
(5) RULEMAKING.—The Secretary shall promulgate rules setting forth the criteria to carry out this subsection.
(6) SUPPLEMENTAL ASSISTANCE.—The Secretary may, where appropriate, authorize supplemental assistance necessary to defray reasonable transportation and subsistence expenses for separate maintenance when training is provided in facilities which are not within commuting distance of a worker's regular place of residence.
(7) ADDITIONAL ON-THE-JOB TRAINING.—Under the program, job search allowances and relocation allowances also qualify for funds.

(i) CONSULTATION WITH LABOR ORGANIZATIONS- If a labor organization represents a substantial number of workers who are engaged in similar work or training in an area that is the same as the area

that is proposed to be funded under this Act, the labor organization shall be provided an opportunity to be consulted and to submit comments in regard to such a proposal.

Section 546 Workforce Training and Safety

(a) UNIVERSITY PROGRAMS.—In order to enhance the educational opportunities and safety of a future generation of scientists, engineers, heath physicists, and energy workforce employees, funds pursuant to section 544(b) shall be used for programs to help United States university and colleges stay at the forefront of science education and research and assist universities in the operation of advanced energy research facilities and in the performance of other educational activities.

(b) WORKFORCE TRAINING.—
(1) IN GENERAL.—The Secretary of Labor shall promulgate regulations –
(A) to implement a program to provide workforce training to meet the high demand for workers skilled in zero- and low-emitting carbon energy technologies and provide for related safety issues;
(B) to implement a fully validated electrical craft certification program, career and technology awareness at the primary and secondary education level, pre-apprenticeship career technical education for all zero- and low-emitting carbon energy technologies related industrial skilled crafts, community college and skill center training for zero- and low-emitting carbon energy technology technicians, development of construction management personnel for zero- and low-carbon emitting carbon energy technology construction projects and regional grants for integrated zero- and low-emitting carbon energy technology workforce development programs; and
(C) to ensure the safety of workers in such careers.
(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, concerning skills and such safety measures that are needed in those industries.

(c) QUANTIFICATION.—For purposes of dispersing funds under this section, qualifying zero- and low-emitting carbon energy means any technology that has a rated capacity of at least 750 megawatts of power.

Subtitle E Transition Assistance for Carbon-Intensive Manufacturers

Section 551 Allocation

(a) IN GENERAL.—Not later than 330 days before the beginning of each calendar year from 2012 through 2030, the Administrator shall allocate a percentage of the quantity of emission allowances established pursuant to subsection (a) of section 201 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 following percentages:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Allocate for Distribution Among Owners and Operators of Carbon-Intensive Manufacturing Facilities in the

	United States
2012	11
2013	11
2014	11
2015	11
2016	11
2017	11
2018	11
2019	11
2020	11
2021	11
2022	10
2023	9
2024	7
2025	6
2026	5
2027	4
2028	3
2029	2
2030	1

Section 552 Distribution

(a) RULEMAKING.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules establishing a system for distributing, for each year from 2012 through 2030, among owners and operators of individual carbon–intensive manufacturing facilities in the United States, the emission allowances allocated for that year by section 551.

(a) DEFINITIONS.—In this section:
(1) CURRENTLY OPERATING FACILITY.—The term "currently operating facility" means an eligible manufacturing facility that had significant operations during the calendar year preceding the calendar year for which emission allowances are distributed under this section.
(2) ELIGIBLE MANUFACTURING FACILITY.—
(A) IN GENERAL.—The term "eligible manufacturing facility" means a manufacturing facility located in the United States that principally manufacturers iron, steel, pulp, paper, cement, rubber, chemicals, glass, ceramics, sulfur hexafluoride, or aluminum and other non-ferrous metals.
(B) EXCLUSION.—The term "eligible manufacturing facility" does not include a facility eligible to receive emission allowances under subtitle F or H of this Title.
(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) TOTAL ALLOCATION FOR CURRENTLY OPERATING FACILITIES.—As part of the system established under subsection (a), the Administrator shall, for each calendar year, distribute 96 percent of the total quantity of emission allowances available for allocation to owners and operators of carbon-intensive manufacturing facilities under section 551 to owners and operators of currently operating such facilities.

(c) TOTAL ALLOCATION FOR CURRENTLY OPERATING FACILITIES IN EACH CATEGORY OF MANUFACTURING.— The rules promulgated under subsection (a) shall provide that the quantity of emission allowances distributed by the Administrator for a calendar year to facilities in each category of currently operating facilities shall be equal to the product obtained by multiplying—
(1) the total quantity of emission allowances available for allocation under section 551; and
(2) the ratio that (during the calendar year preceding the calendar year for which emission allowances are being distributed under this section)—
(A) the sum of the average annual direct and indirect carbon dioxide equivalent emissions over the 3 calendar years immediately preceding the year of distribution under this section by currently operating facilities in the category; bears to
(B) the sum of the average annual direct and indirect carbon dioxide emissions over the 3 calendar years immediately preceding the year of distribution under this section by all currently operating facilities.

(d) INDIVIDUAL ALLOCATIONS TO CURRENTLY OPERATING FACILITIES.— The rules promulgated under subsection (a) shall provide that the quantity of emission allowances distributed by the Administrator for a calendar year to the owner or operator of a currently operating facility shall be a quantity equal to the product obtained by multiplying—
(1) the total quantity of emission allowances available for allocation to owners and operators of currently-operating facilities in the appropriate category, as determined under subsection (c); and
(A) the ratio that, for the 3 years immediately preceding the calendar year for which emission allowances are being distributed under this section, of the facility's total electricity usage; bears to
(B) the average, for the 3 years immediately preceding the calendar year for which emission allowances are being distributed under this section, of the total electricity usage by all the currently operating facilities in the appropriate category.

(e) ENERGY INTENSITY BASED ALLOCATION.—Not later than 1 year after the date of enactment of this Act, the Administrator shall submit to Congress a report that analyzes the feasibility of distributing some or all of the emission allowances under this section to individual facilities on an energy-intensity basis. If the report concludes that an energy-intensity program would encourage efficiency and not cause undue economic harm, then the Administrator, not later than 18 months after the date of submitting the report to Congress, promulgate rules establishing a program under this section that supplements or replaces the allowance allocations required under subsection (d) for industry categories or subcategories that the Administrator determines may be appropriately benchmarked.

(f) INDIVIDUAL ALLOCATION TO NEW-ENTRANT MANUFACTURING FACILITIES.—
(1) IN GENERAL.—As part of the system established under subsection (a), the Administrator shall, for each calendar year, distribute 4 percent of the total quantity of emission allowances available for allocation to owners and operators of carbon-intensive manufacturing under section 551 to new-entrant such manufacturing facilities.
(2) INDIVIDUAL ALLOCATION.—The quantity of emission allowances distributed by the Administrator for a calendar year to the owner or operator of a new-entrant manufacturing facility shall equal the product of—
(A) the total quantity of emission allowances available for allocation under paragraph (1); and

(B)the ratio of;
(i) the estimated direct and indirect carbon dioxide equivalent emissions of the individual new entrant during the prior calendar year; to
(ii) the sum of the estimated direct and indirect carbon dioxide equivalent emissions of all new entrants during the prior calendar year, but in no event may the amount allocated to an individual new entrant exceed the amount that would have been allocated to the facility if it would have been a currently operating facility in the prior year.

(g) FACILITIES THAT SHUT DOWN.—
(1) IN GENERAL.—The system established pursuant to subsection (a) shall ensure, notwithstanding any other provision of this subtitle, that—
(A) emission allowances are not distributed to an owner or operator for any facility that has been permanently shut down at the time of the distribution;
(B) the owner or operator of any facility that permanently shuts down in a calendar year shall promptly return to the Administrator any emission allowances that the Administrator has distributed for that facility for any subsequent calendar years; and
(C) that, if a facility receives a distribution of emission allowances under this subtitle for a calendar year and subsequently permanently shuts down during that calendar year, the owner or operator of the facility shall promptly return to the Administrator a number of emission allowances equal to the number that the Administrator determines is the portion that the owner or operator will no longer need to submit for that facility under section 202.
(2) EXEMPTION.—Subparagraphs (B) and (C) of paragraph (1) shall not apply if the owner or operator demonstrates to the Administrator that, within two years of the shutdown, it will open a comparable new facility or increase the capacity of an existing facility by a comparable capacity within the United States.

(h) PETROLEUM REFINERS.—The Administrator may include, in the system promulgated pursuant to subsection (a), provisions for distributing no more than 10 percent of the emission allowances allocated pursuant to section 551 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

Section 561 Allocation

(a) IN GENERAL.—Not later than 330 days before the beginning of each calendar year from 2012 through 2030, the Administrator shall allocate a percentage of the quantity of emission allowances established pursuant to subsection (a) of section 201 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 following percentages:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Allocate for Distribution Among Owners and Operators of

	Fossil Fuel-Fired Electricity Generators in the United States
2012	18
2013	18
2014	18
2015	18
2016	17.75
2017	17.5
2018	17.25
2019	16.25
2020	15
2021	13.5
2022	11.25
2023	10.25
2024	9
2025	8.75
2026	5.75
2027	4.5
2028	4.25
2029	3
2030	2.75

Section 562 Distribution

(a) RULEMAKING.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules establishing a system for distributing, for each year from 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 pursuant to section 561.

(b) CALCULATION.—The rules promulgated pursuant to subsection (a) shall provide that the quantity of emission allowances distributed to the owner or operator of an individual fossil fuel-fired electricity generator for a calendar year shall be equal to the product obtained by multiplying—
(A) the quantity of emission allowances allocated pursuant to section 561; and
(B) the quotient obtained by dividing—
(i) the average annual quantity of carbon dioxide equivalents emitted by the fossil fuel-fired electricity generator over the 3 calendar years preceding the date of enactment of this Act; by
(ii) the average annual quantity of carbon dioxide equivalents emitted by all fossil fuel-fired electricity generators over those 3 calendar years.

(c) RURAL ELECTRIC COOPERATIVES.—
(1) IN GENERAL.—The Administrator shall include, in the system promulgated pursuant to subsection (a), provisions for distributing solely among rural electric cooperatives no more than 5 percent of the emission allowances allocated pursuant to section 561 each calendar year.
(2) PILOT PROGRAM.—
(A) IN GENERAL.—In the provisions described in paragraph (1), the Administrator shall establish a pilot program for distributing to rural electric cooperatives in the States described in subparagraph (B), for each of calendar years 2012 through 2029, 15 percent of the total number of emission allowances

allocated for the calendar year to rural electric cooperatives under the provisions described in paragraph (1).
(B) DESCRIPTION OF STATES.—The States referred to in subsection (a) are—
(i) 1 State east of the Mississippi River in which 13 rural electric cooperatives sold to consumers in that State electricity in a quantity of 9,000,000 to 10,000,000 MWh, according to Energy Information Administration data for calendar year 2005; and
(ii) 1 State west of the Mississippi River in which 30 rural electric cooperatives sold to consumers in that State electricity in a quantity of 3,000,000 to 4,000,000 MWh, according to Energy Information Administration data for calendar year 2005.
(C) LIMITATION.—No rural electric cooperative that receives emission allowances under this paragraph shall receive any additional emission allowance under the system established pursuant to subsection (a) or under subtitle A.
(D) REPORT.—Not later than January 1, 2015, and every 3 years thereafter, the Administrator shall submit to Congress a report describing the success of the pilot program established under this paragraph, including a description of—
(i) the benefits realized by ratepayers of the rural electric cooperatives that receive allowances under the pilot program; and
(ii) the use by those rural electric cooperatives of advanced, low greenhouse gas-emitting electric generation technologies, if any.

Subtitle G Transition Assistance for Refiners of Petroleum-Based Fuel

Section 571 Allocation

(a) FIRST PERIOD.—Not later than 330 days before the beginning of each calendar year from 2012 through 2017, the Administrator shall allocate 2 percent of the quantity of emission allowances established pursuant to subsection (a) of section 201 for that calendar year for distribution among owners and operators of entities that manufacture in the United States petroleum-based liquid or gaseous fuel.

(b) SECOND PERIOD.—Not later than 330 days before the beginning of each calendar year from 2018 through 2030, the Administrator shall allocate 1 percent of the emission allowances established pursuant to subsection (a) of section 201 for that calendar year for distribution among owners and operators of entities described in subsection (a).

Section 572 Distribution

(a) RULEMAKING.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules establishing a system for distributing, among owners and operators of individual entities described in section 571, for each calendar year identified in that section, the emission allowances allocated for that year by that section.

(b) REQUIREMENTS.—The rules promulgated pursuant to subsection (a) shall—
(1) provide that the quantity of emission allowances distributed to the owner or operator of an entity described in section 571 for a calendar year identified in that section shall be the product obtained by multiplying—
(A) the quantity of emission allowances allocated for that year by section 571; by

(B) the quotient obtained by dividing—
(i) the annual average quantity of units of petroleum-based liquid or gaseous fuel that the entity manufactured in the United States or held title to at the time it was imported into the United States over the 3 calendar years preceding the distribution of emission allowances; by
(ii) the annual average quantity of petroleum-based liquid or gaseous fuel that the entities described in section 571 manufactured in the United States or held title to at the time it was imported into the United States over the 3 calendar years preceding the distribution of emission allowances; and
(2) notwithstanding paragraph (1), provide for appropriate adjustments to reflect the impact of paragraph (2) of subsection (b) of section 201 and subsections (c) and (h) of section 202.

Subtitle H Transition Assistance for Natural-Gas Processors

Section 581 Allocation

Not later than 330 days before the beginning of each calendar year from 2012 through 2030, the Administrator shall allocate 0.75 percent of the quantity of emission allowances established pursuant to subsection (a) of section 201 for that calendar year for distribution among owners and operators of—
(1) natural gas processing plants in the United States but not in the State of Alaska;
(2) entities that produce natural gas in the State of Alaska or the Federal waters of the Alaska Outer Continental Shelf; and
(3) entities that hold title to natural gas, including liquefied natural gas, or natural-gas liquid at the time it is imported into the United States.

Section 582 Distribution

(a) RULEMAKING.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules establishing a system for distributing, among owners and operators of individual entities described in section 581, for each calendar year identified in that section, the emission allowances allocated for that year by that section.

(b) REQUIREMENTS.—The rules promulgated pursuant to subsection (a) shall—
(1) provide that the quantity of emission allowances distributed to the owner or operator of an entity described in section 581 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 581; by
(B) the quotient obtained by dividing—
(i) the annual average quantity, over the 3 calendar years preceding the distribution of emission allowances, of units of—
(I) natural gas processed in the United States by the entity but not in the State of Alaska;
(II) natural gas produced in the State of Alaska or the Federal waters of the Alaska Outer Continental Shelf by the entity and not re-injected into the field; and
(III) natural gas, including liquefied natural gas, and natural-gas liquids to which the entity held title at the time it was imported into the United States; by
(ii) the annual average quantity, over the 3 calendar years preceding the distribution of emission allowances, of units of—
(I) natural gas processed in the United States by the entities described in section 581 but not in the State of Alaska;

(II) natural gas produced in the State of Alaska or the Federal waters of the Alaska Outer Continental Shelf by the entities described in section 581 and not re-injected into the field; and
(III) natural gas, including liquefied natural gas, and natural-gas liquids to which the entities described in section 581 held title at the time it was imported into the United States; and
(2) notwithstanding paragraph (1), provide for appropriate adjustments to reflect the impact of paragraph (2) of subsection (b) of section 202 and subsection (c) of section 202.

Subtitle I Federal Program for Consumers

Section 591 Establishment

There is established in the Treasury a Fund to be known as the "Climate Change Consumer Assistance Fund."

Section 592 Auction

(a) AUCTIONING.— Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2012 through 2050, the Administrator shall, for the purpose of raising cash to deposit into the Climate Change Consumer Assistance Fund, auction a quantity of the emission allowances established for that year pursuant to subsection (a) of section 201.

(b) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—The quantities of emission allowances auctioned pursuant to subsection (a) shall be the quantities represented by the following percentages:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Auction in Order to Raise Cash for the Climate Change Consumer Assistance Fund
2012	3.5
2013	3.75
2014	3.75
2015	4
2016	4.25
2017	4.5
2018	5
2019	6
2020	6
2021	6
2022	7
2023	7
2024	8
2025	8
2026	9
2027	10
2028	10
2029	11

2030	12
2031	14
2032	14
2033	14
2034	15
2035	15
2036	15
2037	15
2038	15
2039	15
2040	15
2041	15
2042	15
2043	15
2044	15
2045	15
2046	15
2047	15
2048	15
2049	15
2050	15

Section 593 Deposits

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 592, immediately upon receipt of those proceeds, into the Climate Change Consumer Assistance Fund.

Section 594 Disbursements from the Climate Change Consumer Assistance Fund

No disbursements shall be made from the Climate Change Consumer Assistance Fund except pursuant to an appropriation Act.

Section 595 Sense of the Senate

It is the sense of the Senate that funds deposited into the Climate Change Consumer Assistance Fund pursuant to section 593 should be used to fund a tax policy that protects consumers, especially those in greatest need, from increases in energy and other costs.

Title VI Partnerships with States, Localities, and Indian Tribes

Subtitle A Partnerships with State Governments to Prevent Economic Hardship While Promoting Efficiency

Section 611 Assisting 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 9.5 percent of the quantity of emission allowances established pursuant to subsection (a) of section 201 for that calendar year for distribution among electricity local distribution companies in the United States and 3.25 percent of the quantity of emission allowances established pursuant to subsection (a) of section 201 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 from 2013 through 2025, the Administrator shall allocate 9.75 percent of the quantity of emission allowances established pursuant to subsection (a) of section 201 for that calendar year for distribution among electricity local distribution companies in the United States and 3.25 percent of the quantity of emission allowances established pursuant to subsection (a) of section 201 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 calendar year from 2026 through 2050, the Administrator shall allocate 10 percent of the quantity of emission allowances established pursuant to subsection (a) of section 201 for that calendar year for distribution among electricity local distribution companies in the United States and 3.5 percent of the quantity of emission allowances established pursuant to subsection (a) of section 201 for that calendar year for distribution among natural gas local distribution companies in the United States.

(b) DISTRIBUTION.—
(1) IN GENERAL.—For each calendar year, the emission allowances allocated under subsection (a) shall be distributed by the Administrator to each local distribution company based on the proportion that—
(A) the quantity of electricity or natural gas delivered by the local distribution company 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 efficiency programs implemented by the local distribution company and verified by the regulatory agency of the local distribution company; bears to
(B) the total quantity of electricity or natural gas delivered by all local distribution companies during those 3 calendar years, adjusted upward for the total electricity or natural gas not delivered as a result of consumer efficiency programs implemented by all local distribution companies and verified by the regulatory agencies of the local distribution companies.
(2) BASIS.—The Administrator shall base the determination of the quantity of electricity or natural gas delivered by a local distribution company for the purpose of subsection (1) on the most recent data available in annual reports filed with the Energy Information Administration of the Department of Energy.

(c) USE.—
(1) IN GENERAL.— 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 company must direct emission allowance proceeds, including low- and middle-income residential consumers and small business commercial consumers that are not allocated emissions allowances pursuant to Title V of this Act. Such regulation shall be developed in consultation with local distribution companies, the regulatory agencies of the local distribution companies, and consumer advocates.
(2) DEFINING LOW-INCOME CONSUMERS ELIGIBLE FOR ASSISTANCE.---In issuing the regulations required in paragraph (1) the Administrator shall consult with the Secretary of Health and Human Services, the Secretary of Agriculture, and any appropriate state agency and shall specify eligibility criteria that must be met by low-income residential consumers. The regulation shall specify that

individuals or households who otherwise meet the eligibility requirements for the [food stamps program - -correct name] and [Medicare Part D low-income subsidy – please insert correct name] shall also qualify for benefits pursuant to this Act. This eligibility determination will be in addition to low-income consumers qualifying for low-income programs provided by their local distribution company prior to December 31, 2011.
(3) Not later than 1 year after the date of enactment of this Act, the Administrator shall promulgate rules for minimum Federal requirements for the development of Climate Change Impact Assistance Program (CCIAP) for local distribution companies accepting allowances under this program. The rule shall require each local distribution company to implement an economic assistance program not later than December 31, 2011 that achieves the following objectives:
(A) mitigates increases in electricity and natural gas costs attributable to enactment of this Act;
(B) provides a timely rebate on electricity and natural gas customers' bills to qualifying low-income households;
(C) provides larger rebates to customers in the lowest income classes;
(D) includes efficiency and other programmatic measures designed to reduce the amount of electricity and natural gas consumed by qualifying low-income households; and
(E) includes economic assistance, efficiency and other programmatic measures designed to reduce the amount of energy consumed to other residential, small business and commercial consumers not receiving allowances under the act..
(4)The rule shall provide the local distribution companies with an option to develop a CCIAP in consultation with appropriate State regulatory authorities, and to submit the plan to EPA for approval and implementation under the oversight of State authorities provided that EPA determines the CCIAP meets the requirements specified herein. Each local distribution company that accepts emission allowances distributed under subsection (b) shall:
(A) develop a CCIAP consistent with the requirements above;
(B) submit the plan for review and approval by the Administrator;
(C) at the option of the local distribution company, the CCIAP may augment existing low income assistance plans; and
(D) the local distribution company may seek a determination by the Administrator that its existing State-approved assistance plans meet the requirements of this Act and constitute an acceptable CCIAP compliance plan.

(5) In developing its list of eligible recipients, the local distribution company may make use of lists of eligible recipients maintained by state and local agencies responsible for administration of existing public assistance programs and shall adhere to strict rules to maintain the privacy of eligible recipients.

(d) SALE.—Any local distribution company that accepts emission allowances distributed under subsection (b) shall—
(A) sell each emission allowance distributed to the local distribution company, either by selling the allowance itself or by contracting with a third party to sell the allowance, by not later than 1 year after receiving the emission allowance; and
(B) pursue fair market value for each emission allowance sold in accordance with subparagraph (A).

(e) Proceeds.—
(A) All proceeds from the sale of emission allowances under subsection (b) shall be used solely—
(i) to mitigate economic impacts on the consumer classes established by regulation pursuant to subsection (a), including by reducing transmission or distribution charges or issuing rebates; and
(ii) to promote the use of zero- and low-carbon distributed generation technologies and efficiency on

the part of consumers; and
(iii) to implement demand response programs and targeted assistance programs to benefit the consumer classes established by regulation pursuant to paragraph (1).
(B) Each local distribution company shall use at least 30 percent of the proceeds from the sale of emission allowances to benefit low-income residential consumers except the regulatory agencies of the local distribution companies (including the governing boards of municipally owned and cooperatively owned local distribution companies) shall have the authority to reduce that percentage for a local distribution company if such regulatory agency determines that the increase in electricity and natural gas costs resulting from this Act to the low-income residential consumers that the local distribution company serves are fully mitigated.

(f) PROHIBITION ON REBATES.—No local distribution company may use any proceeds from the sale of emission allowances under subsection (b) to provide to any consumer a rebate that is based solely on the quantity of electricity or natural gas used by the consumer.

(g) REPORTING.—
(1) IN GENERAL.—Each local distribution company that accepts emission allowances distributed under subsection (b) shall, for each calendar year for which the local distribution company accepts emission allowances, submit to the Administrator a report describing—
(i) the date of each sale of each emission allowance during the preceding year;
(ii) the amount of revenue generated from the sale of emission allowances during the preceding year; and
(iii) how, and to what extent, the local distribution company used the proceeds of the sale of the emission allowances during the preceding year, including the value directed to each customer class covered in the form of rebate, efficiency, demand response and distributed generation.
(2) AVAILABILITY OF REPORTS.—The Administrator shall make available to the public all reports submitted by any local distribution company under paragraph (1), including by publishing those reports on the Internet.

(h)Treatment of Allowance Value Proceeds.--Proceeds from the sale of allowance value under this section of the bill shall not be considered income for local distribution companies if the value of the proceeds is fully disbursed within one year of sale.

(i) Opt-Out.--If a local distribution company chooses not to accept the allowances or does not comply with the requirements of the approved CCIAP, the allowances otherwise due to that local distribution company shall be provided to the state served by such local distribution company and used by the state to carry out the objectives of this program.

Section 612 Assisting State Economies That Rely Heavily on Manufacturing and Coal

(a) ALLOCATION.—
(1) 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 subsection (a) of section 201 for that calendar year for distribution among States whose economies rely heavily on manufacturing and on coal.
(2) QUANTITIES OF EMISSION ALLOWANCES ALLOCATED.—The quantities of emission allowances allocated pursuant to paragraph (1) shall be the quantities represented by the following percentages:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Allocate for Distribution Among States Whose Economies Rely Heavily on Manufacturing and on Coal
2012	3
2013	3
2014	3
2015	3
2016	3.25
2017	3.25
2018	3.25
2019	3.25
2020	3.25
2021	3.25
2022	3.25
2023	3.5
2024	3.5
2025	3.5
2026	3.5
2027	3.5
2028	3.5
2029	3.5
2030	3.5
2031	4
2032	4
2033	4
2034	4
2035	4
2036	4
2037	4
2038	4
2039	4
2040	4
2041	4
2042	4
2043	4
2044	4
2045	4
2046	4
2047	4
2048	4
2049	4
2050	4

(b) DISTRIBUTION.—The emission allowances available for allocation to States under subsection (a) for a calendar year shall be distributed as follows:

(1) For each calendar year, 1/2 of the quantity of emission allowances available for States under subsection (a) shall be distributed among individual States based on the proportion that—
(A) the average annual employment in manufacturing in the State over the period from 1988 through 1992, as determined by the Secretary of Labor; bears to
(B) the average annual employment in manufacturing in the United States over the period from 1988 through 1992, as determined by the Secretary of Labor.
(2) For each calendar year, 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 where the ratio of lignite (in British thermal units) that was mined from 1988 through 1992 within the boundaries of the State to the total amount of coal (in British thermal units) that was consumed from 1988 through 1992 within the boundaries of that State exceeds 0.75, the State's share of allowances shall be based on the proportion that—
(i) twice the quantity of carbon contained in the total amount 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 amount of coal that was mined from 1988 through 1992 within the boundaries of all States described in clause (A) and the quantity of carbon contained in the total amount 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 clause (A), the State's share of allowances shall be based on the proportion that—
(i) the quantity of carbon contained in the total amount 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 amount of coal that was mined from 1988 through 1992 in all States described in clause (A) and the quantity of carbon contained in the total amount of coal that was mined from 1988 through 1992 within the boundaries of all other States, as determined by the Secretary of Energy.

(c) USE.— During any calendar year, a State shall retire or use in 1 or more of the ways listed in subsection (d) of section 625 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.—A State shall distribute or sell allowances for use in accordance with paragraph (c) by not later than the beginning of each allowance allocation year.

(e) RETURN OF ALLOWANCES.—Not later than 330 days before the end of each allowance allocation year, a State shall return to the Administrator any allowances not used by the deadline under 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 uses to which the State has put—
(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

Section 621 Mass Transit

(a) TRANSPORTATION SECTOR EMISSION REDUCTION FUND.—There is established in the Treasury a Fund to be known as the "Transportation Sector Emission Reduction Fund."

(b) AUCTIONS.—Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2012 through 2050, the Administrator shall, for the purpose of raising cash to deposit into the Transportation Sector Emission Reduction Fund established by subsection (a), auction a quantity of the emission allowances established for that year pursuant to subsection (a) of section 201.

(c) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—The quantities of emission allowances auctioned pursuant to subsection (b) shall be the quantities represented by the following percentages:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Auction in Order to Raise Cash for the Transportation Sector Emission Reduction Fund
2012	1
2013	1
2014	1
2015	1
2016	1
2017	1
2018	2
2019	2
2020	2
2021	2
2022	2.75
2023	2.75
2024	2.75
2025	2.75
2026	2.75
2027	2.75
2028	2.75
2029	2.75
2030	2.75
2031	2.75
2032	2.75
2033	2.75
2034	2.75
2035	2.75
2036	2.75
2037	2.75
2038	2.75
2039	2.75
2040	2.75

2041	2.75
2042	2.75
2043	2.75
2044	2.75
2045	2.75
2046	2.75
2047	2.75
2048	2.75
2049	2.75
2050	2.75

(d) DEPOSITS.—The Administrator shall deposit all proceeds of auctions conducted pursuant to subsections (b) and (c), immediately upon receipt of those proceeds, into the Transportation Sector Emission Reduction Fund established by subsection (a).

(e) USE OF FUNDS.—In each calendar year from 2012 through 2050, all funds deposited into the Transportation Sector Emission Reduction Fund in the preceding year pursuant to subsection (d) shall be made available, without further appropriation or fiscal year limitation, for the grants described in subsections (f) through (h).

(f) GRANTS TO PROVIDE FOR ADDITIONAL AND IMPROVED PUBLIC TRANSPORTATION SERVICE.—
(1) IN GENERAL.—Of the funds deposited into the Transportation Sector Emission Reduction Fund each year pursuant to subsection (d), 65 percent shall be distributed to designated recipients as defined in section 5307 of Title 49, United States Code, to maintain or improve public transportation through activities eligible under that section.
(2) DISTRIBUTION.—Of the funds made available under paragraph (1)—
(A) 60 percent shall be distributed according to the formula in subsections (a) through (c) of section 5336 of Title 49, United States Code; and
(B) 40 percent shall be distributed according to the formula in section 5340 of Title 49, United States Code.
(3) TERMS AND CONDITIONS.—Any grant provided under this section shall be subject to the terms and conditions applicable to a grant made under section 5307 of Title 49, United States Code.
(4) COST SHARE.—The Federal government's share of costs shall be as specified in section 5307(e) of Title 49, United States Code.

(g) GRANTS FOR CONSTRUCTION OF NEW PUBLIC TRANSPORTATION PROJECTS.—
(1) IN GENERAL.—Of the funds deposited into the Transportation Sector Emission Reduction Fund each year pursuant to subsection (d), 30 percent shall be distributed to State and local governmental 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 in section 5309(d) of Title 49, United States Code, for major capital investments and section 5309(e) 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.

(h) GRANTS FOR EFFICIENCY AT PUBLIC TRANSIT AGENCIES, 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 (d), 5 percent shall be awarded to State and local governmental authorities as defined in section 5307 of Title 49, United States Code, to assist in reducing the direct and indirect greenhouse-gas emissions of their systems, 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 carpool projects that do not include new roadway capacity.
(2) ELIGIBLE USES OF FUNDS.—A recipient of funds under paragraph (1) shall use the funds for—
(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; or
(D) improvements to energy distribution systems.
(3) DISTRIBUTION OF FUNDS.—In determining the recipients of grants under this subsection, applications shall be evaluated based on the total direct and indirect greenhouse-gas emissions reductions that are projected to result from the project and projected reductions as a percentage of the entity's total direct and indirect emissions.
(4) GOVERNMENT SHARE OF COSTS.—The Federal government's 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.

(i) CONDITION FOR RECEIPT OF FUNDS.—To be eligible to receive funds under this section, projects or activities must be part of an integrated State-wide transportation plan that shall--
(1) include all modes of surface transportation;
(2) integrate transportation data collection, monitoring, planning, and modeling;
(3) report on estimated greenhouse-gas emissions;
(4) be designed to reduce greenhouse-gas emissions from the transportation sector; and
(5) be certified by the Administrator as consistent with the purposes of this Act.

Section 622 Updating State Building Efficiency Codes

Section 304 of the Energy Conservation and Production Act (42 U.S.C. 6833) is amended to read as follows:

"SEC. 304. UPDATING STATE BUILDING ENERGY EFFICIENCY CODES.
"(a) Updates.—
"(1) IN GENERAL.—The Secretary shall support updating the national model building energy codes and standards 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, to achieve overall energy savings, as compared to the IECC (2006) for residential buildings and ASHRAE Standard 90.1 (2004) for commercial buildings, of at least—
"(A) 30 percent, with respect to each edition of a model code or standard published during the period beginning on January 1, 2010, and ending on December 31, 2019;

"(B) 50 percent, with respect to each edition of a model code or standard published on or after January 1, 2020; and
"(C) targets for intermediate and subsequent years, to be established by the Secretary not less than 3 years before the beginning on each target year, in coordination with IECC and ASHRAE Standard 90.1 cycles, at the maximum level of energy efficiency that is technologically feasible and lifecycle cost-effective.
"(2) REVISIONS TO IECC AND ASHRAE.—
"(A) IN GENERAL.—If the IECC or ASHRAE Standard 90.1 regarding building energy use is revised, not later than 1 year after the date of the revision, the Secretary shall determine whether the revision will—
"(i) improve energy efficiency in buildings; and
"(ii) meet the energy savings goals described in paragraph (1).
"(B) MODIFICATIONS.—
"(i) IN GENERAL.—If the Secretary makes a determination under subparagraph (A)(ii) that a code or standard does not meet the energy savings goals established under paragraph (1) or if a national model code or standard is not updated for more than 3 years, not later than 1 year after the determination or the expiration of the 3-year period, the Secretary shall establish a modified code or standard that meets the energy savings goals.
"(ii) REQUIREMENTS.—
"(I) ENERGY SAVINGS.—A modification to a code or standard under clause (i) shall—
"(aa) achieve the maximum level of energy savings that is technically feasible and lifecycle cost-effective;
"(bb) be achieved through an amendment or supplement to the most recent revision of the IECC or ASHRAE Standard 90.1 and taking into consideration other appropriate model codes and standards; and
"(cc) incorporate available appliances, technologies, and construction practices.
"(II) TREATMENT AS BASELINE.—A modification to a code or standard under clause (i) shall serve as the baseline for the next applicable determination of the Secretary under subparagraph (A)(i).
"(C) PUBLIC PARTICIPATION.—The Secretary shall—
"(i) publish in the Federal Register a notice relating to each goal, determination, and modification under this paragraph; and
"(ii) provide an opportunity for public comment regarding the goals, determinations, and modifications.
"(b) State Certification of Building Energy Code Updates.—
"(1) GENERAL CERTIFICATION.—
"(A) IN GENERAL.—Not later than 2 years after the date of enactment of the Lieberman-Warner Climate Security Act of 2008, each State shall certify to the Secretary that the State has reviewed and updated the provisions of the residential and commercial building codes of the State regarding energy efficiency.
"(B) ENERGY SAVINGS.—A certification under subparagraph (A) shall include a demonstration that the applicable provisions of the State code meet or exceed, as applicable—
"(i)(I) the IECC (2006) for residential buildings; or
"(II) the ASHRAE Standard 90.1 (2004) for commercial buildings; or
"(ii) the quantity of energy savings represented by the provisions referred to in clause (i).
"(2) REVISION OF CODES AND STANDARDS.—
"(A) IN GENERAL.—If the Secretary makes an affirmative determination under subsection (a)(2)(A)(i) or establishes a modified code or standard under subsection (a)(2)(B), not later than 2 years after the determination or proposal, each State shall certify that the State has reviewed and updated the provisions of the residential and commercial building codes of the State regarding energy efficiency.
"(B) ENERGY SAVINGS.—A certification under subparagraph (A) shall include a demonstration that the applicable provisions of the State code meet or exceed—
"(i) the modified code or standard; or

“(ii) the quantity of energy savings represented by the modified code or standard.
“(C) FAILURE TO DETERMINE.—If the Secretary fails to make a determination under subsection (a)(2)(A)(i) by the date specified in subsection (a)(2), or if the Secretary makes a negative determination, not later than 2 years after the specified date or the date of the determination, each State shall certify that the State has—
“(i) reviewed the revised code or standard; and
“(ii) updated the provisions of the residential and commercial building codes of the State as necessary to meet or exceed, as applicable—
“(I) any provisions of a national code or standard determined to improve energy efficiency in buildings; or
“(II) energy savings achieved by those provisions through other means.
“(c) Achievement of Compliance by States.—
“(1) IN GENERAL.—Not later than 3 years after the date on which a State makes a certification under subsection (b), the State shall certify to the Secretary that the State has achieved compliance with the building energy code that is the subject of the certification.
“(2) RATE OF COMPLIANCE.—The certification shall include documentation of the rate of compliance based on independent inspections of a random sample of the new and renovated buildings covered by the State code during the preceding calendar year.
“(3) COMPLIANCE.—A State shall be considered to achieve compliance for purposes of paragraph (1) if—
“(A) at least 90 percent of new and renovated buildings covered by the State code during the preceding calendar year substantially meet all the requirements of the code; or
“(B) the estimated excess energy use of new and renovated buildings that did not meet the requirements of the State code during the preceding calendar year, as compared to a baseline of comparable buildings that meet the requirements of the code, is not more than 10 percent of the estimated energy use of all new and renovated buildings covered by the State code during the preceding calendar year.
“(d) Failure to Certify.—
“(1) EXTENSION OF DEADLINES.—The Secretary shall extend a deadline for certification by a State under subsection (b) or (c) for not more than 1 additional year, if the State demonstrates to the satisfaction of the Secretary that the State has made—
“(A) a good faith effort to comply with the certification requirement; and
“(B) significant progress with respect to the compliance.
“(2) NONCOMPLIANCE BY STATE.—
“(A) IN GENERAL.—A State that fails to submit a certification required under subsection (b) or (c), and to which an extension is not provided under paragraph (1), shall be considered to be out of compliance with this section.
“(B) EFFECT ON LOCAL GOVERNMENTS.—A local government of a State that is out of compliance with this section may be considered to be in compliance with this section if the local government meets each applicable certification requirement of this section.
“(e) Technical Assistance.—
“(1) IN GENERAL.—The Secretary shall provide technical assistance (including building energy analysis and design tools, building demonstrations, and design assistance and training) to ensure that national model building energy codes and standards meet the goals described in subsection (a)(1).
“(2) ASSISTANCE TO STATES.—The Secretary shall provide technical assistance to States—
“(A) to implement this section, including procedures for States to demonstrate that the codes of the States achieve equivalent or greater energy savings than the national model codes and standards;
“(B) to improve and implement State residential and commercial building energy efficiency codes; and
“(C) to otherwise promote the design and construction of energy-efficient buildings.

"(f) Incentive Funding.—
"(1) IN GENERAL.—The Secretary shall provide incentive funding to States—
"(A) to implement this section; and
"(B) to improve and implement State residential and commercial building energy efficiency codes, including increasing and verifying compliance with the codes.
"(2) AMOUNT.—In determining whether, and in what amount, to provide incentive funding under this subsection, the Secretary shall take into consideration actions proposed by the State—
"(A) to implement this section;
"(B) to implement and improve residential and commercial building energy efficiency codes; and
"(C) to promote building energy efficiency through use of the codes.
"(3) ADDITIONAL FUNDING.—The Secretary shall provide additional funding under this subsection for implementation of a plan to demonstrate a rate of compliance with applicable residential and commercial building energy efficiency codes at a rate of not less than 90 percent, based on energy performance—
"(A) to a State that has adopted and is implementing, on a statewide basis—
"(i) a residential building energy efficiency code that meets or exceeds the requirements of the IECC (2006) (or a successor code that is the subject of an affirmative determination by the Secretary under subsection (a)(2)(A)(i)); and
"(ii) a commercial building energy efficiency code that meets or exceeds the requirements of the ASHRAE Standard 90.1 (2004) (or a successor standard that is the subject of an affirmative determination by the Secretary under subsection (a)(2)(A)(i)); or
"(B) in the case of a State in which no statewide energy code exists for residential buildings or commercial buildings, or in which the State code fails to comply with subparagraph (A), to a local government that has adopted and is implementing residential and commercial building energy efficiency codes, as described in subparagraph (A).
"(4) TRAINING.—Of the amounts made available to carry out this subsection, the Secretary may use not more than $500,000 for each State to train State and local officials to implement State or local energy codes in accordance with a plan described in paragraph (3).".

Section 623 Conforming Amendment

Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is amended by adding at the end the following new paragraph:
"(17) IECC.—The term 'IECC' means the International Energy Conservation Code.".

Section 624 Energy Efficiency and Conservation Block Grant Program

(a) AUCTIONING.—Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2012 through 2050, the Administrator shall, for the purpose of raising cash for the Energy Efficiency and Conservation Block Grant Program, auction 2 percent of the quantity of the emission allowances established for that year pursuant to subsection (a) of section 201.

(b) USE.— Each calendar year from 2011 through 2049, the Administrator shall, immediately upon receipt of proceeds from auctioning conducted pursuant to subsection (a), direct those proceeds to the Energy Efficiency and Conservation Block Grant Program established within the Department of Energy by subtitle E of Title V of the Energy Independence and Security Act of 2007.

Section 625 States That Have Led in Reducing Emissions

(a) ALLOCATION.—
(1) 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 subsection (a) of section 201 for that calendar year for distribution among States that have led the nation in efforts to reduce greenhouse-gas emissions and improve energy efficiency.
(2) QUANTITIES OF EMISSION ALLOWANCES ALLOCATED.—The quantities of emission allowances allocated pursuant to paragraph (1) shall be the quantities represented by the following percentages:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Allocate for Distribution Among States That Have Led the Nation in Efforts to Reduce Greenhouse-Gas Emissions and Improve Energy Efficiency
2012	4
2013	4
2014	4
2015	4
2016	4.25
2017	4.25
2018	4.5
2019	4.75
2020	5
2021	5
2022	6
2023	6.25
2024	6.5
2025	6.75
2026	7
2027	7.25
2028	7.5
2029	7.75
2030	8
2031	9
2032	10
2033	10
2034	10
2035	10
2036	10
2037	10
2038	10
2039	10
2040	10
2041	10
2042	10

2043	10
2044	10
2045	10
2046	10
2047	10
2048	10
2049	10
2050	10

(b) RULEMAKING.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules establishing a system for annually scoring historical State investments and achievements in reducing greenhouse-gas emissions and increasing energy efficiency.

(c) DISTRIBUTION.—
(1) IN GENERAL.—The emission allowances available for allocation to States under subsection (a) shall be distributed among States in proportion to the States' respective scores in the system established pursuant to subsection (b).
(2) STATE CAP-AND-TRADE PROGRAMS.—Distributions of allowances under this section in any calendar year shall be to—
(A) States that have never established State or regional cap-and-trade programs for greenhouse gas; and
(B) States that did establish State or regional cap-and-trade programs for greenhouse gas and that, not later than the beginning of the calendar year in question—
(i) chose to transition such programs into the national system established by this Act; and
(ii) completed such 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 in 1 or more of the following ways all of the allowances allocated to the State (or proceeds of sale of those emission allowances) under this section for that calendar year:
(A) To mitigate impacts on low-income consumers.
(B) To promote 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 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 technology that reduce or sequester greenhouse gas emissions.
(F) To address local or regional impacts of climate change, including by accommodating, protecting, or relocating affected communities and public infrastructure.
(G) To collect, evaluate, disseminate, and use information necessary for affected coastal communities to adapt to climate change (such as information derived from inundation prediction systems).
(H) To mitigate obstacles to investment by new entrants in electricity generation markets and carbon-intensive manufacturing sectors.
(I) To address local or regional impacts of climate change policy, including providing assistance to displaced workers.
(J) To engage local and municipal governments to provide capacity building and related technical assistance to local and municipal low-carbon green job creation and workforce development programs.

(K) To mitigate impacts on carbon-intensive industries in internationally competitive markets.
(L) To reduce hazardous fuels, and to prevent and suppress wildland fire.
(M) To fund rural, municipal, and agricultural water projects that are consistent with the sustainable use of water resources.
(N)To improve recycling infrastructure.
(O) To increase public education on the benefits of recycling, particularly with respect to greenhouse gases.
(P) To improve residential, commercial, and industrial collection of recyclables.
(Q) To improve recycling system efficiency.
(R) To increase recycling yields.
(S) To improve the quality and usefulness of recycled materials.
(T) To promote industry cluster or industry sector strategies that involve public-private partnerships of state and local economic and workforce developments agencies, leaders from renewable energy, efficiency and low-carbon industries, and other community-based stakeholders, in the development of regional strategies to maximize the creation of good, career-track jobs.
(U) To develop and implement plans to anticipate and reduce the potential threats to health resulting from climate change, including development, improvement and integration of disease surveillance systems, rapid response systems, and communication methods and materials; and identification and prioritization of vulnerable communities and populations and communities.
(V) To fund any other purpose the States determine to be necessary to mitigate any negative economic impacts as a result of—
(i) global warming; or
(ii) new regulatory requirements as a result of this Act.

(d) DEADLINE.—A State shall distribute or sell allowances for use in accordance with paragraph (c) by not later than the beginning of each allowance allocation year.

(e) RETURN OF ALLOWANCES.—Not later than 330 days before the end of each allowance allocation year, a State shall return to the Administrator any allowances not used by the deadline under subsection (d).

(f) RECYCLING.— During any calendar year, a State shall retire or use not less than five percent of the allowances allocated to the State (or proceeds of sale of those emission allowances) under this section for increasing recycling rates through activities such as improving recycling infrastructure; increasing public education on the benefits of recycling, particularly with respect to greenhouse gases; improving residential, commercial and industrial collection of recyclables; increasing recycling efficiency; increasing recycling yields; and improving the quality and usefulness of recycled materials.

(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 uses to which the State has put—
(1) the allowances received under this section; and
(2) the proceeds of the sale by the State of allowances received under this section.

Subtitle C Partnerships with States and Indian Tribes to Adapt to Climate Change

Section 631 Allocation

(a) 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 subsection (a) of section 201 for that calendar year for distribution among States and Indian Tribes for adaptation to impacts of global climate change.

(b) QUANTITIES OF EMISSION ALLOWANCES ALLOCATED.—The quantities of emission allowances allocated pursuant to subsection (a) shall be the quantities represented by the following percentages:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Allocate for Distribution Among States and Indian Tribes for Adaptation
2012	3
2013	3
2014	3
2015	3
2016	3.25
2017	3.25
2018	3.25
2019	3.25
2020	3.25
2021	3.25
2022	3.25
2023	3.25
2024	3.25
2025	3.25
2026	3.5
2027	3.5
2028	3.5
2029	3.5
2030	3.5
2031	4
2032	4
2033	4
2034	4
2035	4
2036	4
2037	4
2038	4
2039	4
2040	4
2041	4
2042	4
2043	4
2044	4

2045	4
2046	4
2047	4
2048	4
2049	4
2050	4

Section 632 Coastal Impacts

(a) DEFINITIONS.—In this section:
(1) COASTAL STATE.—
(A) IN GENERAL.—The term "Coastal State" means any State that borders on 1 or more of the Atlantic Ocean, the Gulf of Mexico, the Pacific Ocean, the Arctic Ocean, or a Great Lake.
(B) INCLUSIONS.—The term "Coastal State" includes—
(i) the Commonwealth of Puerto Rico;
(ii) Guam;
(iii) American Samoa;
(iv) the Commonwealth of the Northern Mariana Islands; and
(v) the United States Virgin Islands.
(C) EXCLUSION.—For the purposes of distributing emission allowances under this section, "Coastal State" shall not mean Alaska.
(2) COASTAL WATERSHED.—The term "coastal watershed" means a geographical area drained into or contributing water to an estuarine area, an ocean, or a Great Lake, all or a portion of which is within the coastal zone (as defined in section 304 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1453)).
(3) GREAT LAKE.—The term "Great Lake" means—
(A) Lake Erie;
(B) Lake Huron (including Lake Saint Clair);
(C) Lake Michigan;
(D) Lake Ontario;
(E) Lake Superior; and
(F) the connecting channels of those Lakes, including—
(i) the Saint Marys River;
(ii) the Saint Clair River;
(iii) the Detroit River;
(iv) the Niagara River; and
(v) the Saint Lawrence River to the Canadian border.
(4) SHORELINE MILES.—The term "shoreline miles", with respect to a Coastal State, means the mileage of tidal shoreline or Great Lake shoreline of the Coastal State, based on the most recently available data from or accepted by the National Ocean Service of the National Oceanic and Atmospheric Administration.

(b) ALLOCATION.— Of the allowances allocated each year pursuant to section 631, the Administrator shall allocate 40 percent to Coastal States.

(c) Distribution.—The emission allowances available for allocation under subsection (b) for a calendar year shall be distributed among Coastal States, as follows:
(1) 50 percent based on the proportion that—

(A) the number of shoreline miles of a Coastal State; bears to
(B) the total number of shoreline miles of all Coastal States.
(2) 30 percent based on the proportion that—
(A) the population of a Coastal State; bears to
(B) the total population of all Coastal States.
(3) 20 percent divided equally among all Coastal States.

(d) Use of Emission Allowances or Proceeds.—
(1) IN GENERAL.—During any calendar year, a Coastal State receiving emission allowances under this section shall use the emission allowances (or proceeds of sale of those emission allowances) only for projects and activities to plan for and address the impacts of climate change in the coastal watershed.
(2) SPECIFIC USES.—The projects and activities described in paragraph (1) shall include projects and activities—
(A) to address the impacts of climate change with respect to—
(i) accelerated sea level rise and lake level changes;
(ii) shoreline erosion;
(iii) increased storm frequency or intensity;
(iv) changes in rainfall; and
(v) related flooding;
(B) to identify public facilities and infrastructure, coastal resources of national significance, public energy facilities, or other public water uses located in the coastal watershed that are affected by climate change, including the development of plans to protect, or, as necessary or applicable, to relocate the facilities or infrastructure;
(C) to research and collect data using, or on matters such as—
(i) historical shoreline position maps;
(ii) historical shoreline erosion rates;
(iii) inventories of shoreline features and conditions;
(iv) acquisition of high-resolution topography and bathymetry;
(v) sea level rise inundation models;
(vi) storm surge sea level rise linked inundation models;
(vii) shoreline change modeling based on sea level rise projections;
(viii) sea level rise vulnerability analyses and socioeconomic studies; and
(ix) environmental and habitat changes associated with sea level rise; and
(D) to respond to—
(i) changes in chemical characteristics (including ocean acidification) and physical characteristics (including thermal stratification) of marine systems;
(ii) saltwater intrusion into groundwater aquifers;
(iii) increased harmful algae blooms;
(iv) spread of invasive species;
(v) habitat loss (particularly loss of coastal wetland);
(vi) species migrations; and
(vii) marine, estuarine, and freshwater ecosystem changes associated with climate change.
(3) COORDINATION.—In carrying out this subsection, a Coastal State shall coordinate with the Administrator and the heads of other appropriate Federal agencies to ensure, to the maximum extent practicable, an efficient and effective use of emission allowances (or proceeds of sale of those emission allowances) allocated under this section.
(4) TECHNICAL ASSISTANCE AND TRAINING.—The Administrator and the heads of such other Federal agencies as are appropriate, including the National Oceanic and Atmospheric Administration, Environmental

Protection Agency, United States Geological Survey, Department of the Interior, Corps of Engineers, and Department of Transportation, shall provide technical assistance and training for State and local officials to assist Coastal States in carrying out this subsection.
(5) UNIVERSITY PARTICIPATION. – Where appropriate, universities and other centers for higher education should use their existing expertise and research capacity 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 immediately transfer to the Administrator for regular auctioning under any emission allowances returned to the Administrator under subsection (e).

(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 uses to which the State has put—
(1) the allowances received under this section; and
(2) the proceeds of the sale by the State of allowances received under this section.

Section 633 Impacts on Water Resources and on Agriculture

(a) ALLOCATION.—Of the allowances allocated each year pursuant to section 631, the Administrator shall allocate 25 percent to those States facing the earliest and most severe impacts on the availability of freshwater and on agriculture.

(b) USE.—
(1) IN GENERAL.—In any calendar year, a State receiving emission allowances under this section shall use them, or the proceeds from their sale, only for projects and activities to plan for and address the impacts of climate change on water resources. State programs shall develop a regionally-specific analysis of the potential climate-change impacts on local water resources. Implementation priorities shall be developed through an integrated analysis of a full range of water management alternatives (including urban and agricultural conservation, habitat and watershed protection and restoration, wastewater recycling, groundwater cleanup, non-structural alternatives, floodplain restoration and urban stormwater management) to direct funding to the most cost-effective strategies that will generate significant net environmental benefits.
(2) SPECIFIC USES.—The projects and activities described in paragraph (1) shall include projects and activities to—
(A) promote investment in research into the impacts of climate change on water resource planning;
(B) promote water resource planning;
(C) develop and implement sustainable strategies for adapting to climate change; and
(D) implement measures to reduce water utilities' greenhouse-gas emissions.
(c) REPORT.—A State receiving allowances under this section shall annually submit to the appropriate congressional committees and the appropriate federal agencies a report describing the uses to which the State has put—

(1) the allowances received under this section; and
(2) the proceeds of the sale by the State of allowances received under this section.

Section 634 Impacts on Alaska

(a) ALLOCATION.—Of the allowances allocated each year pursuant to section 631, the Administrator shall allocate 20 percent to the State of Alaska for the uses set forth in subsection (b).

(b) USE.— In any calendar year, emission allowances distributed to the State of Alaska under this section, or the proceeds from their sale, shall be used only for projects and activities to plan for and address the impacts of climate change on the State and its residents. In order to receive allowances under this section, the State of Alaska shall develop a State-specific analysis of the potential climate-change impacts on residents of the State. Implementation priorities shall be developed through an integrated analysis of impacts and strategies.

(c) REPORT.—The State of Alaska shall annually submit to the appropriate congressional committees and the appropriate federal agencies a report describing the uses to which the State has put—
(1) the allowances received under this section; and
(2) the proceeds of the sale by the State of allowances received under this section.

Section 635 Impacts on Indian Tribes

(a) PURPOSES.—The purposes of this section are—
(1) to demonstrate commitment to the maintenance of the Federal government's unique and continuing relationship with, and responsibility to, Indian tribes;
(2) to recognize the obligation of the United States to prepare for the likely disproportionate consequences of global climate change facing individual Indian tribes located throughout the United States;
(3) to establish, in keeping with the principles of self-determination and government-to-government consultation, a cost-efficient mechanisms to provide for meaningful participation by Indian tribes in the planning, conduct 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, capable of administering innovative programs and economic development initiatives in the face of global climate change.
(5) to establish a self-sustaining Tribal Climate Change Assistance Fund to address local or 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 set aside 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 funds to Indian tribes as in accordance with the principles established by the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450f), under regulations to be developed, in consultation with the Secretary of Interior and Indian tribes, by the Administrator not later than 5 years after enactment of this Act.

(b) ESTABLISHMENT.—
(1) Not later than 2 years after the date of enactment of this Act, the Administrator shall establish a program to assist Indian tribes in addressing local and regional impacts of climate change in accordance with section 635.

(2) The Administrator shall develop regulations in accordance with the Negotiated Rulemaking Act (5 U.S.C. 651 et seq.), with consultation from representatives from Indian tribes in each EPA Region, to distribute proceeds from the Tribal Climate Change Assistance Fund on an annual basis beginning no later than 2011.

(c) FUND.—There is established in the Treasury a fund to be known as the "Tribal Climate Change Assistance Fund."

(d) AUCTIONS.—Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2012 through 2050, the Administrator shall, for the purpose of raising cash to deposit into the Tribal Climate Change Assistance Fund, auction 15 percent of the quantity of the emission allowances allocated pursuant to section 631.

(e) DEPOSITS.—Each calendar year from 2011 through 2049, the Administrator shall, immediately upon receipt of proceeds from auctioning conducted pursuant to subsection (b), deposit all such proceeds into the Tribal Climate Change Assistance Fund.

(f) USE OF FUNDS.—In each calendar year from 2012 through 2050, all funds deposited into the Tribal Climate Change Assistance Fund in the preceding year pursuant to subsection (c) shall be made available, without further appropriation or fiscal year limitation, to the Administrator to carry out the program to be established pursuant to subsection (b) and to the purposes of this subtitle which are in excess of amounts annually appropriated to the Administrator for Indian Tribes under the Indian General Assistance Program (42 U.S.C §4368(b)) and the Clean Air Act (42 U.S.C. 7403 and 7601(d)).

(g) PROGRAM.— The Administrator shall use the funds in the Tribal Climate Change Assistance Fund—
(A) To deliver assistance to Indian tribes within the United States that face disruption or dislocation as a result of climate change.
(B) To assist Indian tribes in planning and designing agricultural, forestry and other land use-related projects through the Indian General Assistance Program (42 U.S.C. §4368(b)).
(C) To assist Indian tribes in the collection of greenhouse gas and other air quality data through the Indian General Assistance Program (42 U.S.C. §4368(b) and the Clean Air Act (42 U.S.C. 7403).
(D) To mitigate impacts on low-income consumers.
(E) To promote 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 communities to adapt to climate change (such as information derived from inundation prediction systems).
(H) To address local or regional impacts of climate change policy, including providing assistance to displaced workers.
(I) To reduce hazardous fuels, and to prevent and suppress wildland fire.
(J) To fund rural, municipal, and agricultural water projects that are consistent with the sustainable use of water resources.
(K) To fund any other purposes the Indian tribes determine to be necessary to mitigate any negative economic impacts as a result of –
(i) global warming; or
(ii) new regulatory requirements as a result of this Act.

(2) The Administrator shall not require Indian tribes to obtain Tribal Authority pursuant to the Clean Air Act (42 U.S.C. 7601(d)) as a condition to participate in programs authorized by this section.

(h) REPORT.—An Indian tribe receiving allowances under this section shall annually submit to the appropriate congressional committees and the appropriate federal agencies a report describing the uses to which the tribe has put—
(1) the allowances received under this section; and
(2) the proceeds of the sale by the tribe of allowances received under this section.

Subtitle D Partnerships with States, Localities, and Indian Tribes to Protect Natural Resources

Section 641 Establishment

There is established in the Treasury a fund to be known as the "State Wildlife Adaptation Fund."

Section 642 Auctions

(a) AUCTIONING.—Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2012 through 2050, the Administrator shall, for the purpose of raising cash to deposit into the State Wildlife Adaptation Fund, auction a quantity of the emission allowances established for that year pursuant to subsection (a) of section 201.

(b) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—The quantities of emission allowances auctioned pursuant to subsection (a) shall be the quantities represented by the following percentages:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Auction in Order to Raise Cash for the State Wildlife Adaptation Fund
2012	2
2013	2
2014	2
2015	2
2016	2
2017	2
2018	2
2019	2
2020	2
2021	2
2022	2
2023	2
2024	3
2025	3
2026	3
2027	4

2028	4
2029	4
2030	4
2031	4
2032	4
2033	4
2034	4
2035	4
2036	4
2037	4
2038	4
2039	4
2040	4
2041	4
2042	4
2043	4
2044	4
2045	4
2046	4
2047	4
2048	4
2049	4
2050	4

Section 643 Deposits

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 642, immediately upon receipt of those proceeds, into the State Wildlife Adaptation Fund.

Section 644 Use of Funds

(a) PITTMAN-ROBERTSON WILDLIFE RESTORATION PROGRAM.—In each calendar year from 2012 through 2050, 78 percent of the funds deposited into the State Wildlife Adaptation Fund in the preceding year pursuant to section 643 shall be made available, without further appropriation or fiscal year limitation, to the Secretary of the Interior, and subsequently made available to States through the Wildlife Conservation and Restoration Account established under section 3(a)(2) of the Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669b(a)(2)), to carry out adaptation activities in accordance with comprehensive State adaptation strategies, as described in section 647.

(b) LAND AND WATER CONSERVATION FUND.—In each calendar year from 2012 through 2050, 22 percent of the funds deposited into the State Wildlife Adaptation Fund in the preceding year pursuant to section 643 shall be made available for deposit into 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).

Section 645 Land and Water Conservation

(a) USE GENERALLY.—Deposits to the Land and Water Conservation Fund under subsection shall—

(1) be supplemental to authorizations provided under section 3 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460l–6), which shall remain available for non-adaptation needs; and
(2) notwithstanding section 3 of the Land and Water Conservation Fund Act, be available without further appropriation or fiscal year limitation.

(b) ALLOCATIONS.—Of the amounts deposited under subsection (a) into the Land and Water Conservation Fund—
(1) \1/6\ shall be allocated to the Secretary 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)—
(A) to States, in accordance with comprehensive wildlife conservation strategies, and to Indian tribes,;
(B) notwithstanding section 5 of that Act (16 U.S.C. 460l–7); and
(C) in addition to grants provided pursuant to—
(i) annual appropriations Acts;
(ii) the Energy Policy Act of 2005 (42 U.S.C. 15801 et seq.); or
(iii) any other authorization for nonadaptation needs;
(2) \1/3\ shall be allocated to the Secretary to carry out adaptation activities through the acquisition of lands and interests in land under section 7 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460l–9);
(3) \1/6\ shall be allocated to the Secretary of Agriculture and made available to the States to carry out adaptation activities through the acquisition of land and interests in land under section 7 of the Forest Legacy Program under the Cooperative Forestry Assistance Act of 1978 (16 U.S.C. 2103c); and
(4) \1/3\ 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).

(c) EXPENDITURE OF FUNDS.—In allocating funds under subsection (b), the Secretary and the Secretary of Agriculture shall take into consideration factors including—
(1) the availability of non-Federal contributions from State, local, or private sources;
(2) opportunities to protect wildlife corridors or otherwise to link or consolidate fragmented habitats;
(3) opportunities to reduce the risk of catastrophic wildfires, extreme flooding, or other climate-related events that are harmful to fish and wildlife and people;
(4) the potential for conservation of species or habitat types at serious risk due to climate change, ocean acidification, and other stressors; and
(5) the potential to provide enhanced access to land and water for fishing, hunting, and other public recreational uses.

Section 646 Cost Sharing

Notwithstanding any other provision of law, a State or Indian tribe that receives a grant under section 644 or 645 shall provide 10 percent of the costs of each activity carried out using amounts under the grant.

Section 647 State Comprehensive Adaptation Strategies

(a) IN GENERAL.—Except as provided in paragraph (2), funds made available to States under 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 (16 U.S.C. 1451 et seq.)), by the Secretary of Commerce, subject to the condition that approval by the Secretary of Commerce shall be required only for those portions of the strategy relating to activities affecting the coastal zone.

(b) INITIAL.—
(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 the State strategy, a State shall be eligible to receive funding under subsection (b)(1) for adaptation activities that are—
(A) consistent with the comprehensive wildlife strategy of the State and, where appropriate, other fish, wildlife and conservation strategies; and
(B) in accordance with a workplan developed in coordination with—
(i) the Secretary of the Interior; and
(ii) for any State with a coastal zone (within the meaning of the Coastal Zone Management Act (16 U.S.C. 1451 et seq.)), the Secretary of Commerce, subject to the condition that coordination with the Secretary of Commerce shall be required only for those portions of the strategy relating to activities affecting the coastal zone.
(2) PENDING APPROVAL.—During the period for which approval by the applicable Secretary of a State strategy described in paragraph (3) is pending, the State may continue receiving funds under subsection (b)(1) pursuant to the workplan described subparagraph (A)(ii).

(c) REQUIREMENTS.—A State strategy shall—
(1) describe the impacts of climate change and ocean acidification on the diversity and health of the fish, wildlife and plant populations, habitats, aquatic and terrestrial ecosystems, and associated ecological processes;
(2) describe and prioritize proposed conservation, protection, and restoration actions to assist fish, wildlife, aquatic and terrestrial ecosystems, and plant populations in adapting to those impacts;
(3) establish programs for monitoring the impacts of climate change on fish, wildlife, and plant populations, habitats, aquatic and terrestrial ecosystems, and associated ecological processes;
(4) include strategies, specific conservation, protection, and restoration actions, and a timeframe for implementing conservation actions for fish, wildlife, and plant populations, habitats, aquatic and terrestrial ecosystems, and associated ecological processes;
(5) establish methods for 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 for updating those actions to respond appropriately to new information or changing conditions;
(6) be developed—
(A) with the participation of the State fish and wildlife agency, the State agency responsible for administration of Land and Water Conservation Fund grants, the State Forest Legacy Program coordinator, the State environmental agency, and the State coastal agency; and
(B) in coordination with the Secretary of the Interior and, where applicable, the Secretary of Commerce;
(7) provide for solicitation and consideration of public and independent scientific input;
(8) include strategies that engage youth and young adults, including those working in full-time or part-time Youth Service or Conservation Corps programs, to provide them with opportunities for meaningful conservation service to their communities and the nation, and to encourage opportunities for employment in the private sector through partnerships with employers..
(9) take into consideration research and information contained in, and coordinate with and integrate the goals and measures identified in, as appropriate, other fish, wildlife, aquatic and terrestrial

ecosystems, and habitat conservation strategies, including—
(A) the national fish habitat action plan;
(B) plans under the North American Wetlands Conservation Act (16 U.S.C. 4401 et seq.);
(C) the Federal, State, and local partnership known as "Partners in Flight";
(D) federally approved coastal zone management plans under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.);
(E) federally approved regional fishery management plans and habitat conservation activities under the Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.);
(F) the national coral reef action plan;
(G) recovery plans for threatened species and endangered species under section 4(f) of the Endangered Species Act of 1973 (16 U.S.C. 1533(f));
(H) habitat conservation plans under section 10 of that Act (16 U.S.C. 1539);
(I) other Federal and State plans for imperiled species;
(J) the United States shorebird conservation plan;
(K) the North American waterbird conservation plan;
(L) federally approved watershed plans under section 208 or 319 of the Clean Water Act; and
(M) other State-based strategies that comprehensively implement adaptation activities to remediate the effects of climate change and ocean acidification on fish, wildlife, habitats, and aquatic and terrestrial ecosystems; and
(N) be incorporated into a revision of the comprehensive wildlife conservation strategy of a State that has been submitted to the United States Fish and Wildlife Service; and
(i) that has been approved by the Service; or
(ii) on which a decision on approval is pending.

(d) UPDATING.—Each State strategy described in subsection (c) shall be updated at least every 5 years.

Title VII Recognizing Early Action

Section 701 Rulemaking

Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules establishing an Early Action Program for distributing emission allowances to entities that emit greenhouse gas in the United States, in recognition of verified greenhouse-gas emissions reductions—
(1) that occurred prior to promulgation of the rules required by this section; and
(2) that resulted from actions taken by the entities after January 1, 1994 and before the date of enactment of this Act.

Section 702 Allocation

Not later than 2 years after the date of enactment of this Act, the Administrator shall allocate to the Early Action Program established pursuant to section 701 quantities of the emission allowances established for calendar years 2012 through 2025 pursuant to subsection (a) of section 201, as follows:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Allocate to the Early Action Program
2012	5

2013	5
2014	5
2015	4
2016	3
2017	3
2018	1
2019	1
2020	1
2021	1
2022	1
2023	1
2024	1
2025	1

Section 703 Distribution Generally

Not later than 4 years after the date of enactment of this Act, the Administrator shall have distributed to entities described in section 701 all of the emission allowances allocated to the Early Action Program pursuant to section 702.

Section 704 Distribution to Entities Holding Regional Greenhouse Gas Initiative Emission Allowances

The rules promulgated pursuant to section 701 shall provide that each entity in the United States holding, as of December 31, 2011, Regional Greenhouse Gas Initiative emission allowances or emission allowances issued by the State of California under to State legislation enacted or regulations promulgated pursuant to the California Global Warming Solutions Act of 2006shall receive, from the quantity of emission allowances allocated to the Early Action Program pursuant to section 702, that quantity of emission allowances necessary to compensate the entity for the cost that the entity incurred in obtaining and holding those Regional Greenhouse Gas Initiative emission allowances.

Section 705 Distribution to Power Plants That Repowered Pursuant to Consent Decrees

(a) IN GENERAL.—The rules promulgated pursuant to section 701 shall provide that owners or operators of electricity generating facilities that are located in the United States and that repowered from coal prior to 2005 pursuant to a consent decree shall receive emission allowances from the quantity allocated to the Early Action Program pursuant to section 702.

(b) QUANTITY OF ALLOWANCES.—The quantity of emission allowances distributed to the owner or operator of an electricity generating facility pursuant to subsection (a) shall be the sum of—
(1) the verified quantity of metric tons of carbon dioxide whose emission was avoided as a result of the repowering, in the period between the date on which the repowering began and the date of enactment of this Act; and
(2) the aggregate quantity of emission allowances that, as a result of the lower annual carbon-dioxide emissions resulting from the repowering, will not be distributed to the owner or operator of the facility pursuant to subtitle H of Title V.

(c) LIMTIATION.—Notwithstanding subsection (b), the total quantity of emission allowances distributed pursuant to this section shall not exceed 80,000,000.

Title VIII Efficiency and Renewable Energy

Subtitle A Efficient Buildings

Section 811 Allocation

Not later than 330 days before the beginning of each calendar year from 2012 through 2050, the Administrator shall allocate to the Climate Change Technology Board established by section 441 0.75 percent of the emission allowances established pursuant to subsection (a) of section 201 for that calendar year, for the purpose of conducting the Efficient Buildings Program established pursuant to section 812.

Section 812 Efficient Buildings Program

(a) IN GENERAL.—The Climate Change Technology Board shall establish and administer a program, to be known as the "Efficient Buildings Program," for distributing the emission allowances allocated pursuant to section 811 among owners of buildings in the United States as reward for constructing highly-efficient buildings in the United States and for increasing the efficiency of existing buildings in the United States.

(b) REQUIREMENTS – Allowances shall be distributed to building owners to the extent their energy efficient building projects result in verifiable, additional, and enforceable improvements in energy performance—
(1) in new or renovated buildings that demonstrate exemplary energy performance by achieving a minimum score of 75 on the Energy Star benchmarking tool or an equivalent score on an established energy performance benchmarking metric as determined by the regulations adopted pursuant to section 812 (c); and
(2) in retrofitted existing buildings that demonstrate substantial improvement in their score or rating along the Energy Star benchmarking tool by a minimum of 30 points or an equivalent improvement using an established energy performance benchmarking metric as determined by the regulations adopted pursuant to section 812.

(c) PRIORITY.—In distributing the allowances, priority will given to projects—
(1) completed by building owners with a proven track record of building energy performance; or
(2) that result in measurable greenhouse gas reduction benefits not encompassed within the Energy Star metrics.

(d) REGULATIONS REQUIRED – Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules implementing this section.

Section 813 Discontinuation of EPA Program

Not later than the date of the establishment of the Efficient Buildings Program under section 812, the program established by section 121 shall be discontinued.

Subtitle B Efficient Equipment and Appliances

Section 821 Allocation

Not later than 330 days before the beginning of each calendar year from 2012 through 2050, the Administrator shall allocate to the Climate Change Technology Board established by section 441 0.75 percent of the emission allowances established pursuant to subsection (a) of section 201 for that calendar year, for the purpose of conducting the Super-Efficient Equipment and Appliances Development Program established pursuant to section 822.

Section 822 Super-Efficient Equipment and Appliances Deployment (SEAD) Program

(a) IN GENERAL.—The Climate Change Technology Board shall establish and administer a program, to be known as the "Super-Efficient Equipment and Appliances Development Program" or "SEAD Program," for distributing the emission allowances allocated pursuant to section 821 among retailers and distributors in the United States as reward for increasing their sales of high-efficiency building equipment, high-efficiency consumer electronics, and high-efficiency household appliances through marketing strategies such as consumer rebated, with the goal of minimizing life-cycle costs for consumers and maximizing public benefit.

(b) SIZE OF INDIVIDUAL REWARDS.—The size of each reward for each product-type shall be determined by the Climate Change Technology Board in consultation with the Administrator, the Secretary of Energy, state and utility efficiency program administrators, and national laboratories.

(c) REPORTING.—Participating retailers and distributors shall be required to report the number of products sold within each product-type and wholesale purchase-price data to the Climate Change Technology Board on a confidential basis for program-design purposes.

(d) COST-EFFECTIVENESS REQUIREMENT.—
(1) DEFINITIONS.—In this subsection—
(A) SAVINGS.—The term "savings" means megawatt-hours of electricity or million British thermal units of other fuels saved by a product, in comparison to projected energy consumption based on the efficiency performance of displaced new product sales.
(B) COST-EFFECTIVENESS.—The term "cost-effectiveness" means the product obtained by multiplying—
(i) the net number of highly-efficient pieces of equipment, electronics, and appliances sold by a retailer or distributor in a calendar year; by
(ii) the savings during the projected useful life, but not to exceed 10 years, of the pieces of equipment, electronics, and appliances, including the impact of any documented measures to retire low-performing devices at the time of purchase of highly-efficient substitutes.
(2) REQUIREMENT.—The Climate Change Technology Board shall make cost-effectiveness a top priority in distributing emission allowances pursuant to this section.

(e) DISCONTINUATION OF EPA PROGRAM.—Not later than the date of the establishment of the SEAD Program under this section, the program established by section 122 shall be discontinued.

Subtitle C Efficient Manufacturing

Section 831 Allocation

Not later than 330 days before the beginning of each calendar year from 2012 through 2050, the Administrator shall allocate to the Climate Change Technology Board established by section 441 0.75 percent of the emission allowances established pursuant to subsection (a) of section 201 for that calendar year, for the purpose of conducting the Efficient Manufacturing Program established pursuant to section 832.

Section 832 Efficient Manufacturing Program

(a) IN GENERAL.—The Climate Change Technology Board shall establish and administer a program, to be known as the "Efficient Manufacturing Program," for distributing the emission allowances allocated pursuant to section 831 among owners and operators of manufacturing facilities in the United States, as reward for achieving high levels of efficiency in their operations.

(b) REQUIREMENTS.—The Efficient Manufacturing Program established pursuant to subsection (a) shall provide—
(1) that the rewards of emission allowances under the program shall include rewards for use of recycled material in manufacturing; and
(2) that the Climate Change Technology Board shall place priority in distributing emission allowances on entities that—
(1) document the greatest use of domestically sourced parts and components;
(2) return to productive service existing idle manufacturing capacity;
(3) are located in States with the greatest availability of unemployed manufacturing workers;
(4) compensate workers at a minimum amount equal to at least 100 percent of the State average manufacturing wage, plus health insurance benefits;
(5) demonstrate a high probability of commercial success; and
(6) achieve other criteria, as the Climate Change Technology Board determines to be appropriate.

Subtitle D Renewable Energy

Section 841 Allocation

(a) FIRST PERIOD.—Not later than 330 days before the beginning of each calendar year from 2012 through 2030, the Administrator shall allocate to the Climate Change Technology Board established by section 441 4 percent of the emission allowances established pursuant to subsection (a) of section 201 for that calendar year.

(b) SECOND PERIOD.—Not later than 330 days before the beginning of each calendar year from 2031 through 2050, the Administrator shall allocate to the Climate Change Technology Board established by section 441 1 percent of the emission allowances established pursuant to subsection (a) of section 201 for that calendar year.

Section 842 Bonus Allowances for Renewable Energy

(a) IN GENERAL.—The Climate Change Technology Board shall distribute the emission allowances allocated pursuant to section 841 among owners, operators, and developers of facilities, including

distributed-energy and transmission systems, in the United States that harness a renewable-energy source, as reward for the start-up, expansion, and operation of such facilities.

(b) DEFINITION.—In this section, the term “renewable-energy source” means any one or a combination of—
(1) solar;
(2) wind;
(3) geothermal;
(3) incremental hydropower;
(4) biomass;
(5) ocean waves;
(6) landfill gas;
(7) livestock methane; and
(8) fuel cells powered with a renewable-energy source.

(c) ADMINISTRATION.—In distributing emission allowances pursuant to this section, the Climate Change Technology Board shall provide appropriate rewards for regulated investor-owned utilities, municipal utilities, electric cooperatives, and independent power producers.

(d) LIMITATION.—A project may not receive a distribution of emission allowances under this section if the project receives an award under subtitle A of Title IX or is supported under subtitle A or subtitle C of Title III.

(e) REQUIREMENTS.—
(1) A reward of allowances for construction, alteration, or repair under this section shall be conditioned on a written assurance of payment, to all laborers and mechanics employed by contractors or subcontractors for that work, of wages at rates not less than those prevailing on the same types of work in the locality, as determined by the Secretary of Labor in accordance with sections 3141-3144, 3146, and 3147 of title 40, United States Code.
(2) The Secretary of Labor shall have, with respect to the labor standards described in this subsection, the authority and functions set forth in Reorganization Plan Number 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40, United States Code.

Title IX Low-Carbon Electricity and Advanced Research

Subtitle A Low- and Zero-Carbon Electricity Technology

Section 911 Definitions

In this section:

(1) SAVINGS.—The term “savings” means megawatt-hours of electricity or million British thermal units of natural gas saved by a product, in comparison to projected energy consumption under an efficiency standard applicable to the product.

(2) ENGINEERING INTEGRATION COSTS.—The term “engineering integration costs” includes the costs of engineering tasks relating to—

(A) redesigning manufacturing processes to begin producing qualifying components and zero- or low-carbon generation technologies;
(B) designing new tooling and equipment for production facilities that produce qualifying components and zero- or low-carbon generation technologies; and
(C) establishing or expanding manufacturing operations for qualifying components and zero- or low-carbon generation technologies.

(3) QUALIFYING COMPONENT.—The term "qualifying component" means a component that the Secretary of Energy determines to be specially designed for zero- or low-carbon generation technology.

(4) ZERO- OR LOW-CARBON GENERATION.—The term "zero- or low-carbon generation" means generation of electricity by an electric generation unit that—
(A) emits no carbon dioxide into the atmosphere; and
(B) was placed into commercial service after the date of enactment of this Act.

(5) ZERO- OR LOW-CARBON GENERATION TECHNOLOGY.—The term "zero- or low-carbon generation technology" means a technology used to create zero- or low-carbon generation.

Section 912 Low- and Zero-Carbon Electricity Technology Fund

There is established in the Treasury a Fund to be known as the "Low- and Zero-Carbon Electricity Technology Fund."

Section 913 Auctions

(a) FIRST PERIOD.—Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2012 through 2021, the Administrator shall, for the purpose of raising cash to deposit into the Low- and Zero-Carbon Electricity Technology Fund, auction 1.75 percent of the quantity of emission allowances established for that calendar year pursuant to subsection (a) of section 201.

(b) SECOND PERIOD.— Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2022 through 2030, the Administrator shall, for the purpose of raising cash to deposit into the Low- and Zero-Carbon Electricity Technology Fund, auction 2 percent of the quantity of emission allowances established for that calendar year pursuant to subsection (a) of section 201.

(c) THIRD PERIOD.—Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2031 through 2050, the Administrator shall, for the purpose of raising cash to deposit into the Low- and Zero-Carbon Electricity Technology Fund, auction 1 percent of the quantity of emission allowances established for that calendar year pursuant to subsection (a) of section 201.

Section 914 Deposits

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 913, immediately upon receipt of those proceeds, into the Low- and Zero-Carbon Electricity Technology Fund.

Section 915 Use of Funds

In each calendar year from 2012 through 2050, all funds deposited into the Low- and Zero-Carbon Electricity Technology Fund in the preceding year pursuant to section 914 shall be made available, without further appropriation or fiscal year limitation, to the Climate Change Technology Board established by section 441 for the financial incentives program established pursuant to section 916.

Section 916 Financial Incentives Program

During each fiscal year beginning on or after October 1, 2010, 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.

Section 917 Requirements

(a) IN GENERAL.—The Climate Change Technology Board shall make awards under this section to domestic producers of new zero- or low-carbon generation and domestic facilities and operations of manufacturers and component suppliers of zero- or low-carbon generation technology—
(1) in the case of producers of new zero- or low-carbon generation, based on the bid of each producer 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 noted in section 919.

(b) ACCEPTANCE OF BIDS.—
(1) IN GENERAL.—In making awards under paragraphs (1) and (2) of subsection (a), the Climate Change Technology Board shall—
(A) solicit bids for reverse auction from appropriate producers and manufacturers, as determined by the Climate Change Technology Board; and
(B) award financial incentives to the producers and manufacturers that submit the lowest bids that meet the requirements established by the Climate Change Technology Board.
(2) FACTORS FOR CONVERSION.—
(A) IN GENERAL.—For the purpose of assessing bids under paragraph (1), the Climate Change Technology Board shall specify a factor for converting megawatt-hours of electricity and million British thermal units of natural gas to common units.
(B) REQUIREMENT.—The conversion factor shall be based on the relative greenhouse gas emission benefits of electricity and natural gas conservation.

Section 918 Forms of Awards

(a) ZERO- AND LOW-CARBON GENERATORS.—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—
(1) the amount bid by the producer of the zero- or low-carbon generation; and
(2) the 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, where the first year of commercial service of the generating unit shall be 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 facility establishment or conversion costs for zero- or low-carbon generation technology shall be in an amount equal to not more than 30 percent of the cost of—
(A) establishing, reequipping, or expanding a manufacturing facility to produce—
(i) qualifying zero- or low-carbon generation technology; or
(ii) qualifying components;
(B) engineering integration costs of zero- or low-carbon generation technology and qualifying components; and
(C) property, machine tools, and other equipment acquired or constructed primarily to enable the recipient to test equipment necessary for the construction or operation of a zero- or low-carbon generation facility.
(2) MINIMUM AMOUNT.—The Climate Change Technology Board shall use not less than ¼ of the amounts made available to carry out this section to make awards to entities for the manufacturing of zero- or low-carbon generation technology.

Section 919 Selection Criteria

(a) IN GENERAL.—In making awards under this subtitle to qualifying manufacturers of zero- or low-carbon generation technology and qualifying components, the Climate Change Technology Board shall select manufacturers that—
(1) document the greatest use of domestically sourced parts and components;
(2) return to productive service existing idle manufacturing capacity;
(3) are located in States with the greatest availability of unemployed manufacturing workers;
(4) compensate workers at a minimum amount equal to at least 100 percent of the State average manufacturing wage, plus health insurance benefits;
(5) demonstrate a high probability of commercial success; and
(6) achieve other criteria, as the Climate Change Technology Board determines to be appropriate.

(b) REQUIREMENTS.—
(1) Funding for construction, alteration, or repair under this section shall be conditioned on a written assurance of payment, to all laborers and mechanics employed by contractors or subcontractors for that work, of wages at rates not less than those prevailing on the same types of work in the locality, as determined by the Secretary of Labor in accordance with sections 3141-3144, 3146, and 3147 of title 40, United States Code.
(2) The Secretary of Labor shall have, with respect to the labor standards described in this paragraph, the authority and functions set forth in Reorganization Plan Number 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40, United States Code.

Subtitle B Advanced Research

Section 921 Auctions

Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2012 through 2050, the Administrator shall, for the purpose of raising cash to deposit into the fund described in section 922,

auction 0.25 percent of the quantity of emission allowances established for that calendar year pursuant to subsection (a) of section 201.

Section 922 Deposits

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 921, immediately upon receipt of those proceeds, into an transformation acceleration fund in the Treasury that is administered by the Director of the Advanced Research Projects Agency within the Department of Energy.

Section 923 Use of Funds

No disbursements of funds deposited pursuant to section 922 shall be made except pursuant to an appropriation Act.

Title X Future of Coal

Subtitle A Kick-Start for Carbon Capture and Sequestration

Section 1011 Carbon Capture and Sequestration Technology Fund

There is established in the Treasury a Fund to be known as the "Carbon Capture and Sequestration Technology Fund."

Section 1012 Auctions

Not later than 120 days after the date of enactment of this Act, the Administrator shall, for the purpose of raising cash to deposit into the Carbon Capture and Sequestration Technology Fund, auction 1 percent of the quantity of emission allowances established pursuant to subsection (a) of section 201 for calendar years 2012 through 2025.

Section 1013 Deposits

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 1012, immediately upon receipt of those proceeds, into the Carbon Capture and Sequestration Technology Fund.

Section 1014 Use of Funds

In each calendar year from 2012 through 2050, all funds deposited into the Carbon Capture and Sequestration Technology Fund in the preceding year pursuant to section 1013 shall be made available, without further appropriation or fiscal year limitation, to the Climate Change Technology Board established by section 441 for the early development program established pursuant to section 1015.

Section 1015 Kick-Start Program

(a) IN GENERAL.—The Climate Change Technology Board shall use the funds in the Carbon Capture and Sequestration Technology Fund to establish and implement a program for early deployment of carbon capture and sequestration technology in the United States.

(b) GOAL.—The Climate Change Technology Board shall design and operate the program established pursuant to subsection (a) with the goal of rapidly bringing into operation in the United States between 5 and 10 commercial facilities that capture and geologically sequester carbon released when coal is used to generate electricity.

(b) BASIS.—The program established pursuant to subsection (a) shall be based upon 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 on January 29, 2008.

(e) COAL DIVERSITY.—The program established pursuant to subsection (a) shall ensure that a range of domestic coal types are employed in the facilities receiving support under the program.

(f) PRIORITY.—Awards of financial support under the program established pursuant to subsection (a) shall be made in a manner that maximizes the avoidance or reduction of greenhouse-gas emissions.

(g) REQUIREMENTS.—
(1) Funding for construction, alteration, or repair under this section shall be conditioned on a written assurance of payment, to all laborers and mechanics employed by contractors or subcontractors for that work, of wages at rates not less than those prevailing on the same types of work in the locality, as determined by the Secretary of Labor in accordance with sections 3141-3144, 3146, and 3147 of title 40, United States Code.
(2) The Secretary of Labor shall have, with respect to the labor standards described in this subsection, the authority and functions set forth in Reorganization Plan Number 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40, United States Code.

Subtitle B Long-Term Carbon Capture and Sequestration Incentives

Section 1021 Allocation

Not later than 2 years after the date of enactment of this Act, the Administrator shall establish a Bonus Allowance Account for carbon capture and sequestration projects in the United States, and shall allocate to the Bonus Allowance Account quantities of the emission allowances established for calendar years 2012 through 2050 pursuant to subsection (a) of section 201, as follows:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Allocate to the Bonus Allowance Account
2012	3
2013	3
2014	3
2015	3
2016	3

2017	3
2018	3
2019	3
2020	3
2021	3
2022	3
2023	3
2024	3
2025	3
2026	4
2027	4
2028	4
2029	4
2030	4
2031	1
2032	1
2033	1
2034	1
2035	1
2036	1
2037	1
2038	1
2039	1
2040	1
2041	1
2042	1
2043	1
2044	1
2045	1
2046	1
2047	1
2048	1
2049	1
2050	1

Section 1022 Qualifying Projects

(a) DEFINITIONS.—In this section:
(1) COMMENCED.—The term “commenced”, with respect to construction, means that an owner or operator has obtained the necessary permits to undertake a continuous program of construction and has entered into a binding contractual obligation, with substantial financial penalties for cancellation, to undertake such a program.
(2) CONSTRUCTION.—The term “construction” means the fabrication, erection, or installation of the technology for the carbon capture and sequestration project.
(3) NEW ENTRANT.—The term “new entrant” means an electric generating unit that began operation after the date of enactment of this Act.

(b) ELIGIBILITY.—To be eligible to receive emission allowances under this subtitle, a carbon capture and sequestration project shall—
(1) comply with such criteria and procedures as the Administrator may establish, including a requirement, as prescribed in subsection (c), for an annual emissions performance standard for carbon dioxide emissions from any unit for which allowances are allocated;
(2) sequester, in a geological formation permitted by the Administrator for that purpose in accordance with regulations promulgated under part C of the Safe Drinking Water Act (42 U.S.C. 300h et seq.), carbon dioxide captured from any unit for which allowances are allocated;
(3) have begun operation during the period beginning on January 1, 2008, and ending on December 31, 2035; and
(4) not produce a transportation fuel that contains more than 10 kilograms of fossil-based carbon per million British thermal units, higher heat value.

(c) EMISSION PERFORMANCE STANDARDS.—Subject to subsection (d), a carbon capture and sequestration project shall be eligible to receive emission allowances under this subtitle only if the project achieves 1 of the following emissions performance standards for limiting carbon dioxide emissions from the unit:
(1) An electric generation unit that is not a new entrant and that commences operation of its carbon capture and sequestration equipment in 2015 or earlier must treat at least the amount of flue gas equivalent to 100 megawatts of the generation unit's output and be designed to capture and sequester at least 85 percent of the carbon dioxide in that flue gas. The bonus allowance adjustment ratio of section 1023(b) shall apply only to the megawatt-hours and carbon dioxide emissions attributable to the treated share of the generation unit's flue gas.
(2) An electric generation unit that is not a new entrant and that commences operation of its carbon capture and sequestration equipment after 2016 must achieve an average annual emissions rate of not more than 1,200 pounds of carbon dioxide per megawatt-hour of net electricity generation, after subtracting the carbon dioxide that is captured and sequestered.
(3) A new entrant electric generation unit for which construction of the unit commenced prior to July 1, 2018 must achieve an average annual emissions rate of not more than 800 pounds of carbon dioxide per megawatt-hour of net electricity generation, after subtracting the carbon dioxide that is captured and sequestered.
(4) A new entrant electric generation unit for which construction of the unit commenced on or after July 1, 2018 must achieve an average annual emissions rate of not more than 350 pounds of carbon dioxide per megawatt-hour of net electricity generation, after subtracting the carbon dioxide that is captured and sequestered.
(5) Any unit at a covered facility that is not an electric generation unit must achieve an average annual emissions rate that is achieved by the capture and sequestration of a minimum of 85 percent of the total carbon dioxide emissions produced by the unit.

(d) ADJUSTMENT OF PERFORMANCE STANDARDS.—
(1) IN GENERAL.—The Climate Change Technology Board may adjust the emissions performance standard for a carbon capture and sequestration project under subsection (c) for an electric generation unit that uses subbituminous coal, lignite, or petroleum coke in significant amounts.
(2) REQUIREMENT.—In any case described in paragraph (1), the performance standard for the project shall prescribe an annual emissions rate that requires the project to achieve an equivalent reduction from uncontrolled carbon dioxide emissions levels from the use of subbituminous coal, lignite, or petroleum coke, as compared to the emissions that the project would have achieved if that unit had

combusted only bituminous coal during the particular year.

Section 1023 Distribution

(a) IN GENERAL.—Subject to section 1024, for each of calendar years 2012 through 2039, the Administrator shall distribute emission allowances from the Bonus Allowance Account to each qualifying project under this subtitle in a quantity equal to the product obtained by multiplying—
(1) the bonus allowance adjustment factor, as determined under subsection (b);
(2) the number of metric tons of carbon dioxide emissions avoided through capture and geologic sequestration of emissions by the project; and
(3) the bonus allowance rate for that calendar year, as provided in the following table:

Calendar Year	Bonus Allowance Rate
2012	2
2013	2
2014	2
2015	2
2016	2
2017	2
2018	1.9
2019	1.8
2020	1.7
2021	1.6
2022	1.3
2023	1.2
2024	1.1
2025	1
2026	0.9
2027	0.8
2028	0.7
2029	0.6
2030	0.5
2031	0.5
2032	0.5
2033	0.5
2034	0.5
2035	0.5
2036	0.5
2037	0.5
2038	0.5
2039	0.5

(4) For the purpose of determining the number of metric tons of carbon dioxide avoided in paragraph (2), the Administrator shall, in the first year, count as avoided carbon dioxide emissions the proportion of carbon dioxide emissions the owner or operator certifies as the designed level of capture for the project, subject to verification and adjustment, and in subsequent years shall count the higher of the actual metric tons of carbon dioxide sequestered in the preceding year or the proportion of emissions the owner or operator certifies as the result of a modification to the designed capture level of the

project, subject to verification and adjustment.

(b) BONUS ALLOWANCE ADJUSTMENT RATIO.—The Administrator shall determine the bonus allowance adjustment factor by dividing a carbon dioxide emissions rate of 350 pounds per megawatt-hour by the annual carbon dioxide emissions rate, on a pounds per megawatt-hour basis, that a qualifying project at the electric generation unit achieved during a particular year, except that—
(1) the factor shall be equal to 1 in the case of a project that qualifies under section 1022(c)(1) during the first 4 years that emissions allowances are distributed to the project;
(2) the factor shall be equal to 1 in the case of a project that qualifies under section 1022(c)(2) during the first 4 years that emission allowances are distributed to the project;
(3) the factor shall be equal to 1 in the case of a project that qualifies under section 1022(c)(3) during the first 8 years that emission allowances are distributed to the project; and
(4) the factor shall not exceed 1 for any qualifying project.

(c) NON-ELECTRIC GENERATING UNITS.—
(1) For a qualifying project other than an electric generating unit, the Administrator shall by rule reduce the bonus allowance rates set forth in section 1023(a)(3) so that the bonus allowance rate for such projects does not exceed the incremental capital and operating costs for carrying out sequestration of carbon dioxide from the facility.
(2) In distributing emission allowances under this subtitle, the Administrator shall distribute not more than 20 percent of the quantity of emission allowances in the Bonus Allowance Account for non-electric generating units described in section 1022(c)(4).

(e) ENHANCED OIL RECOVERY.—For a carbon capture and sequestration project sequestering in a geologic formation for purposes of enhanced oil recovery, the Administrator shall by rule reduce the bonus allowance rates set forth in section 1023(a)(3) to reflect the lower cost of such projects when compared to sequestration into geologic formations solely for purposes of disposal.

Section 1024 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.

Section 1025 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 will be insufficient to allow the distribution, in that calendar year, of the number of allowances that otherwise would be distributed under section 1023 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

Section 1031 National Drinking-Water Regulations

(a) In general – Section 1421 of the Safe Drinking Water Act (42 U.S.C.300h) is amended–
(1) In subsection (b)(1) by striking "subsection (d)(2)" and inserting "subsection (e)(2)";
(2) By redesignating subsection (d) as subsection (e); and
(3) By inserting after subsection (c) the following:
"(d) CARBON DIOXIDE –
"(1) Regulations – Not later than 1 year after the date of enactment of the Lieberman-Warner Climate Security Act of 2007, the Administrator shall promulgate regulations establishing standards for permitting commercial-scale underground injection of carbon dioxide for purposes of geological sequestration to address climate change. Such standards shall include, but need not be limited to, requirements–
"(A) For monitoring and controlling the long-term storage of carbon dioxide, as well as avoiding, to the maximum extent practicable, and quantifying any release of carbon dioxide into the atmosphere, and for ensuring 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 may be necessary or desirable, allowing for the use of one or more financial instruments, including but not limited to: insurance, surety bond, letter of credit, financial guarantee, or qualification as a self-insurer. The Administrator is authorized to specify the policy or other contractual terms, conditions, or defenses which are necessary to establish evidence of financial responsibility for the purposes of this section.
"(C) Relating to long-term care and stewardship associated with commercial scale geological sequestration, including financial responsibility as may be necessary or desirable, consistent with the degree and duration of risk associated with the geological sequestration of carbon dioxide for purposes of, paragraph (A) above."

(b) Conforming Amendment.—Section 1447(a)(4) of the Safe Drinking Water Act (42 U.S.C. 300j–6(a)(4)) is amended by striking "section 1421(d)(2)" and inserting "section 1421(e)(2)".

Section 1032 Assessment of Geological Storage Capacity for Carbon Dioxide

(a) Definitions.—In this section:
(1) ASSESSMENT.—The term "assessment" means the national assessment of capacity for carbon dioxide completed under subsection (f).
(2) CAPACITY.—The term "capacity" means the portion of a storage formation that can retain carbon dioxide in accordance with the requirements (including physical, geological, and economic requirements) established under the methodology developed under subsection (b).
(3) ENGINEERED HAZARD.—The term "engineered hazard" includes the location and completion history of any well that could affect a storage formation or capacity.
(4) RISK.—The term "risk" includes any risk posed by a geomechanical, geochemical, hydrogeological, structural, or engineered hazard.
(5) SECRETARY.—The term "Secretary" means the Secretary of the Interior, acting through the Director of the United States Geological Survey.
(6) STORAGE FORMATION.—The term "storage formation" means a deep saline formation, unmineable coal seam, oil or gas reservoir, or other geological formation that is capable of accommodating a volume of

industrial carbon dioxide.

(b) Methodology.—Not later than 1 year after the date of enactment of this Act, the Secretary shall develop a methodology for conducting an assessment under subsection (f), taking into consideration—
(1) the geographical extent of all potential storage formations in all States;
(2) the capacity of the potential storage formations;
(3) the injectivity of the potential storage formations;
(4) an estimate of potential volumes of oil and gas recoverable by injection and storage of industrial carbon dioxide in potential storage formations;
(5) the risk associated with the potential storage formations; and
(6) the work performed to develop the Carbon Sequestration Atlas of the United States and Canada completed by the Department of Energy in April 2006.

(c) Coordination.—
(1) FEDERAL COORDINATION.—
(A) CONSULTATION.—The Secretary shall consult with the Secretary of Energy and the Administrator regarding data sharing and the format, development of methodology, and content of the assessment to ensure the maximum usefulness and success of the assessment.
(B) COOPERATION.—The Secretary of Energy and the Administrator shall cooperate with the Secretary to ensure, to the maximum extent practicable, the usefulness and success of the assessment.
(2) STATE COORDINATION.—The Secretary shall consult with State geological surveys and other relevant entities to ensure, to the maximum extent practicable, the usefulness and success of the assessment.

(d) External Review and Publication.—On completion of the methodology under subsection (b), the Secretary shall—
(1) publish the methodology and solicit comments from the public and the heads of affected Federal and State agencies;
(2) establish a panel of individuals with expertise in the matters described in paragraphs (1) through (5) of subsection (b) composed, as appropriate, of representatives of Federal agencies, institutions of higher education, nongovernmental organizations, State organizations, industry, and international geosciences organizations to review the methodology and comments received under paragraph (1); and
(3) on completion of the review under paragraph (2), publish in the Federal Register the revised final methodology.

(e) Periodic Updates.—The methodology developed under this section shall be updated periodically (including not less frequently than once every 5 years) to incorporate new data as the data becomes available.

(f) National Assessment.—
(1) IN GENERAL.—Not later than 2 years after the date of publication of the methodology under subsection (d)(3), the Secretary, in consultation with the Secretary of Energy and State geological surveys, shall complete a national assessment of the capacity for carbon dioxide storage in accordance with the methodology.
(2) GEOLOGICAL VERIFICATION.—As part of the assessment, the Secretary shall carry out a characterization program to supplement the geological data relevant to determining storage capacity in carbon dioxide in geological storage formations, including—
(A) well log data;
(B) core data; and

(C) fluid sample data.
(3) PARTNERSHIP WITH OTHER DRILLING PROGRAMS.—As part of the drilling characterization under paragraph (2), the Secretary shall enter into partnerships, as appropriate, with other entities to collect and integrate data from other drilling programs relevant to the storage of carbon dioxide in geologic formations.
(4) INCORPORATION INTO NATCARB.—
(A) IN GENERAL.—On completion of the assessment, the Secretary shall incorporate the results of the assessment using, to the maximum extent practicable—
(i) the NatCarb database; or
(ii) a new database developed by the Secretary, as the Secretary determines to be necessary.
(B) RANKING.—The database shall include the data necessary to rank potential storage sites—
(i) for capacity and risk;
(ii) across the United States;
(iii) within each State;
(iv) by formation; and
(v) within each basin.
(5) REPORT.—Not later than 180 days after the date on which the assessment is completed, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science and Technology of the House of Representatives a report describing the results of the assessment.
(6) PERIODIC UPDATES.—The assessment shall be updated periodically (including not less frequently than once every 5 years) as necessary to support public and private sector decisionmaking, as determined by the Secretary.

Section 1033 Study of the Feasibility Relating to Construction and Operation of Pipelines and Geological Carbon Dioxide Sequestration Activities

(a) IN GENERAL.—The Secretary of Energy, in coordination with the Administrator, the Chairman of the Federal Energy Regulatory Commission, the Secretary of Transportation, and the Secretary of the Interior, in consultation with industry, financial institutions, investors, owners and operators, regulators, academia, and other stakeholders, shall conduct a study to assess the feasibility of the construction of—
(1) pipelines to be used for the transportation of carbon dioxide for the purpose of sequestration or enhanced oil recovery; and
(2) geological carbon dioxide sequestration facilities.

(b) SCOPE.—The study shall consider—
(1) any barrier or potential barrier in existence as of the date of enactment of this Act, including any technical, siting, financing, or regulatory barrier, relating to—
(A) the construction and operation of pipelines to be used for the transportation of carbon dioxide for the purpose of sequestration or enhanced oil recovery; or
(B) the construction and operation of facilities for the geological sequestration of carbon dioxide;
(2) any market risk (including throughput risk) relating to—
(A) the construction and operation of pipelines to be used for the transportation of carbon dioxide for the purpose of sequestration or enhanced oil recovery; or
(B) the construction and operation of facilities for the geological sequestration of carbon dioxide;
(3) any regulatory, financing, or siting option that, as determined by the Secretary of Energy, would—
(A) mitigate any market risk described in paragraph (2); or
(B) help ensure the construction and operation of pipelines dedicated to the transportation of carbon

dioxide for the purpose of sequestration or enhanced oil recovery;
(4) the means by which to ensure the safe handling, transportation, and sequestration of carbon dioxide;
(5) any preventive measure to ensure the integrity of pipelines to be used for the transportation of carbon dioxide for the purpose of sequestration or enhanced oil recovery; and
(6) any other appropriate use, as determined by the Secretary of Energy, in coordination with the Administrator, the Chairman of the Federal Energy Regulatory Commission, the Secretary of Transportation, and the Secretary of the Interior.
(7) The means by which to ensure that siting is carried out in a socioeconomically just, environmentally and ecologically sound manner.
(8) The Secretary shall consider the findings of the Task Force established under Section 1034 of this Act, and consult with industry, financial institutions, investors, owners and operators, regulators, academic experts and stakeholders.

(c) Report.—Not later than 180 days after the date of enactment of this Act, the Secretary of Energy shall submit to Congress a report describing the results of the study.

Section 1034 Liabilities for Closed Geological Storage Sites

(a) ESTABLISHMENT OF TASK FORCE.—Not later than 6 months after the date of enactment of this Act, the Administrator shall establish a task force, with equal representation from the public, academic subject matter experts, and industry, to conduct a study of the statutory framework, environmental and safety considerations, and financial implications of potential Federal assumption of liabilities with respect to closed geological sites.

(b) CHARGE OF TASK FORCE.—At a minimum, the task force shall consider:
(1) Procedures for the certification and approval of geological storage sites and projects, including siting and monitoring standards.
(2) Existing statutory authority under the Safe Drinking Water Act and Clean Air Act to address issues related to long-term financial responsibility and long-term liabilities.
(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, transfer of financial responsibility, and possible indemnity from long-term liabilities.

Title XI Future of Transportation

Subtitle A Kick-Start for Clean Commercial Fleets

Section 1111 Purpose

The purpose of this subtitle is to accelerate the commercialization and diffusion of fuel-efficient, medium- and heavy-duty hybrid commercial trucks, buses, and vans in the United States.

Section 1112 Allocation

Not later than 2 years after the date of enactment of this Act, the Administrator shall allocate to the program established pursuant to section 1113 0.5 percent of the aggregate quantity of emission allowances established pursuant to subsection (a) of section 201 for calendar years 2012 through 2017.

Section 1113 Clean Medium- and Heavy-Duty Hybrid Fleets Program

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules establishing a program for distributing emission allowances allocated pursuant to section 1112 to entities in the United States as immediate reward for their purchase of advanced medium- and heavy-duty hybrid commercial vehicles, based on demonstrated increases in fuel efficiency.

(b) REQUIREMENTS.—The rules promulgated pursuant to subsection (a) shall provide that—
(1) only purchasers of commercial vehicles weighing at least 8,500 pounds shall be eligible for receipt of emission allowances under the program;
(2) the purchasers of qualifying vehicles will have certainty of magnitude of the reward and the speed of its delivery at the time they purchase such vehicles;
(2) rewards scale upwards with fuel efficiency;
(3) that the allocation be subdivided into at least three classes of vehicle weight, in order to ensure—
(A) adequate availability of rewards for different categories of commercial vehicles; and
(B) that the rewards for heavier, more expensive vehicles are proportional to those for lighter, less expensive vehicles;
(4) rewards decrease over time, in order to encourage early purchases of hybrid vehicles; and
(5) to the extent feasible, all emission allowances allocated to the program shall have been distributed as rewards no later than five years after the date of enactment of this Act.

(c) DISCONTINUATION OF EPA PROGRAM.—Not later than the date of the establishment of the Clean Medium- and Heavy-Duty Hybrid Fleets Program under this section, the program established by section 123 shall be discontinued.

Subtitle B Advanced Vehicle Manufacturers

Section 1121 Establishment

There is established in the Treasury a Fund to be known as the “Climate Change Transportation Technology Fund.”

Section 1122 Auctions

Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2012 through 2050, the Administrator shall, for the purpose of raising cash to deposit into the Climate Change Transportation Technology Fund, auction 1 percent of the quantity of emission allowances established for that calendar year pursuant to subsection (a) of section 201.

Section 1123 Deposits

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 1122, immediately upon receipt of those proceeds, into the Climate Change Transportation Technology Fund.

Section 1124 Use of Funds

In each calendar year from 2012 through 2050, all funds deposited into the Climate Change Transportation Technology Fund in the preceding year pursuant to section 1123 shall be made available, without further appropriation or fiscal year limitation, to carry out the Advanced Technology Vehicles Manufacturing Incentive Program established by section 136 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17013).

Subtitle C Cellulosic Biofuel

Section 1131 Allocation

(a) FIRST PERIOD.—Not later than 330 days before the beginning of each calendar years 2012 and 2013, the Administrator shall allocate to the program established pursuant to section 1132 1 percent of the emission allowances established pursuant to subsection (a) of section 201 for that calendar year.

(b) SECOND PERIOD.— Not later than 330 days before the beginning of each calendar year from 2014 through 2017, the Administrator shall allocate to the program established pursuant to section 1132 0.75 percent of the emission allowances established pursuant to subsection (a) of section 201 for that calendar year.

(c) THIRD PERIOD.— Not later than 330 days before the beginning of each calendar year from 2018 through 2030, the Administrator shall allocate to the program established pursuant to section 1132 1 percent of the emission allowances established pursuant to subsection (a) of section 201 for that calendar year.

Section 1132 Cellulosic Biofuel Program

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules establishing a program for distributing emission allowances allocated pursuant to section 1131 to entities in the United States as reward for their production in the United States of fuel from cellulosic biomass grown in the United States.

(b) REQUIREMENTS.—The rules promulgated pursuant to subsection (a) shall provide—
(1) that emission allowances be distributed across a variety of feedstocks and a variety of regions of the United States;
(2) that emission allowances be distributed on a competitive basis to projects that have produced in the United States fuels that—
(A) meet United States fuel and emissions specifications;
(B) help diversify domestic transportation energy supplies;
(C) improve or maintain air, water, sol, and habitat quality, and protect scarce water supplies;
(D) qualify as “cellulosic biofuel” under Title II, subtitle A, section 201 of the Energy Independence and Security Act of 2007; and
(3) that the distributions of emission allowances be weighted to favor—

(A) low costs to consumers over the medium- and long-terms;
(B) demonstrably low lifecycle greenhouse-gas emissions, taking into account direct and indirect land-use changes;
(C) high long-term technological potential, taking into consideration production volume, feedstock availability, and process efficiency;
(D) low environmental impacts, taking into consideration air, water, and habitat quality; and
(E) fuels with the ability to serve multiple economic segments of the transportation sector, including the aviation and marine segments.

Subtitle D Low-Carbon Fuel Standard

Section 1141 Findings

Congress finds that—

(1) oil used for transportation contributes significantly to air pollution, including greenhouse gases, water pollution, and other adverse impacts on the environment; and

(2) to reduce greenhouse-gas emissions, the United States should rely increasingly on advanced, clean, low-carbon fuels for transportation.

Section 1142 Definitions

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

(a) by redesignating subparagraphs (B), (C), and (D) as subparagraphs (J), (G), and (H), respectively, and moving those subparagraphs so as to appear in alphabetical order;

(b) by inserting after subparagraph (A) the following:

"(B) CULTIVATED NOXIOUS PLANT.—For the purposes of paragraph (11) of this subsection, 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.
"(C) FUEL EMISSION BASELINE.—For the purposes of paragraph (11) of this subsection, the term 'fuel emission baseline' means the average lifecycle greenhouse-gas emissions per unit of energy of the aggregate of all transportation fuels sold or introduced into commerce in calendar year 2005, as determined by the Administrator under paragraph (11).
"(D) FUEL PROVIDER—For the purposes of paragraph (11) of this subsection, 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.

(c) by inserting after subparagraph (H) (as redesignated by subsection (a)) the following:
"(I) TRANSPORTATION FUEL.—For the purposes of paragraph (11) of this subsection, the term 'transportation fuel' means fuel for use in motor vehicles, nonroad vehicles, nonroad engines, or aircraft.".

Section 1143 Establishment

Section 211(o) of the Clean Air act (42 U.S.C. 7545(o)) is amended by adding at the end the following:

"(11) ADVANCED CLEAN FUEL PERFORMANCE STANDARD.—
"(A) 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 methodology;
"(II) determine the fuel emission baseline;
"(III) ensure that the requirements of subparagraph (11)(A)(i)(IV) of this subsection are met;
"(IV) in accordance with clause (ii), establish a requirement applicable to transportation fuel providers to reduce on an annual average basis the average lifecycle greenhouse-gas emissions per unit of energy of the aggregate quantity of transportation fuel produced, refined, blended, or imported by the fuel provider to a level that is, to the maximum extent practicable—
"(aa) by not later than calendar year 2011, at least equal to or less than the fuel emission baseline;
"(bb) by not later than calendar year 2012 and through calendar year 2022, equivalent to the fuel emission baseline minus the lifecycle greenhouse-gas emissions per unit of energy reduced by the volumetric renewable fuel requirements of section 211(o)(2)(B) of the Clean Air Act (42 U.S.C. 7475);
"(cc) by not later than calendar year 2023, at least 5 percent less than the fuel emission baseline; and
"(dd) by not later than calendar year 2028, at least 10 percent less than the fuel emission baseline; and
"(ii) PREVENTION OF AIR QUALITY DETERIORATION.—
"(I) STUDY.—Not later than 18 months after the date of enactment of this subsection, the Administrator shall complete a study to determine whether the greenhouse-gas emissions reductions required under subparagraph (A)(i)(IV) of this subsection will adversely impact air quality as a result of changes in vehicle and engine emissions of air pollutants regulated under this Act.
"(II) CONSIDERATIONS.—The study shall include consideration of—
"(aa) different blend levels, types of transportation fuels, and available vehicle technologies; and
"(bb) appropriate national, regional, and local air-quality control measures.
"(III) REGULATIONS.—Not later than 3 years after the date of enactment of this subsection, the Administrator shall—
"(aa) promulgate fuel regulations to implement appropriate measures to mitigate, to the greatest extent achievable, considering the results of the study conducted pursuant to subparagraph (A)(ii)(I) of this subsection, any adverse impacts on air quality, as the result of the greenhouse-gas emissions reductions required by this subjection; or
"(bb) make a determination that no such measures are necessary.
"(iii) CALENDAR YEAR 2033 AND THEREAFTER.—For calendar year 2033, and each fifth calendar year thereafter, the Administrator, in consultation with the Secretary of Agriculture and the Secretary of Energy, shall revise the applicable performance standard under subparagraph (A)(i)(IV) of this subsection to reduce, to the maximum extent practicable, the average lifecycle greenhouse-gas emissions per unit of energy of the aggregate quantity of transportation fuel sold or introduced into commerce in the United States.
"(iv) REVISION OF REGULATIONS.—In accordance with the purposes of the Lieberman-Warner Climate Security Act of 2008, the Administrator may, as appropriate, revise the regulations promulgated under clause (i) as necessary to reflect or respond to changes in the transportation duel market or other relevant circumstances.

“(v) METHOD OF CALCULATION.—In calculating the lifecycle greenhouse-gas emissions of hydrogen or electricity (when used as a transportation fuel) pursuant to clause (i)(I), the Administrator shall—
“(I) include emissions resulting from the production of the hydrogen or electricity; and
“(II) consider to be equivalent to the energy delivered by 1 gallon of ethanol the energy delivered by—
“(aa) 6.4 kilowatt-hours of electricity;
“(bb) 132 standard cubic feet of hydrogen; or
“(cc) 1.25 gallons of liquid hydrogen.
“(vi) DETERMINATION OF LIFECYCLE GREENHOUSE-GAS EMISSIONS.—In carrying out this paragraph, the Administrator shall use the best available scientific and technical information to determine the lifecycle greenhouse-gas emissions per unit of energy of transportation fuels derived from—
“(I) ‘renewable biomass’ as defined in Title II, Subtitle A, section 201 of the Energy Independence and Security Act of 2007;
“(II) electricity, including the entire lifecycle of the fuel;
“(III) 1 or more fossil fuels, including the entire lifecycle of the fuels; and
“(IV) hydrogen, including the entire lifecycle of the fuel.
“(vii) EQUIVALENT EMISSIONS.—In carrying out this paragraph, the Administrator shall consider transportation fuel derived from cultivated noxious plants, and transportation fuel derived from biomass sources other than those sources defined as ‘renewable biomass’ under clause (vi), to have emissions equivalent to the greater of—
“(I) the lifecycle greenhouse-gas emissions; or
“(II) the fuel emission baseline.
“(B) ELECTION TO PARTICIPATE.—An electricity provider may elect to participate in the program under this section if the electricity provider provides and separately tracks electricity for transportation through a meter that—
“(i) measures the electricity used for transportation separately from electricity used for other purposes; and
“(ii) allows for load management and time-of-use rates.
“(C) CREDITS.—
“(i) IN GENERAL.—The regulations promulgated to carry out this paragraph shall permit fuel providers to generate credits for achieving, during a calendar year, greater reductions in lifecycle greenhouse-gas emissions of the fuel provided, blended, or imported by the fuel provider than are required under subparagraph (A)(i)(IV).
“(ii) METHOD OF CALCULATION.—The number of credits received by a fuel provider as described in clause (i) for a calendar year shall be calculated by multiplying—
“(I) the aggregate quantity of fuel produced, distributed, or imported by the fuel provider in the calendar year; and
“(II) the difference between—
“(aa) the lifecycle greenhouse-gas emissions 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)(IV).
“(D) COMPLIANCE.—
“(i) IN GENERAL—Each fuel provider subject to this paragraph shall demonstrate compliance with this paragraph, including, as necessary, through the use of credits banked or purchased.
“(ii) NO LIMITATION ON TRADING OR BANKING.—There shall be no limit on the ability of any fuel provider to trade or bank credits pursuant to this subparagraph.
“(iii) USE OF BANKED CREDITS.—A fuel provider may use banked credits under this subparagraph with no discount or other adjustment to the credits.

“(iv) INABILITY TO GENERATE OR PURCHASE SUFFICIENT CREDITS.—A fuel provider that is unable to generate or purchase sufficient credits to meet the requirements of subparagraph (A)(i)(IV) may carry the compliance deficit forward under the condition that the fuel provider, in the calendar year following the year that the deficit is created—
“(aa) achieves compliance with subparagraph (A)(i)(IV) of this subsection; and
“(bb) generates or purchases additional credits to offset the deficit from the previous year.
“(v) TYPES OF CREDITS.—To encourage innovation in transportation fuels—
“(I) only credits created in the production of transportation fuels may be used for the purpose of compliance described in clause (i); and
“(II) credits created by or in other sectors, such as manufacturing, may not be used for that purpose.
“(E) IMPACT ON FOOD PRODUCTION- Not later than 18 months after the date of enactment of this subsection, the Administrator shall evaluate and consider in developing regulations under this title any significant impacts on access to, and production of, food due to the sourcing and production of fuels used to comply with this section.
“(F) NO EFFECT ON STATE AUTHORITY.—Nothing in this subsection affects the authority of any State to establish, or to maintain in effect, any transportation fuel standard that reduces greenhouse-gas emissions.”

Title XII Federal Program to Protect Natural Resources

Subtitle A Funds

Section 1211 Establishment

There are established in the Treasury Funds to be known as the “Bureau of Land Management Emergency Firefighting Fund,” the “Forest Service Emergency Firefighting Fund, and the “Federal Wildlife Adaptation Fund.”

Section 1212 Auctions

(a) AUCTIONING.—Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2012 through 2050, the Administrator shall, for the purpose of raising cash to deposit into the Bureau of Land Management Emergency Firefighting Fund, the Forest Service Emergency Firefighting Fund, and the Federal Wildlife Adaptation Fund, auction a quantity of the emission allowances established for that year pursuant to subsection (a) of section 201.

(b) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—The quantities of emission allowances auctioned pursuant to subsection (a) shall be the quantities represented by the following percentages:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Auction in Order to Raise Cash for the Bureau of Land Management Emergency Firefighting Fund, the Forest Service Emergency Firefighting Fund, and the Federal Wildlife Adaptation Fund
2012	3

2013	2.5
2014	2.5
2015	2.5
2016	2.5
2017	2.5
2018	2.5
2019	2.5
2020	2.5
2021	2.5
2022	2.5
2023	3
2024	3
2025	4
2026	4
2027	4
2028	4
2029	4
2030	4
2031	4
2032	5
2033	5
2034	5
2035	5
2036	5
2037	5
2038	5
2039	5
2040	5
2041	5
2042	5
2043	5
2044	5
2045	5
2046	5
2047	5
2048	5
2049	5
2050	5

Section 1213 Deposits

Each calendar year from 2011 through 2049, the Administrator shall, immediately upon receipt of proceeds from auctioning conducted pursuant to section 1212—

(1) deposit into the Bureau of Land Management Emergency Firefighting Fund established by section 1211 the amount of those proceeds that is sufficient to ensure that the amount of funds in the Bureau of Land Management Emergency Firefighting Fund equals $300,000,000;

(2) deposit into the Forest Service Emergency Firefighting Fund established by section 1211 the amount of those proceeds that is sufficient to ensure that the amount of funds in the Forest Service Emergency Firefighting Fund equals $800,000,000; and

(3) deposit all remaining proceeds from auctioning conducted pursuant to section 1212 into the Federal Wildlife Adaptation Fund.

Subtitle B Bureau of Land Management Emergency Firefighting Program

Section 1221 Use of Funds

In each calendar year from 2012 through 2050, all funds deposited into the Bureau of Land Management Emergency Firefighting Fund in the preceding year pursuant to section 1213 shall be made available, without further appropriation or fiscal year limitation, to pay for wildland fire suppression activities, the costs of which are in excess of amounts annually appropriated to the Secretary of the Interior for normal, nonemergency wildland fire suppression activities.

Section 1222 Accounting and Reporting

(a) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, the Secretary of the Interior shall establish an accounting and reporting system, in accordance and compatible with National Fire Plan reporting procedures, for the activities carried out under this subtitle.

(b) REQUIREMENT.—The system established under subsection (a) shall require that the Secretary of the Interior shall submit to the Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate—
(1) a monthly report describing each expenditure made from the Bureau of Land Management Emergency Firefighting Fund during the preceding month; and
(2) a report at the end of each fiscal year describing the expenditures made from the Bureau of Land Management Emergency Firefighting Fund during the preceding fiscal year.

Subtitle C Forest Service Emergency Firefighting Program

Section 1231 Use of Funds

In each calendar year from 2012 through 2050, all funds deposited into the Forest Service Emergency Firefighting Fund in the preceding year pursuant to section 1213 shall be made available, without further appropriation or fiscal year limitation, to pay for wildland fire suppression activities, the costs of which are in excess of amounts annually appropriated to the Secretary of Agriculture for normal, nonemergency wildland fire suppression activities.

Section 1232 Accounting and Reporting

(a) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, the Secretary of Agriculture shall establish an accounting and reporting system, in accordance and compatible with National Fire Plan reporting procedures, for the activities carried out under this subtitle.

(b) REQUIREMENT.—The system established under subsection (a) shall require that the Secretary of Agriculture shall submit to the Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate—
(1) a monthly report describing each expenditure made from the Forest Service Emergency Firefighting Fund during the preceding month; and
(2) a report at the end of each fiscal year describing the expenditures made from the Forest Service Emergency Firefighting Fund during the preceding fiscal year.

Subtitle D National Wildlife Adaptation Strategy

Section 1241 In General

Not later than 3 years after the date of enactment of this Act, the President shall develop and implement a National Wildlife Adaptation Strategy for assisting fish and wildlife, fish and wildlife habitat, plants, aquatic and terrestrial ecosystems, and associated ecological processes in becoming more resilient and adapting to the impacts of climate change and ocean acidification.

Section 1242 Administration

In establishing and revising the National Wildlife Adaptation Strategy, the President shall—
(1) base the Strategy on the best available science, as identified by the Science Advisory Board established under section 1244;
(2) develop the Strategy in cooperation with State fish and wildlife agencies, State coastal agencies, State environmental agencies, United States territories, and Indian tribes;
(3) coordinate with the Secretary of the Interior, the Secretary of Commerce, the Secretary of Agriculture, the Secretary of Defense, the Administrator, and other agencies as appropriate;
(4) consult with local governments, Indian tribes, conservation organizations, scientists, and other interested stakeholders; and
(5) provide public notice and opportunity for comment.

Section 1243 Contents

The President shall include in the National Wildlife Adaptation Strategy, at a minimum, prioritized goals and measures and a schedule for implementation—
(1) to identify and monitor fish and wildlife, fish and wildlife habitat, plants, aquatic and terrestrial ecosystems, and associated ecological processes that are particularly likely to be adversely affected by climate change and ocean acidification and have the greatest need for protection, restoration, and conservation;
(2) to identify and monitor coastal, estuarine, marine, terrestrial, and freshwater habitats that are at the greatest risk of being damaged by climate change and ocean acidification;
(3) to assist species in adapting to the impacts of climate change and ocean acidification;
(4) to protect, acquire, maintain, and restore fish and wildlife habitat to build resilience to climate change and ocean acidification;

(5) to provide habitat linkages and corridors to facilitate fish, wildlife, and plant movement in response to climate change and ocean acidification;
(6) to restore and protect ecological processes that sustain fish, wildlife, and plant populations that are vulnerable to climate change and ocean acidification;
(7) to protect, maintain, and restore coastal, marine, and aquatic ecosystems so that the ecosystems are more resilient and better able to withstand the additional stresses associated with climate change, including changes in hydrology, relative sea level rise, ocean acidification, and changes in Great Lakes water levels and temperatures;
(8) to protect ocean and coastal species from the impact of climate change and ocean acidification;
(9) to incorporate adaptation strategies and activities to address relative sea level rise and changes in Great Lakes Water levels in coastal zone planning;
(10) to protect, maintain, and restore ocean and coastal habitats to build healthy and resilient ecosystems, including the purchase of aquatic and terrestrial ecosystems and coastal and island land;
(11) to protect, maintain, and restore floodplains to build healthy and resilient ecosystems, including the purchase of lands in floodplains;
(12) to protect, maintain, and restore aquatic and terrestrial ecosystems to ensure their long-term sustainability for human and ecosystem use;
(13) to explore pollution prevention opportunities to reduce or eliminate the environmental impacts caused by climate change on aquatic and terrestrial ecosystems; and
(14) to incorporate consideration of climate change and ocean acidification, and to integrate adaptation strategies and activities for fish and wildlife, fish and wildlife habitat, plants, aquatic and terrestrial ecosystems, and associated ecological processes, in the planning and management of Federal land and water administered by the Federal agencies that receive funding under subtitle E of this Title.

Section 1244 Science Advisory Board

(a) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary of the Interior shall establish and appoint the members of a Science Advisory Board, to be comprised of not fewer than 10 and not more than 20 members, who shall—
(1) be recommended by the President of the National Academy of Sciences;
(2) have expertise in fish, wildlife, plant, aquatic, and coastal and marine biology, hydrology, ecology, climate change, ocean acidification, and other relevant scientific disciplines; and
(3) represent a balanced membership between Federal, State, local, and Tribal representatives, universities, and conservation organizations.

(b) DUTIES.—The Science Advisory Board shall—
(1) advise the President, the Climate Change and Natural Resource Science Center established pursuant to section 1245, and relevant Federal agencies and departments on—
(A) the best available science regarding the impacts of climate change and ocean acidification on fish and wildlife, habitat, plants, aquatic and terrestrial ecosystems, and associated ecological processes; and
(B) scientific strategies and mechanisms for adaptation;
(2) identify and recommend priorities for ongoing research needs on those issues; and
(3) review the quality of the research programs of the Climate Change and Natural Resource Science Center established pursuant to section 1245.

(c) COLLABORATION.—The Science Advisory Board shall collaborate with other climate change and ecosystem research entities in other Federal agencies and departments. The directors of the Climate Change and Natural Resource Science Center established under section 1245 shall serve as ex officio

members of the Science Advisory Board.

(d) AVAILABILITY TO THE PUBLIC.—The advice and recommendations of the Science Advisory Board shall be made available to the public.

(e) NONAPPLICABILIT OF FACA.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Science Advisory Board.

Section 1245 Climate Change and Natural Resource Science Center

(a) IN GENERAL- The Secretary shall establish a Climate Change and Natural Resource Science Center in the Department of the Interior.

(b) FUNCTIONS- In operating the Climate Change and Natural Resource Science Center, the Secretary of the Interior, in coordination with the Secretaries of Agriculture, Commerce, and Defense, and the Administrator, and in consultation with State fish and wildlife management agencies, state coastal management agencies, Territories and Indian tribes, shall—
(1) conduct scientific research on national issues related to the impacts of climate change on the agencies' respective authority over and mechanisms for adaptation, and avoidance and minimization of such impacts on fish, wildlife and plants, their habitats, and associated ecological processes;
(2) consult with and advise Federal land, water, and natural resource management and regulatory agencies and Federal fish and wildlife agencies regarding the impacts of climate change on fish, wildlife and plants, their habitats, and associated ecological processes and mechanisms for addressing such impacts, and the;
(3) consult, and to the maximum extent practicable, collaborate with State and local agencies, United States Territories, Indian tribes, universities, and other public and private entities regarding their research, monitoring, and other efforts to address the impacts of climate change on fish, wildlife and plants, their habitats and associated ecological processes;
(4) collaborate and, where appropriate, contract with other climate change research entities in the federal agencies and outside the federal government to ensure that the full array of ecosystem types are appropriately addressed.

Section 1246 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) the reports of the Pew Oceans Commission and the United States Commission on Ocean Policy;
(F) state or local integrated water resource management plans;
(G) watershed plans developed pursuant to Section 208 or 319 of the Clean Water Act;
(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.

Section 1247 Revisions

Not later than 5 years after the date on which the National Wildlife Adaptation Strategy is developed, and not less frequently than every 5 years thereafter, the President shall review and update the Strategy using the procedures described in this subtitle.

Subtitle E National Wildlife Adaptation Program

Section 1251 Use of Funds

(a) IN GENERAL.—In each calendar year from 2012 through 2050, all funds deposited into the Federal Wildlife Adaptation Fund in the preceding year pursuant to section 1213 shall be made available, without further appropriation or fiscal year limitation, to carry out activities (including research and education activities) that assist fish and wildlife, fish and wildlife habitat, plants, aquatic and terrestrial ecosystems, and associated ecological processes in becoming more resilient, adapting to, and surviving the impacts of climate change and ocean acidification (referred to in this Title as "adaptation activities") pursuant to this subtitle.

(b) CONSISTENCY WITH NATIONAL WILDLIFE ADAPTATION STRATEGY.—Effective beginning on the date on which the President establishes the National Wildlife Adaptation Strategy pursuant to subtitle D of this Title, funds made available under subsection (a) shall be used only for adaptation activities that are consistent with that strategy.

(c) INITIAL PERIOD.—Until the date on which the President establishes the National Wildlife Adaptation Strategy pursuant to subtitle D of this Title, funds made available under subsection (a) shall be used only for adaptation activities that are consistent with a work-plan established by the President.

Section 1252 Department of the Interior

Of the funds made available annually pursuant to subsection (a) of section 1251—

(a) 34 percent shall be allocated to the Secretary of the Interior for use in funding—
(1)adaptation activities carried out—
(A) under endangered species, migratory bird, and other fish and wildlife programs administered by the United States Fish and Wildlife Service;
(B) 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;
(C) within Federal water managed by the Bureau of Reclamation; or
(D) to address the needs of Federal and State natural resource agencies through coordination, dissemination, and augmentation of research regarding the impacts of climate change on fish, wildlife, plants, their habitats and ecological processes and the mechanisms to adapt to, mitigate or prevent those impacts by the Climate Change and Natural Resource Science Center within the United States Geological Survey, in coordination with the Secretaries of Agriculture, Commerce, and Defense, and the Administrator, and in consultation with State fish and wildlife management agencies, State environmental, coastal and Great Lakes management agencies, Territories and Indian tribes; and
(2) the Science Advisory Board established pursuant to section 1244 and Climate Change and Natural Resource Science Center established pursuant to section 1245.

(b) 10 percent shall be allocated to the Secretary of the Interior for adaptation activities carried out under cooperative grant programs, including—
(1) the Cooperative Endangered Species Conservation Fund authorized under section 6(i) of the Endangered Species Act of 1973 (16 U.S.C. 1535(i));
(2) programs under the North American Wetlands Conservation Act (16 U.S.C. 4401 et seq.);
(3) the Multinational Species Conservation Fund established under the heading "Multinational Species Conservation Fund" of Title I of the Department of the Interior and Related Agencies Appropriations Act, 1999 (16 U.S.C. 4246);
(4) the Neotropical Migratory Bird Conservation Fund established by section 9(a) of the Neotropical Migratory Bird Conservation Act (16 U.S.C. 6108(a));
(5) the Coastal Program of the United States Fish and Wildlife Service;
(6) the National Fish Habitat Action Plan;
(7) the Partners for Fish and Wildlife Program;
(8) the Landowner Incentive Program;
(9) the Wildlife Without Borders Program of the United States Fish and Wildlife Service; and
(10) the Park Flight Migratory Bird Program of the National Park Service; and

(c) 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.

Section 1253 Forest Service

FOREST SERVICE.—Of the funds made available annually pursuant to subsection (a) of section 1251, 10 percent shall be allocated to the Secretary of Agriculture for use in funding adaptation activities carried out on national forests and national grasslands under the jurisdiction of the Forest Service, or pursuant to the cooperative Wings Across the Americas Program.

Section 1254 Environmental Protection Agency

ENVIRONMENTAL PROTECTION AGENCY.— Of the funds made available annually pursuant to subsection (a) of section 1251, 12 percent shall be allocated to the Administrator for use in adaptation activities restoring and protecting—
(1) large-scale freshwater aquatic ecosystems, such as the Everglades, the Great Lakes, Flathead Lake, the Missouri River, the Mississippi River, the Colorado River, the Sacramento-San Joaquin Rivers, the Ohio River, the Columbia-Snake River System, the Apalachicola, Chattahoochee and Flint River System, the Connecticut River, and the Yellowstone River;
(2) large-scale estuarine ecosystems, such as Chesapeake Bay, Long Island Sound, Puget Sound, the Mississippi River Delta , San Francisco Bay Delta, Narragansett Bay, and Albemarle-Pamlico Sound; and
(3) other freshwater, estuarine, coastal and marine ecosystems, watersheds, basins, and groundwater resources identified as priorities by the Administrator, including those identified pursuant to section 320 of the Clean Water Act as amended by the Water Quality Act of 1987, working in cooperation with other Federal agencies, States, local governments, scientists, and other conservation partners.

Section 1255 Army Corps of Engineers

(f) CORPS OF ENGINEERS.— Of the funds made available annually pursuant to subsection (a) of section

1251, 15 percent shall be allocated to the Secretary of the Army for use by the Corps of Engineers to carry out adaptation activities protecting and restoring—
(1) large-scale freshwater aquatic ecosystems, such as the ecosystems described in paragraph (1) of section 1254;
(2) large-scale estuarine ecosystems, such as the ecosystems described in paragraph (2) of section 1254;
(3) other freshwater, estuarine, coastal and marine ecosystems, watersheds, basins, and groundwater resources identified as priorities by the Corps of Engineers, working in cooperation with other Federal agencies, States, local governments, scientists, and other conservation partners; and
(4) habitats or ecosystems under programs such as the Estuary Restoration Act of 2000 (33 U.S.C. 2901 et seq.), project modifications for improvement of the environment, and aquatic restoration under section 1135 of the Water Resources Development Act of 1986 (33 U.S.C. 2330).

Section 1256 Department of Commerce

DEPARTMENT OF COMMERCE.— Of the funds made available annually pursuant to subsection (a) of section 1251, 17 percent shall be allocated to the Secretary of Commerce for use in funding adaptation activities to protect, maintain, and restore coastal, estuarine, Great Lakes, and marine resources, habitats, and ecosystems, including such activities carried out under—
(1) the Coastal and Estuarine Land Conservation Program;
(2) the Community-Based Restoration Program;
(3) the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.), subject to the condition that State coastal agencies shall incorporate, and the Secretary of Commerce shall approve, coastal zone management plan elements that are—
(A) consistent with the National Wildlife adaptation Strategy under subtitle D of this Title, as part of a coastal zone management program established under this Act; and
(B) specifically designed to strengthen the ability of coastal, estuarine, and marine resources, habitats, and ecosystems to adapt to and withstand the impacts of—
(i) global warming; and
(ii) where practicable, ocean acidification;
(4) the Open Rivers Initiative;
(5) the Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.);
(6) the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 et seq.);
(7) the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.);
(8) the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1401 et seq.); and
(9) the Coral Reef Conservation Act of 2000 (16 U.S.C. 6401 et seq.).

Section 1257 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 a contract with the National Academy of Sciences, under which the Academy shall convene 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 created by the regional scientific symposia; and
(3) to issue a report that takes into consideration the information described in paragraph (1).

(b) CONTENTS OF REPORT.— The report required under paragraph (2) of subsection (a) shall include—

(1) an identification and assessment of the impact of climate change and ocean acidification on imperiled species, ecosystems, and waters under the jurisdiction of the United States (including the territories of the United States);
(2) an identification and assessment of different ecological scenarios that may result from different intensities, rates, and other critical manifestations of climate change;
(3) recommendations for roles to be played by Federal, State, local, and tribal agencies and private parties in assisting imperiled species in adapting to, and surviving the impacts of, climate change, including a recommended list of prioritized remediation actions by those agencies and parties; and
(4) other relevant ecological information.

(c) PUBLIC AVAILABILITY.— The recommendations and report required under this section shall be made available to the public as soon as practicable after the recommendations and report are complete.

(d) USE OF REPORT BY HEADS OF CERTAIN FEDERAL AGENCIES.—The Secretaries of Agriculture, Commerce, the Interior, Defense and the Administrator of the Environmental Protection Agency shall take into account the recommendations and report required under this section.

Title XIII International Partnerships to Reduce Emissions and Adapt

Subtitle A Promoting Fairness While Reducing Emissions

Section 1311 Definitions

In this subtitle:

(1) BASELINE EMISSION LEVEL.—
(A) COVERED GOODS.—With respect to covered goods of a foreign country, the term "baseline emission level" means, as determined by the Commission, the total annual greenhouse-gas emissions attributed to a category of covered goods of a foreign country during the calendar year 2005, based on best available information.
(B) COUNTRIES.—With respect to the United States or foreign country, the term "baseline emission level" means, as determined by the Commission, the total annual nationwide greenhouse-gas emissions attributed to the country during the calendar year 2005, based on best available information.

(2) BEST AVAILABLE INFORMATION.—The term "best available information" means—
(A) all relevant data that is available for the particular period; and
(B) to the extent necessary, economic and engineering models, best available information on technology performance levels, and any other useful measure or technique for estimating the emissions from such emissions activities.

(3) COMMISSION.—The term "Commission" means the International Climate Change Commission that is established under section 1314.

(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 under subparagraph (B).
(B) REQUIREMENTS.—The Commission shall make a determination on whether a foreign country has taken comparable action for a particular year under subparagraph (A) based on best available information and in accordance with the following requirements—
(i) A foreign country shall be deemed to have taken comparable action if the Commission determines that—
(I) the percentage change in greenhouse gas emissions in such foreign country during the relevant period is equal to, or better than,
(II) the percentage change in greenhouse emissions in the United States during the relevant period.
(ii) In the case of a foreign country that is not deemed to have taken comparable action under clause (i), the Commission shall take into consideration, in making a determination on comparable action for that foreign country, the extent to which all of the following actions have been taken during the relevant period, and that these actions have been fully implemented, verified and enforced—
(I) 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 implementation of other techniques or actions that have the effect of limiting greenhouse-gas emissions in the foreign country during the relevant period; and
(II) any regulatory programs, requirements, and other measures that the foreign country has implemented to limit greenhouse-gas emissions during the relevant period.
(iii) For determinations under clause (i), the commission shall develop rules for taking into account net transfers to and from the United States and other foreign countries of greenhouse-gas allowances and other emission credits.
(iv) Any determination on comparable action that the Commission makes under this paragraph shall comply with applicable international agreements.

(5) COMPLIANCE YEAR.—The term “compliance year” means each calendar year for which the requirements of this title apply to a category of covered goods of a covered foreign country that enters into the United States.

(6) COVERED FOREIGN COUNTRY.—The term “covered foreign country” means a foreign country that is included on the covered list prepared under section 1316(b)(3).

(7) COVERED GOOD.—The term “covered good” means a good that (as identified by the Administrator by rule)—
(A) is a primary product or manufactured item for consumption;
(B) generates, in the course of the manufacture of the good, a substantial quantity of direct greenhouse-gas emissions and indirect greenhouse-gas emissions; and
(C) is closely related to a good the cost of production of which in the United States is affected by a requirement of this Act.

(8) CUSTOMS.—The term “Customs” means U.S. Customs and Border Protection.

(9) ENTRY; ENTER.—The terms “entry” and “enter” mean the point at which a covered good entered, or was withdrawn from the warehouse for consumption, in the customs territory of the United States.

(10) FOREIGN COUNTRY.—The term “foreign country” means any country or separate customs territory, other than the United States.

(11) INDIRECT GREENHOUSE-GAS EMISSIONS.—The term “indirect greenhouse-gas emissions” means any emissions of a greenhouse gas resulting from the generation of electricity that is consumed during the manufacture of a good.

(12) 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.

(13) INTERNATIONAL RESERVE ALLOWANCE.—The term “international reserve allowance” means an allowance (denominated in units of metric tons of carbon dioxide equivalent) that is—
(A) purchased from a special reserve of allowances pursuant to section 1316(a)(2); and
(B) used for purposes of meeting the requirements of section 1316.

(14) 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 amount of direct greenhouse-gas emissions or indirect greenhouse-gas emissions, including such emissions that are 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 1316 to the particular category of goods or products is administratively feasible and necessary to achieve the purposes of this title.

(15) PERCENTAGE CHANGE IN GREENHOUSE-GAS EMISSIONS.—The term “percentage change in greenhouse-gas emissions” means, as determined by the Commission, the percentage by which greenhouse-gas emissions on a nationwide basis has decreased or increased (as the case may be) from the baseline emissions level of the country. The percentage change for a country shall equal the quotient obtained by dividing—
(A) the amount of the decrease or increase in the total nationwide emissions for the country, as measured by comparing such total emissions for the relevant calendar year, to the baseline emission level for the country; and
(B) the baseline emissions levels for the country.

(16) PRIMARY PRODUCT.—The term “primary product” means—
(A) iron, steel, steel mill products (including pipe and tube), aluminum, cement, glass (including flat, container, and specialty glass, and fiberglass), pulp, paper, chemicals, or industrial ceramics; or
(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.

Section 1312 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.

Section 1313 International Negotiations

(a) FINDING.—Congress finds that the purposes described in section 1312 can be most effectively addressed and achieved through agreements negotiated between the United States and foreign countries.

(b) NEGOTIATING OBJECTIVE.—
(1) STATEMENT OF POLICY.—It is the policy of the United States to work proactively under the United Nations Framework Convention on Climate Change and, in other appropriate forums, to establish binding agreements committing all major greenhouse gas-emitting nations to contribute equitably to the reduction of global greenhouse-gas emissions.
(2) INTENT OF CONGRESS REGARDING OBJECTIVE.—To the extent that the agreements described in subsection (a) involve measures that will affect international trade in any good or service, it is the intent of Congress that the negotiating objective of the United States shall be to focus multilateral and bilateral international agreements on the reduction of greenhouse-gas emissions to advance achievement of the purposes described in section 1312. Furthermore, it is the intent of Congress that the United States shall strive to achieve this objective through the negotiation of international agreements that—
(A) 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 that are carried out by the United States to limit greenhouse-gas emissions on a nationwide basis; and
(B) with respect to foreign countries that are taking comparable action, promote the adoption of requirements modeled after the provisions of this title in order to advance further the achievement of the purposes described in section 1312.

(c) NOTIFICATION TO FOREIGN COUNTRIES.—Immediately upon enactment of this Act, the President shall notify each foreign country of the negotiating objective of United States to limit greenhouse gas emissions through binding international agreements, as provided under subsection (b). The notification to each foreign country shall include—
(1) a request that any foreign country, that would not otherwise be excluded under clause (ii) or (iii) of subparagraph (b)(2)(A), take comparable action to limit the greenhouse-gas emissions of the foreign country; and
(2) an estimation of the percentage change in greenhouse-gas emissions that the United States expects to achieve annually through federal, state and local measures during the first 10 years for which allowances must be submitted under section 202.

(d) REPORT TO CONGRESS.—Not later than 2 years after date of enactment of this Act, and every 3 years thereafter, the President shall submit to Congress a report on the progress that the United States has made in achieving the negotiating objective of subsection (b).

Section 1314 International Climate Change Commission

(a) ESTABLISHMENT.—There is established a commission that shall be known as the "International Climate Change Commission."

(b) ORGANIZATION.—
(1) MEMBERSHIP.—The Commission shall be composed of 6 commissioners who shall be appointed by the President, by and with the advice and consent of the Senate. No person shall be eligible for appointment as a commissioner unless that person –
(A) is a citizen of the United States, and
(B) has, in the judgment of the President, the requisite qualifications for developing the knowledge and expertise on international climate change matters that are necessary for performing the duties and functions of the Commission under this title.
(2) APPOINTMENTS OF FIRST COMMISSIONERS.—Not later than 3 months after date of enactment of this Act, the President shall appoint all 6 of the commissioners first taking office after enactment of this Act (referred to in this section as the "first commissioners"). If the President fails to appoint one or more of the first commissioners under this paragraph by this date, then the International Trade Commission shall have a non-discretionary duty to appoint each first commissioner by no later than 6 months after date of enactment of this Act. The authority of the President to make appointments of first commissioners under this paragraph shall be terminated immediately upon the International Trade Commission making such appointments in accordance with the provisions of this paragraph.
(3) POLITICAL AFFILIATION.—Not more than 3 of the commissioners serving at any time shall be affiliated with the same political party. In making the appointments, members of different parties shall be appointed alternatively as nearly as may be practicable.
(4) TERM OF COMMISSIONERS; REAPPOINTMENT.—
(A) IN GENERAL.—The term of a commissioner shall be 12 years, except that commissioners first taking office under paragraph (2) shall be appointed to the Commission in a manner that ensures that –
(i) the term of not more than 1 member shall expire during any 2-year period; and
(ii) no commissioner serves a term of more than 12 years.
(B) SERVICE UNTIL NEW APPOINTMENT.—A commissioner shall continue to serve after the expiration of that commissioner's term 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 prior to the expiration of the term for which the predecessor was appointed shall be appointed for the remainder of the term.
(D) REAPPOINTMENT.—A person who has served as commissioner for more than 7 years shall not be eligible for reappointment.
(5) Chairperson and Vice-Chairperson.—
(A)IN GENERAL.—The President shall designate a Chairperson and Vice-Chairperson of the Commission from the commissioners that are eligible for designation under subparagraph (B). The Chairperson and Vice-Chairperson shall each serve for a term of 4 years. If the President fails to designate the Chairperson for any term, the commissioner with the longest period of continuous service shall serve as Chairperson for that term.
(B) ELIGIBILITY REQUIREMENTS.—
(i) CHAIRPERSON.—The President may designate as the Chairperson of the Commission for any term any commissioner who is not affiliated with the political party with which the Chairperson of the Commission for the immediately preceding year is affiliated, and who (except in the case of the first commissioners) has at least 1 year of continuous service as a commissioner.
(ii) VICE-CHAIRPERSON.—The President may designate as the Vice-Chairperson of the Commission for any term any commissioner who is not affiliated with the political party with which the Chairperson is

affiliated.
(6) VOTING.—
(A) IN GENERAL.—The Commission shall vote on the adoption of each action that is identified in subparagraph (D). Such a vote on a Commission action shall occur at a public meeting of the Commission for which a quorum is present. A majority of commissioners that are in office shall constitute a quorum for a meeting of the Commission.
(B) ADOPTION.—A Commission action identified in subparagraph (D) shall take effect upon adoption by the Commission in accordance with requirements of this paragraph. Subject to subparagraph (C), the adoption of a Commission action shall occur if a majority of the commissioners in attendance at the meeting (as well as any commissioners voting by proxy) vote in favor of such action.
(C) EQUALLY DIVIDED VOTES.—In cases when the commissioners voting are equally divided on whether or not a foreign country has taken comparable action under section 1315, the Commission shall be deemed to have made an affirmative determination that the foreign country has not taken comparable action.
(D) COMMISSION ACTIONS.—A Commission action for purposes of this paragraph shall include the performance of the duties specified under section 1314(c) and the exercise of the enforcement powers authorized under section 1314(d).

(c) DUTIES.—The duties of the Commission shall include those actions relating to—
(1) Determinations on whether a foreign country is taking comparable action under section 1315;
(2) Establishment of foreign country lists under section 1316(b);
(3) Classification of a category of goods or products as a manufactured item for consumption under section 1311(14)(C).
(4) Adjustment of the international reserve allowance requirements pursuant to section 1317; and
(5) Performance of other actions that are necessary for the implementation of the provisions of this title.

(d) ENFORCEMENT POWERS.—
(1) PENALTY FOR NONCOMPLIANCE.—The Commission shall have authority to impose an excess emissions penalty on a United States importer of covered goods if that importer fails to submit the required number of international reserve allowances, as specified in section 1316. Such penalty for noncompliance shall be equal to the amount of an excess emissions penalty that an owner or operator of a covered entity is required to submit for noncompliance under section 202.
(2) PROHIBITION ON IMPORTERS.—The Commission may prohibit a United States importer from entering covered goods for a period not to exceed 5 years if that importer—
(i) fails to pay a penalty for noncompliance imposed under paragraph (1); or
(ii) submits a written declaration under section 1316(c) that provides false or misleading information for the purpose of circumventing the international reserve requirements of this title.
(3) DELEGATION.—The Commission, as appropriate, may delegate to Customs the enforcement powers that are authorized under this subsection. Customs shall exercise such enforcement powers in accordance with procedures and requirements that the Commission may establish.

Section 1315 Determinations on Comparable Action

(a) IN GENERAL.—Not later than July 1 of the second calendar year for which allowances must be submitted under section 202, 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. The Commission shall

make a determination under this subsection based upon best available information and a comparison of such actions that—
(1) the foreign country has taken in the calendar year immediately prior to the July 1 date referenced in this subsection; and
(2) the United States has taken in the calendar year immediately prior to the calendar year referenced in paragraph (1).

(b) EXEMPTION.— The Commission shall exempt from a determination under subsection (a) any foreign country that is placed on the excluded list pursuant to clause (ii) or (iii) of paragraph 1316(b)(2)(A) for that particular year.

(c) REPORTS.—The Commission shall, as expeditiously as practicable,—
(1) submit to the President and Congress an annual report describing the determinations of the Commission under subsection (a) for the most recent calendar year; and
(2) publish the determinations in the Federal Register.

Section 1316 International Reserve Allowance Program

(a) ESTABLISHMENT.—
(1) IN GENERAL.—The Administrator shall establish a program under which the Administrator shall offer for sale to United States importers international reserve allowances in accordance with this subsection. Importers shall be able to purchase international reserve allowances by no later than the earliest date that Administrator distributes allowances under Titles V through XI.
(2) SOURCE.—International reserve allowances under paragraph (1) shall be issued from a special reserve of allowances that is separate from, and established in addition to, the quantity of allowances established under section 201.
(3) PRICE.—The Administrator shall establish, by rule, a methodology for determining the daily price of international reserve allowances that the Administer offers for sale under paragraph (a)(1). Such methodology shall require the Administrator to—
(A) not later than the date that importers may first purchase international reserve allowances under paragraph (1), and annually thereafter, identify 3 leading publicly-reported daily price indexes for the sale of allowances established under section 201; and
(B) for each day that international reserve allowances are offered for sale under paragraph (a)(1), set the price of such an allowance in an amount that shall be equal to the arithmetic mean of the prior day's average market clearing price for an allowance on the three indexes identified under subparagraph (A).
(4) SERIAL NUMBER.—The Administrator shall assign a unique serial number to each international reserve allowance issued under this subsection.
(5) TRADING SYSTEM.—The Administrator may establish, by rule, a system for the sale, exchange, purchase, transfer, and banking of international reserve allowances.
(6) COVERED ENTITIES.—International reserve allowances may not be submitted by covered entities to comply with the allowance submission requirements of section 202.
(7) PROCEEDS.—All proceeds from the sale of international reserve allowances under this subsection shall be allocated to a program that the Administrator, in coordination with the Secretary of State, shall establish to mitigate the negative impacts of global climate change on disadvantaged communities in other countries.

(b) FOREIGN COUNTRY LISTS.—
(1) IN GENERAL.—Not later than January 1 of the third calendar year for which allowances must be

submitted under section 202, and annually thereafter, the Commission shall develop and publish in the Federal Register 2 lists of foreign countries, in accordance with this subsection.
(2) EXCLUDED LIST.—
(A) IN GENERAL.—The Commission shall identify and publish in a list, to be known as the "excluded list"—
(i) each foreign country determined by the Commission under section 1315(a) to have taken action comparable to that taken by the United States to limit the greenhouse gas emissions of the foreign country;
(ii) each foreign country that the United Nations has identified as among the least-developed developing countries; and
(iii) each foreign country the share of total global greenhouse gas emissions of which is below the de minimis percentage described in subparagraph (B).
(B) DE MINIMIS PERCENTAGE.—The de minimis percentage referred to in clause (iii) of subparagraph (A) is a percentage of total global greenhouse gas emissions of not more than 0.5, as determined by the Commission, for the most recent calendar year for which emissions and other relevant data is available. The Commission shall place a foreign country on the excluded list under subparagraph (A) only if the de minimis percentage is not exceeded in two separate determinations that, in one case includes and, in the other case, excludes the annual average deforestation rate during a representative period for the United States and each foreign country.
(3) COVERED LIST.—
(A) IN GENERAL.—The Commission shall identify and publish in a list, to be known as the "covered list", each foreign country the covered goods of which are subject to the requirements of this section.
(B) REQUIREMENT.—The covered list shall include each foreign country that is not included on the excluded list under paragraph (2).

(c) WRITTEN DECLARATIONS.—
(1) IN GENERAL.—Effective beginning January 1 of the third calendar year for which allowances must be submitted under section 202, a United States importer of any covered good shall, as a condition of entry of the covered good into the United States, submit to the Administrator and Customs a written declaration with respect to the entry of such good. The written declaration shall include a compliance statement, supporting documentation, and deposit, as required under this subsection.
(2) COMPLIANCE STATEMENT.—A written declaration under paragraph (1) shall contain a statement certifying that the applicable covered good is—
(A) subject to the international reserve allowance requirements of this section and accompanied by the appropriate supporting documentation and deposit, as required under paragraph (3);or
(B) exempted from the international reserve allowance requirements of this section and accompanied by a certification that the good was not manufactured or processed in any foreign country that is on the covered list under subsection (b)(3).
(3) DOCUMENTATION AND DEPOSIT.—If an importer cannot certify that the covered good is exempted under subparagraph (2)(B), the written declaration for such good shall include the following supporting documentation and deposit for ensuring compliance with the international reserve allowance requirements:
(A) the name of each foreign country in which the covered good was manufactured or processed;
(B) a brief description of extent to which the covered good was manufactured or processed in each foreign country identified under paragraph (A);
(C) an estimation of the number of international reserve allowances that are required for entry of the covered good into the United States under subsection (d); and
(D) at the election of the importer, the deposit of —

(i) international reserve allowances in an amount equal to the estimated number required for entry under subparagraph (C); or
(ii) a bond, other security, or cash in an amount that shall cover the purchase of the estimated number of international reserve allowances under subparagraph (C).
(4) FINAL ASSESSMENT.—
(A) IN GENERAL.—Not later than 6 months after submission of the written declaration and entry of the covered good under paragraph (1), the Administrator shall make a final assessment of the international reserve allowance requirement for the covered good under this section. The final assessment shall specify the total number of international reserve allowances that are required for entry of the covered good and whether the amount of the deposit under paragraph 3(D) is lower or higher than the final assessment.
(B) RECONCILIATION.—
(i) ALLOWANCE DEPOSIT.—Customs shall promptly reconcile the final assessment with the amount of international reserve allowances deposited under subparagraph (3)(D)(i). If international reserve allowances are deposited in an amount that is more than the final assessment, Customs shall refund the excess amount. If such allowances are deposited in an amount that is less than final assessment, then the importer shall tender within 14 days sufficient allowances to satisfy fully the final assessment.
(ii) BOND, SECURITY, OR CASH DEPOSIT.—If an importer has submitted a bond, security, or cash deposit under clause (3)(D), Customs shall use the deposit to purchase a sufficient number of international reserve allowances, as determined in the final assessment under paragraph (A). To the extent that the deposit fails to cover the purchase of sufficient international reserve allowances, the importer shall submit such additional allowances to cover the shortfall of allowances. To the extent that the amount of the deposit is more than the amount of the final assessment, Customs shall refund the unused portion of the deposit.
(5) INCLUSION.—A written declaration described under this subsection shall include the unique serial number of each emission allowance associated with the entry of the applicable covered good.
(6) FAILURE TO DECLARE.— A covered good that is not accompanied by a written declaration that meets the requirements of this subsection shall not be permitted to enter the United States.
(7) CORRECTED DECLARATION.—
(A) IN GENERAL.—If, after making a declaration required under this subsection, an importer has reason to believe that the declaration contains information that is not correct, the importer shall provide a corrected declaration by not later than 30 days after the date of discovery of the error, in accordance with subparagraph (B).
(B) METHOD.—A corrected declaration under subparagraph (A) shall be in the form of a letter or other written statement to the Administrator and Customs to which the original declaration was submitted.

(d) QUANTITY OF ALLOWANCES REQUIRED.—
(1) METHODOLOGY.—The Administrator shall establish, by rule, a method for calculating the required number of international reserve allowances that a United States importer must submit, together with a written declaration under subsection (c), for each category of covered goods of each covered foreign country. The method shall—
(A) apply to covered goods that are manufactured and processed entirely in one covered foreign country; and
(B) include a general formula for calculating the international reserve allowance requirement on a per unit basis for each category of covered goods that are entered into the United States from that foreign country during each compliance year.
(2) GENERAL FORMULA—The international reserve allowance requirement, as described in paragraph (1), for a compliance year is equal to 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); by
(B) the allowance adjustment factor for the industry sector in the foreign country that manufactured the covered goods entered into the United States, as determined by the Administrator under paragraph (4); by
(C) the economic adjustment ratio for the foreign country, as determined by the Commission under paragraph (5).
(3) NATIONAL GREENHOUSE-GAS INTENSITY RATE.—The Administrator shall calculate the national greenhouse gas intensity rate for a particular foreign country under subparagraph (2)(A), on a per unit basis, in an amount equal to the quotient obtained by dividing—
(A) the total amount 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 calendar year (as adjusted to exclude those emissions that would not be subject to the allowance submission requirements of section 202 for the category of covered goods if manufactured in the United States); by
(B) total number of units of the particular covered good that are produced in the covered foreign country during the same calendar year.
(4) ALLOWANCE ADJUSTMENT FACTOR.—
(A) GENERAL FORMULA.—The Administrator shall calculate the allowance adjustment factor for a particular foreign country under subparagraph (2)(B) in an amount that is equal to 1 minus the ratio that—
(i) the number of allowances, as determined by the Administrator under subparagraph (4)(B), that an entire industry sector in the foreign country would have received at no cost if such allowances were allocated in the same manner that allowances are allocated at no cost under Titles V through XI to the same industry sector in the United States; bears to
(ii) the total amount of direct greenhouse gas emissions and indirect greenhouse-gas emissions that are attributable to a category of covered goods of a covered foreign country during a particular compliance year.
(B) ALLOWANCES ALLOCATED AT NO COST.—The Administrator shall calculate the allowances allocated at no cost under clause (4)(A)(i) in an amount equal to the product obtained by multiplying—
(i) the baseline emissions level that the Commission has attributed to a category of covered goods of a foreign country; by
(ii) the ratio that—
(I) the quantity of allowances that are allocated at no cost under Titles V through XI to entities within the industry sector that manufactures the covered goods for the compliance year during which the covered goods were entered into the United States; bears to
(II) the total amount of direct greenhouse-gas emissions and indirect greenhouse-gas emissions of that sector during the same compliance year.
(5) ECONOMIC ADJUSTMENT RATIO.—The Administrator shall apply an economic adjustment ratio of 1 for a particular foreign country under subparagraph (2)(C) unless the Commission makes an affirmative decision to lower the ratio in order to take into account all of the following actions that the foreign country has taken during the relevant period, and that these actions have been fully implemented, verified, and enforced—
(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 implementation of other techniques or actions that have the effect of limiting greenhouse-gas emissions in the foreign country during the relevant period; and
(B) any regulatory programs, requirements, and other measures that the foreign country has implemented to limit greenhouse-gas emissions during the relevant period.

(6) ANNUAL CALCULATION.—The Administrator shall calculate the international reserve allowance requirements for each compliance year based on the best available information and annually revise the applicable international reserve allowance requirements to reflect changes in the variables of the formula described in this subsection.
(7) PUBLICATION.—Not later than 90 days before the beginning of each compliance year, the Administrator shall publish in the Federal Register a schedule describing the required number of international reserve allowances for each category of imported covered goods of each covered foreign country, as calculated under this subsection.
(8) COVERED GOODS FROM MULTIPLE COUNTRIES.—
(A) IN GENERAL.—The Administrator shall establish, by rule, procedures for determining the number of the international reserve allowances that a United States importer must submit under subsection (c) for a category of covered goods that are primary products and manufactured or processed in more than one foreign country. Subject to paragraph (B), such procedures shall require the importer to—
(i) determine for each covered foreign country listed in the written declaration, as required subparagraph (c)(2)(B), the number of international reserve allowances that apply under paragraph (d)(2) to the category of covered goods that are manufactured and processed entirely in that covered foreign country for the particular compliance year; and
(ii) of the international reserve allowance requirements identified under clause (8)(A)(i) for particular covered foreign countries, apply the requirement that imposes the highest number of international reserve allowances for the category of covered goods.
(B) EXCEPTION.—The procedures for setting the international reserve allowance requirement under paragraph (A) shall not apply if the Administrator grants a request by the importer to apply an alternate method for establishing such requirement. The Administrator shall grant such a request only if the importer demonstrates in an administrative hearing by a preponderance of evidence that the alternate method will establish an international reserve allowance requirement that is more representative than the requirement applicable under paragraph (A).
(C) ADMINISTRATIVE HEARING.—The Administrator shall establish procedures for administrative hearings under paragraph (B) to ensure that—
(i) all evidence submitted by an importer will be subject to verification by the Administrator;
(ii) domestic manufactures of the category of covered goods subject to the administrative hearing under this paragraph will have an opportunity to review and comment on evidence submitted by the importer; and
(iii) appropriate penalties will be assessed in cases where the importer has submitted information that is false or misleading.

(e) FOREIGN ALLOWANCES AND CREDITS.—
(1) FOREIGN ALLOWANCES.—
(A) IN GENERAL.—A United States importer may submit, in lieu of an international reserve allowance issued under this section, a foreign allowance or similar compliance instrument distributed by a foreign country pursuant to a cap and trade program that represents a comparable action.
(B) COMMENSURATE CAP AND TRADE PROGRAM.—For purposes of subparagraph (A), a cap and trade program that represents a comparable action shall include any greenhouse gas regulatory program adopted by a covered foreign country to limit the greenhouse gas emissions of the covered foreign country, if the Administrator certifies that the program—
(i)(I) places a quantitative limitation on the total quantity of greenhouse gas emissions of the covered foreign country (expressed in terms of tons emitted per calendar year); and
(II) achieves that limitation through an allowance trading system;
(ii) satisfies such criteria as the Administrator may establish for requirements relating to the

enforceability of the cap and trade program, including requirements for monitoring, reporting, verification procedures, and allowance tracking; and
(iii) is a comparable action.
(2) FOREIGN CREDITS.—
(A) IN GENERAL.—A United States importer may submit, in lieu of an international reserve allowance issued under this section, a an international offset that the Administrator has authorized for use under subtitle B of Title III or subtitle B of this Title.
(B) APPLICATION.—The limitation on the use of international reserve allowances by covered entities under subsection (a)(6) shall not apply to a United States importer for purposes of this paragraph.

(f) RETIREMENT OF ALLOWANCES.—The Administrator shall retire each international reserve allowance, foreign allowance, and international offset submitted to achieve compliance with this section.

(g) TERMINATION.—The international reserve allowance requirements of this section shall not apply to a covered good of a covered foreign country in any case in which the Commission makes a determination described in subsection (b)(2) with respect to the covered goods of that covered foreign country.

(h) FINAL REGULATIONS.—Not later than January 1 of the second calendar year for which allowances must be submitted under section 202, the Administrator, in consultation with the Commission, shall promulgate such regulations as the Administrator determines to be necessary to carry out this section.

Section 1317 Adjustment of International Reserve Allowance Requirements

(a) IN GENERAL.—Not later than January 1 of the sixth calendar year for which allowances must be submitted under section 202, and annually thereafter, the Commission shall prepare and submit to the President and Congress a report that assesses the effectiveness of the international reserve allowance requirements implemented under section 1316 with respect to—
(1) covered goods that are entered into the United States from each covered foreign country; and
(2) the production of covered goods in covered foreign countries that are incorporated into manufactured goods that are subsequently entered into the United States.

(b) INADEQUATE REQUIREMENTS.—If the Commission determines that an applicable international reserve allowance requirement is not adequate to achieve the purposes of this title, the Commission, simultaneously with the submission of the report under subsection (a), shall make recommendations to—
(1) increase the stringency or otherwise improve the effectiveness of the applicable requirements in a manner that ensures compliance with all applicable international agreements;
(2) take action to address greenhouse gas emissions that are attributable to the production of manufactured items for consumption that are not subject to the international reserve allowance requirements under section 1316; or
(3) take such other action as the Commission determines to be necessary to address greenhouse-gas emissions that are attributable to the production of covered goods in covered foreign countries, in compliance with all applicable international agreements.

(c) REVISED REGULATIONS.—The Administrator, in consultation with the Commission, shall promulgate revised regulations to implement the recommended changes to improve the effectiveness of the international reserve allowance requirements under subsection (b).

(d) EFFECTIVE DATE.—Any adjustments adopted by the Administrator under subsection (c) shall take effect beginning on January 1 of the compliance year immediately following the date on which the adjustment is made.

Subtitle B International Partnerships to Reduce Deforestation and Forest Degradation

Section 1321 Findings

Congress finds that—

(1) land-use change 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, amounting to roughly 40 percent of the total greenhouse-gas emissions of the developing world;

(3) with sufficient data, deforestation and forest degradation rates and forest carbon stocks can be measured with an acceptable level of uncertainty;

(4) encouraging reduced deforestation and reduced forest degradation in other countries can—
(A) provide critical leverage to encourage voluntary developing-country participation in emission limitation regimes;
(B) facilitate greater overall reductions in greenhouse-gas emissions than otherwise would be practicable; and
(C) substantially benefit biodiversity, conservation, and indigenous and other forest-dependent people in developing countries;

(5) in addition to those forest carbon activities that can be readily measured, monitored, and verified through national scale programs and through projects, there is great value to reducing emissions and sequestering carbon through forest carbon projects in countries that currently lack the institutional arrangements to support national scale accounting of forest carbon stocks; and

(6) providing allowances in support of projects in countries that lack fully developed institutions for national scale accounting can help to build capacity in those countries, sequester additional carbon, and increase developing country participation in international climate agreements.

Section 1322 Purposes

The purposes of this subtitle are—

(1) to reduce greenhouse-gas emissions by reducing deforestation and reducing forest degradation in countries other than the United States; and

(2) to accomplish that purpose in a way that reduces the cost imposed by this Act on covered entities in the United States.

Section 1323 Allocation

Not later than 330 days before the beginning of each calendar year from 2012 through 2050, the Administrator shall allocate to the Capacity Building Program established pursuant to section 1324 1 percent of the emission allowances established pursuant to subsection (a) of section 201 for that calendar year.

Section 1324 Capacity Building Program

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall, in consultation with the Secretary of the Interior, the Secretary of State, and the Secretary of Agriculture, promulgate rules to implement this subtitle and achieve the purposes set forth in section 1322.

(b) Eligibility Requirements for Forest Carbon Activities.—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 eligibility requirements for forest carbon activities directed at sequestration of carbon through restoration of forests and degraded land, afforestation, and improved forest management in countries other than the United States, including requirements that those activities be--
(1) carried out and managed in accordance with widely-accepted environmentally sustainable forestry practices; and
(2) designed--
(A) to promote native species and restoration of native forests, where practicable;
(B) to avoid the introduction of invasive nonnative species;
(C) so as not to adversely impact or undermine indigenous and other forest-dependent people living in the affected areas, including their internationally-recognized rights; and
(D) in a manner that ensures that local communities are provided the right of free prior informed consent regarding projects or other activities, are able to share equitably in profits or other benefits of the activities, and receive fair compensation for any damages resulting from the activities.

(c) Quality Criteria for Forest Carbon Allocations.—Not later than 2 years after the date of enactment of this Act, the Administrator, in consultation with the Secretary of the Interior, the Secretary of State, and the Secretary of Agriculture, shall promulgate regulations establishing the requirements for eligibility to receive allowances under this section, including requirements that ensure that the emission reductions or sequestrations are real, permanent, additional, verifiable and enforceable, with reliable measuring and monitoring and appropriate accounting for leakage.
(c) Double Counting. – Notwithstanding any other provision of this Act, activities that receive credit under Title II Subtitle E of this Act shall not be eligible for allocations under this subtitle.

(d) INTERNATIONAL FOREST CARBON ACTIVITIES.—The Administrator, in consultation with the Secretary of State, shall identify and periodically update a list of countries that have—
(1) demonstrated capacity to participate in international forest carbon activities, including –
(A) sufficient historical data on changes in national forest carbon stocks;
(B) technical capacity to monitor and measure forest carbon fluxes with an acceptable level of uncertainty; and
(C) institutional capacity to reduce emissions from deforestation and degradation;

(2) capped greenhouse gas emissions or otherwise established a national emission reference scenario based on historical data; and
(3) commenced an emission reduction program for the forest sector.

(e) Crediting and Additionality.—
(1) REDUCTION IN DEFORESTATION AND FOREST DEGRADATION.—A verified reduction in greenhouse gas emissions from deforestation and forest degradation under a cap or from a nationwide emissions reference scenario described in subsection (a) shall be—
(A) eligible for crediting; and
(B) considered to satisfy the additionality criterion.
(2) PERIODIC REVIEW OF NATIONAL LEVEL REDUCTIONS IN DEFORESTATION AND DEGRADATION.—The Administrator, in consultation with the Secretary of State, shall identify and periodically update a list of countries described in subsection (a) that have—
(A) achieved national-level reductions of deforestation and degradation below a historical reference scenario, taking into consideration the average annual deforestation and degradation rates of the country and of all countries during a period of at least 5 years; and
(B) demonstrated those reductions using remote sensing technology, taking into account relevant international standards.
(3) OTHER FOREST CARBON ACTIVITIES.—A forest carbon activity, other than a reduction in deforestation or forest degradation, shall be eligible for distribution of emission allowances under this section, subject to the eligibility requirements and quality criteria for forest carbon activities identified in Section 3803 of this Act or in regulations promulgated under this Act.

(f) Reviews.—Not later than 3 years after the date of enactment of this Act, and 5 years thereafter, the Administrator shall conduct a review of the program under this subtitle.

(g) Discount.—If, after the date that is 10 years after the date of enactment of this Act, the Administrator determines that foreign countries that, in the aggregate, generate greenhouse gas emissions accounting for more than 0.5 percent of global greenhouse gas emissions have not capped those emissions, established emissions reference scenarios based on historical data, or otherwise reduced total forest emissions, the Administrator may apply a discount to distributions of emission allowances to those countries under this section.

(h) PEATLANDS AND OTHER NATURAL LANDS THAT SEQUESTER CARBON.—If the Administrator finds that peatlands or other natural landscapes store carbon, and that storage of carbon in such landscapes is capable of meeting the quality criteria promulgated pursuant to subsection (a), the Administrator may, after public notice and comment, find that such activities are eligible to receive allowances under this Subtitle.

Section 1325 Establishing and Distributing Offset Allowances

(a) International Forest Carbon Credits.
(1) In General.—Not later than 2 years after the date of enactment of this Act, the Administrator, in consultation with the Secretary of the Interior, the Secretary of State, and the Secretary of Agriculture, shall promulgate rules, including quality and eligibility requirements, for offset allowances from international forest carbon activities.
(2) Quality and Eligibility Requirements.— The rules promulgated under subsection (b)(1) shall require

that, in order to be approved for use under this subtitle emission credits from international forest carbon activities must meet the following quality and eligibility requirements, including:
(A) that those activities be designed, carried out and managed —
(i) in accordance with widely-accepted environmentally sustainable forestry practices;
(ii) to promote native species and conservation and/or restoration of native forests, where practicable, and to avoid the introduction of invasive nonnative species;
(iii) in a manner that does not adversely impact or undermine indigenous and other forest-dependent people living in the affected areas, including their internationally-recognized rights; and
(iv) in a manner that ensures that local communities are provided the right of free prior informed consent regarding projects or other activities, are able to share equitably in profits or other benefits of the activities, and receive fair compensation for any damages resulting from the activities;
(B) that the emission reductions or sequestrations are real, permanent, additional, verifiable and enforceable, with reliable measuring and monitoring and appropriate accounting for leakage, and
(C) that eligible emissions credits come only from countries on the list described in section 2502(b)(3) that have taken on a national level commitment to reduce deforestation, and achieved and demonstrated national level emission reductions.

(b) National Level Reductions in Deforestation and Forest Degradation. – The Administrator, in consultation with the Secretary of State, shall identify and periodically update a list of countries that have—
(i) demonstrated capacity to participate in international forest carbon activities, including sufficient accurate and verifiable data on changes in national forest carbon stocks;
(ii) capped greenhouse gas emissions or otherwise established a credible national baseline or emission reference scenario that is consistent with nationally appropriate mitigation commitments or actions, taking into consideration the average annual deforestation and degradation rates of the country during a period of at least 5 years, and that leads to zero net deforestation no later than 2050; and
(iii) commenced an emission reduction program for the forest sector; and demonstrated those reductions using remote sensing technology, taking into account relevant international standards.

(c) FACILITY CERTIFICATION.—The owner or operator of a covered facility who submits an offset allowance generated under this section shall certify that the allowance has not been retired from use in the registry of the applicable foreign country.
(d) USE. —
(1) IN GENERAL.—Subject to paragraph (3), the quantity of offset allowances distributed pursuant to this section in a calendar year shall not exceed 10 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201.
(2) USE OF INTERNATIONAL ALLOWANCES.—
(A) If the quantity of offset allowances distributed in a calendar year pursuant to this section is less than 10 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201, then the Administrator shall allow the use, by covered facilities in that year, of international allowances under section 322.
(B) The aggregate quantity of international allowances whose use the Administrator shall allow under subparagraph (A) shall be equal to the quantity by which the quantity of offset allowances distributed in that year pursuant to this section is less than 10 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201.
(3) CARRY-OVER.—
(A) If the sum of the quantity of offset allowances distributed in that year pursuant to this section and the quantity of international allowances used in that year pursuant to paragraph (2) is less than 10

percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201, then, notwithstanding paragraph (1), the quantity of offset allowances distributed pursuant to this section in the subsequent calendar year shall not exceed the sum of—
(i) 10 percent of the quantity of emission allowances established for that subsequent year pursuant to subsection (a) of section 201; and
(ii) the quantity by which the sum of the quantity of offset allowances distributed in the preceding calendar year pursuant to this section and the quantity of international allowances used in that year pursuant to paragraph (2) is less than 10 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201.

(4) LIMITATIONS.—
(1) In no event shall the Administrator distribute to the government of a foreign country a quantity of offset allowances that exceeds the quantity of metric tons of carbon dioxide that have been biologically sequestered or prevented from being emitted as a result of countrywide reductions in deforestation and forest degradation.
(2) The rules promulgated pursuant to subsection (d) shall ensure that offset allowances are not issued for sequestration or emission reductions that have been used or will be used by any other country for compliance with a domestic or international obligation to limit or reduce greenhouse-gas emissions.

Section 1326 Savings Clause

Nothing in this subtitle shall supersede, limit, or otherwise affect any restriction imposed by Federal statute or regulation on interactions between entities in the United States and entities in other countries.

Subtitle C International Partnerships to Deploy Clean Technology

Section 1331 Purpose and Construction

(a) PURPOSE.—The purpose of this subtitle 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) CONSTRUCTION.—Nothing in this subtitle shall be construed to alter or affect authorities of the Secretary of States under—
(1) Title V of the Foreign Relations Authorization Act, Fiscal Year 1979 (Public Law 95-426; 22 U.S.C. 2656a et seq.); or
(2) section 622(c) of the Foreign Assistance Act of 1961 (22 U.S.C. 2382(c)).

Section 1332 Definition

In this subtitle, the term “appropriate congressional committees” means--
(1) the Committee on Foreign Relations, the Committee on Finance, the Committee on Energy and Natural Resources, the Committee on Environment and Public Works, and the Committee on Appropriations of the Senate; and

(2) the Committee on Foreign Affairs, the Committee on Ways and Means, the Committee on Energy and Commerce, the Committee on Natural Resources, and the Committee on Appropriations of the House of representatives.

Section 1333 Establishment

There is established in the Treasury a Fund to be known as the "Clean Development Technology Deployment Fund."

Section 1334 Auction

Over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of calendar year 2012, the Administrator shall, for the purpose of raising cash to deposit into the Clean Development Technology Deployment Fund, auction 0.5 percent of the aggregate quantity of emission allowances established for calendar years 2012 through 2017 pursuant to subsection (a) of section 201.

Section 1335 Deposit

The Administrator shall, immediately upon receipt of proceeds from auctioning conducted pursuant to section 1334, deposit all such proceeds into the Clean Development Technology Deployment Fund established by section 1333.

Section 1336 Use of Funds

In each calendar year, all funds deposited into the Clean Development Technology Deployment Fund in the preceding year pursuant to section 1335 shall be made available, without further appropriation or fiscal year limitation, to the Clean Development Technology Deployment Board established pursuant to section 1337 to provide assistance under that section.

Section 1337 International Clean Development Technology

(a) ESTABLISHMENT.—Not later than 90 days after the date of enactment of this Act, the President shall establish an International Clean Development Technology Board (referred to in this subtitle as the "Board").

(b) COMPOSITION.—The Board shall be composed of—
(1) the Secretary of State, who shall act as the chair of the Board;
(2) the Secretary of the Treasury;
(3) the Secretary of Energy;
(4) the Secretary of Commerce;
(5) the Administrator;
(6) the Administrator of the United States Agency for International Development;
(7) the United States Trade Representative; and
(8) other officials as determined appropriate by the President.

(c) ADMINISTRATION OF INTERNATIONAL CLEAN DEVELOPMENT TECHNOLOGY FUND.—The Board shall administer the International Clean Development Technology Fund, ensuring that—

(1) funds are deployed in a manner that best promotes the participation of, and investments by, the private sector;
(2) funds are allocated in a manner consistent with commitments by the United States under international climate-change agreements; and
(3) funds achieve the greatest greenhouse-gas emission mitigation with the lowest possible cost, consistent with paragraphs (1) and (2).

(d) ASSISTANCE.—The Board, acting through the Secretary of States, is authorized to provide assistance under this section to qualified entities to support the purposes of this section.

(e) FORM OF ASSISTANCE.—Consistent with international legal obligations of the United States regarding intellectual property, assistance under this section may be provided—
(1) as direct assistance in the form of grants, concessional loans, cooperative agreements, contracts, insurance, or loan guarantees to or with qualified entities;
(2) as indirect assistance to such entities through—
(A) funding for international clean technology funds supported by multilateral institutions;
(B) support from development and export promotion assistance programs of the United States Government; or
(C) support from international technology programs of the Department of Energy; or
(3) in such other forms as the Board may determine appropriate.

(f) USE OF FUNDS.—Assistance provided under this section may be used for one or more of the following purposes:
(1) Funding for capacity building programs, including—
(A) developing and implementing methodologies and programs for measuring and quantifying greenhouse-gas emissions and verifying emission reductions;
(B) assessing technology and policy options for greenhouse-gas emission mitigations; and
(C) providing other forms of technical assistance to facilitate the qualification for, and receipt of, program funding under this subtitle.
(2) Funding for technology programs to mitigate greenhouse-gas emissions in eligible countries.

(g) QUALIFIED ENTITIES.—A qualified entity referred to in subsection (h) is—
(1) the national government of an eligible country;
(2) a regional or local governmental unit of an eligible country;
(3) a nongovernmental organization or a private entity located or operating in an eligible country.

(h) SELECTION OF PROJECTS.—
(1) IN GENERAL.—The Board shall be responsible for selecting qualified entities to receive assistance under this section.
(2) NOTICE AND WAIT REQUIREMENT.—Assistance may not be provided under this section until 30 days after the Board notifies the appropriate congressional committees of the proposed assistance, including—
(A) in the case of a capacity-building program—
(i) a description of the capacity-building program to be funded through such assistance;
(ii) the terms and conditions of such assistance; and
(iii) a description of how the capacity-building program will contribute to the purposes of this title; or
(B) in the case of a technology program—
(i) a description of the technology program to be funded through such assistance;

(ii) the terms and conditions of such assistance;
(iii) an estimate of the additional amount of greenhouse-gas emission reductions expected due to the use of such assistance; and
(iv) a description of how the technology program will contribute to the purposes of this title.

(i) DETERMINATION BY THE PRESIDENT.—The Board shall determine whether a country is eligible for technology-program assistance under this title based on the criteria in subsection (j).

(j) CRITERIA.—A country shall be considered to be eligible for purposes of this section if—
(1) the country is not a member of the Organization for Economic Cooperation and Development, and
(2)(A) the country has made a binding commitment, pursuant to an international agreement to which the United States is a party, to undertake actions to produce measurable, reportable, and verifiable greenhouse-gas emission mitigations; or
(B) the Board determines and certifies to the appropriate congressional committees that the country has in force binding national policies and measures capable of producing measurable, reportable, and verifiable greenhouse-gas emission mitigations.

(k) FIRST REPORT.—Not later than 270 days after the date of enactment of this Act, the President shall submit to the appropriate congressional committees a report outlining the criteria to be used to determine whether a country is eligible for assistance under this subtitle pursuant to subsection (j)(2)(B).

(l) SECOND REPORT.—Not later than one year after the date of enactment of this Act, and annually thereafter, the President shall submit to the appropriate congressional committees a report on assistance provided under this subtitle.

(m) CONTENT.—Each report submitted under subsection (l) shall include a description of assistance provided during the reporting period, including—
(1) the aggregate amount of assistance provided for capacity-building initiatives and technology deployment initiatives; and
(2) a description of each initiative funded through such assistance, including the amount of assistance provided, the terms and conditions of such assistance, and the anticipated reductions in greenhouse-gas emissions to be achieved as a result of technology deployment initiatives.

Subtitle D International Partnerships to Adapt to Climate Change and Protect National Security

Section 1341 Establishment

There is established in the Treasury a Fund to be known as the “International Climate Change Adaptation and National Security Fund.”

Section 1342 Auctions

(a) AUCTIONING.— Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2012 through 2050, the Administrator shall, for the purpose of raising cash to deposit into the International

Climate Change Adaptation and National Security Fund, auction a quantity of the emission allowances established for that year pursuant to subsection (a) of section 201.

(b) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—The quantities of emission allowances auctioned pursuant to subsection (a) shall be the quantities represented by the following percentages:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Auction in Order to Raise Cash for the International Climate Change Adaptation and National Security Fund
2012	1
2013	1
2014	1.25
2015	1.25
2016	1.25
2017	1.25
2018	2
2019	2
2020	2
2021	2
2022	3
2023	3
2024	3
2025	3
2026	4
2027	4
2028	4
2029	4
2030	4
2031	6
2032	6
2033	6
2034	6
2035	6
2036	6
2037	6
2038	6
2039	7
2040	7
2041	7
2042	7
2043	7
2044	7
2045	7
2046	7
2047	7

2048	7
2049	7
2050	7

Section 1343 Deposits

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 1342, immediately upon receipt of those proceeds, into the International Climate change Adaptation and National Security fund.

Section 1344 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, working with the Administrator of the United States Agency for International Development (referred to in this subtitle as the "Agency") and the Administrator, shall establish an International Climate Change Adaptation and National Security Program within the Agency.

(b) PURPOSES OF THE PROGRAM.— The purposes of the Program are:
(1) to protect the economic and national security of the United States where such interest can be advanced by minimizing, averting, or increasing resilience to potentially destabilizing global climate change impacts;
(2) to support the development of national and regional climate change adaptation plans in the most vulnerable developing countries;
(3) to support the identification and deployment of technologies that would help the most vulnerable developing countries respond to destabilizing impacts of climate change, including appropriate low-carbon and efficient technologies that help reduce a country's greenhouse gas emissions and their black-carbon emissions;
(4) to provide assistance to the most vulnerable developing countries with national or regional climate change adaptation plans in the planning, financing, and execution of adaptation projects;
(5) to support investments, capacity-building activities and other assistance, to reduce vulnerability and promote community-level resilience related to climate change and its impacts in the most vulnerable developing countries, including but not limited to impacts such as water scarcity (including drought and reductions in access to safe drinking water), reductions in agricultural productivity, floods, sea level rise, shifts in agricultural zones or seasons, shifts in biodiversity, or other impacts that affect economic livelihoods, result in increases in refugees and internally displaced persons, or otherwise increase social, economic, political, cultural or environmental vulnerability;
(6) to support climate change adaptation research in or for the most vulnerable developing countries; and
(7) 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) RESPONSIBILITIES OF PROGRAM.—The Program shall—
(1) submit annual reports to the President, the Committees on Environment and Public Works and Foreign Relations of the Senate, and the Committees on Energy and Commerce and Foreign Relations of the House of Representatives, and any other relevant committees on national security, the economy and foreign policy, that describe—

(A) the extent to which other countries are committing to reducing greenhouse gas emissions through mandatory programs;
(B) the extent to which global climate change, through its potential negative impacts on sensitive populations and natural resources in the most vulnerable developing countries, may threaten, cause, or exacerbate political, economic, environmental, cultural or social instability or international conflict in those regions; and
(C) the ramifications of any potentially destabilizing impacts climate change may have on the economic and national security of the United States, including—
(i) the creation of refugees and internally displaced peoples;
(ii) international or internal armed conflicts over water, food, land, or other resources;
(iii) loss of agricultural and other livelihoods, cultural stability, and other causes of increased poverty and economic destabilization;
(iv) decline in availability of resources needed for survival, including water;
(v) increased impact of natural disasters, including severe weather events, droughts and flooding;
(vi) increased prevalence or virulence of climate-related diseases; and
(vii) intensified urban migration.
(2) include in each annual report submitted under paragraph (1) a description of how funds made available under section 1322 were spent to enhance the economic and national security of the United States and assist in avoiding the economically, politically, environmentally, culturally, and socially destabilizing impacts of climate change in volatile regions of the world, particularly least developed countries;
(3) identify and recommend the developing countries that are most vulnerable to climate change impacts and in which assistance can have the greatest and most sustainable benefit to reducing vulnerability to climate change, including in the form of deploying technologies, investments, capacity-building activities, and other types of assistance for adaptation to climate change impacts and approaches to reduce greenhouse gases in ways that can also provide community-level resilience to climate change impacts; and
(4) in each annual report under paragraph (1), describe cooperation undertaken with other nations and international organizations to carry out this subtitle.

Section 1345 Implementation of International Climate Change and National Security Program

(a) USE OF FUNDS.—In each calendar year from 2012 through 2050, all funds deposited into the Climate Change and National Security Fund in the preceding year pursuant to section 1343 shall be made available, without further appropriation or fiscal year limitation, to carry out the program established under this subtitle and to fund international activities that meet the eligibility requirements of subsection (i).

(b) DISTRIBUTION OF FUNDS.—The Secretary shall distribute to the International Climate Change Adaptation and National Security Program the funds for the purposes described in section 1344.

(c) OVERSIGHT.—The Administrator of the Agency shall oversee the expenditures of the Program.

(d) MOST VULNERABLE DEVELOPING COUNTRIES.— When funds shall be used for projects and programs in the most vulnerable developing countries, such countries shall include least developed countries, low-lying and other small island developing countries, developing countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems.

(e) LIMITATIONS.—Not more than 10 percent of amounts made available to carry out this subtitle shall be spent in any single country in any year.

(f) CONSULTATION.—The Administrator of the Agency shall ensure that local communities in areas where any projects or programs are planned under the program established under this subtitle are engaged through full disclosure of information, consultation, and with communities' informed participation. The Administrator of the Agency shall establish a process for consultation at the national level with local, national and international stakeholders regarding any projects and programs planned under the program established under this subtitle.

(g) DEVELOPMENT OBJECTIVES.— The Administrator of the Agency shall, to the extent practicable, ensure that project or programs planned under the program established under this subtitle are aligned with broader development, poverty alleviation, or natural resource management objectives and initiatives in the recipient country.

(h) INTERNATIONAL FUNDS.—The Secretary of State is hereby authorized to distribute up to 60 percent of the funds available to the program established under this subtitle to an international fund that meets the requirements of subsection (i). The Secretary shall notify the appropriate congressional committees not less than 15 days prior to an allocation or transfer of funds pursuant to this subsection.

(i) INTERNATIONAL FUND ELIGIBILITY.—An international fund is eligible for funding under the Program provided that it is created pursuant to the United Nations Framework Convention on Climate Change or an agreement negotiated under the Convention and that the agreement—
(1) specifies the terms and conditions under which the United States is to provide monies to the fund, and under which the international fund is to disburse monies to recipient countries;
(2) ensures that United States assistance to the fund and the principal and income of the fund are disbursed only for purposes that are consistent with those described in section 1343;
(3) requires a regular meeting of a governing body of the international fund that provides full public access and includes members representing most vulnerable developing countries;
(4) requires that not more than 10 percent of the amounts available to the fund be spent in any single country in any year; and
(5) requires the international fund to prepare and make public an annual report that—
(A) identifies and recommends the developing countries that are most vulnerable to climate change impacts and in which assistance can have the greatest and most sustainable benefit to reducing vulnerability to climate change;
(B) describes the process and methodology for selecting the recipients of assistance or grants from the fund;
(C) 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;
(D) describes the performance goals for assistance authorized under the fund and expresses such goals in an objective and quantifiable form, to the extent practicable;
(E) describes the performance indicators to be used in measuring or assessing the achievement of the performance goals described in subparagraph (D);
(F) provides a basis for recommendations for adjustments to assistance authorized under this title to enhance the impact of such assistance; and
(G) describes the participation of other nations and international organizations in funding and governing the international fund.

Section 1346 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 development impact of such assistance, including the extent to which the assistance is meeting the purposes of this subtitle in addressing the climate change adaptation needs of developing countries and enhancing the national security of the United States.

(b) REQUIREMENTS.—In carrying out subsection (a), the Administrator shall—
(1) in consultation with national governments in recipient countries, establish performance goals for assistance authorized under this subtitle and expresses such goals in an objective and quantifiable form, to the extent practicable;
(2) establish performance indicators to be used in measuring or assessing the achievement of the performance goals described in paragraph (1);
(3) provide a basis for recommendations for adjustments to assistance authorized under this title to enhance the impact of such assistance; and
(4) include in its report to Congress described in subsection (c) of section 1343, the monitoring and evaluation of programs subject to this section in its findings.

(b) REVIEW.— 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—
(1) review the global needs and opportunities for and costs of adaptation assistance in developing countries, especially least developed countries;
(2) review the progress of international adaptation among developing countries, including an evaluation of the impacts of funds spent by the Secretary pursuant to this subsection and the extent to which adaptation needs are addressed; and
(3) review the best practices for adapting to climate change in terms of promoting community-level resilience and social, economic, political, environmental and cultural stability, and review any guidelines or rules established by the Administrator of the Agency to carry out this subsection.

Title XIV Reducing the Deficit

Section 1401 Deficit Reduction Fund

There is established in the Treasury a Fund to be known as the “Deficit Reduction Fund.”

Section 1402 Auctions

(a) AUCTIONING.— Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2012 through 2050, the Administrator shall, for the purpose of raising cash to deposit into the Deficit Reduction Fund, auction a quantity of the emission allowances established for that year pursuant to subsection (a) of section 201.

(b) QUANTITIES OF EMISSION ALLOWANCES AUCTIONED.—The quantities of emission allowances auctioned pursuant to subsection (a) shall be the quantities represented by the following percentages:

Calendar Year	Percentage of Emission Allowances Established for the Year That the Administrator Shall Auction in Order to Raise Cash for the Deficit Reduction Fund
2012	5.75
2013	5.75
2014	5.75
2015	6.50
2016	6.75
2017	6.75
2018	7.25
2019	7
2020	8
2021	9.5
2022	8.75
2023	9.75
2024	10.75
2025	10.75
2026	12.75
2027	12.75
2028	12.75
2029	13.75
2030	13.75
2031	19.75
2032	17.75
2033	17.75
2034	16.75
2035	16.75
2036	16.75
2037	16.75
2038	16.75
2039	16.75
2040	16.75
2041	16.75
2042	16.75
2043	16.75
2044	16.75
2045	16.75
2046	16.75
2047	16.75
2048	16.75
2049	16.75
2050	16.75

Section 1403 Deposits

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 1402, immediately upon receipt of those proceeds, into the Deficit Reduction Fund.

Section 1404 Disbursements from the Deficit Reduction Fund

No disbursements shall be made from the Deficit Reduction Fund except pursuant to an appropriation Act.

Title XV Capping Hydrofluorocarbon Emissions

Section 1501 Rulemaking

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate rules establishing a program requiring reductions in HFC consumed in the United States by entities that manufacture HFCs in the United States or that import HFCs into the United States.

(b) DEFINITION.—The rules promulgated pursuant to subsection (a) shall provide that the term "HFC consumed" shall not include a quantity of HFC that is recycled; and otherwise shall mean—
(1) in the case of an HFC producer, a value equal to the difference of the carbon dioxide equivalents of hydrochlorofluorocarbons and HFCs as delineated in paragraph 14 between—
(A) a value equal to the sum of—
(i) the quantity produced in the United States; and
(ii) the quantity imported from any source into the United States or acquired in the United States from another HFC producer through sale or other transaction; and
(B) the quantity of exported or transferred to another HFC producer or importer in the United States through sale or other transaction; and
(2) in the case of an HFC importer for resale a value equal to the difference between—
(A) the quantity of the HFC imported for resale from any source into the United States; and
(B) the quantity of the HFC exported.

(c) REQUIREMENTS.—The program established pursuant to subsection (a) shall—
(1) be based upon, and parallel the major regulatory structures of, the program established by this Act for requiring reductions of emission in the United States of non-HFC greenhouse gases;
(2) provide that the compliance obligation under the program shall not be satisfied, in whole or in part, by the submission of any emission allowances or offset allowances established pursuant to Titles II, III, or XIII of this Act;
(3) impose, not later than in calendar year 2012, the first annual cap on annual HFC consumed;
(4) set the level of the first cap on HFC consumed at no higher than 289,000,000 carbon dioxide equivalents;
(5) set the level of each subsequent annual cap lower than the level of the cap of the preceding calendar year, provided, however that the level may remain constant from 2037 through 2050;
(6) set the level of the annual cap for calendar year 2020 at no higher than 85 percent of the annual cap for calendar year 2012;
(7) set the level of the annual cap for calendar year 2030 at no higher than 55 percent of the annual cap for calendar year 2012;

(8) set the level of the annual caps for calendar years 2040 and 2050 at no higher than 30 percent of the annual cap for calendar year 2012;
(9) consider, in setting the levels of the annual caps, whether the automobile manufacturing industry will have, before 2012, begun selling in the United States automobiles whose air conditioning systems use an HFC alternative that has a lower global-warming potential than any HFC;
(10) require that the Administrator sell at auction 10 percent of the quantity of allowances established for calendar year 2012;
(11) require that the Administrator sell at auction 100 percent of the quantity of allowances established for calendar years 2031 through 2050;
(12) require that, in each of calendar years 2013 through 2031, the percentage of the quantity of allowances established for that year sold by the Administrator at auction be greater than the percentage of the quantity of allowances established for the preceding calendar year sold by the Administrator at auction;
(13) require that, in each calendar year prior to calendar year 2031, the Administrator shall allocate at no charge to entities that manufacture HFCs in the United States and import HFCs into the United States for resale not less than 80 percent of the allowances established for that calendar year and not auctioned;
(14) require that allocations under paragraph (13) shall be based upon 100 percent of the HFCs and 60 percent of the hydrochlorofluorocarbons consumed by an HFC producer and importer for resale in the base period of 2004 through2006;
(15) notwithstanding paragraph (14), provide for a base period that extends through 2008, for an HFC producer or importer for resale that commenced operation of a new manufacturing facility in the United States after 2006, if the Administrator deems it appropriate;
(16) require that, in each calendar year prior to calendar year 2031, the Administrator shall allocate at no charge not less than 10 percent of the allowances established for that calendar year and not auctioned to a class, defined by the Administrator, of entities that manufacture in the United States commercial products containing HFCs;
(17) require that the class identified in paragraph (16) include, at a minimum, entities that manufactured or imported into the United States in calendar year 2005 commercial or residential air conditioning, heat-pump, commercial, or residential refrigeration products, or plastic foam products (including formulated systems) containing HFC or hydrochlorofluorocarbon where HFC or hydrochlorofluorocarbon was included in such products at time of sale;
(18) establish a system whereby manufacturers and importers of HFCs may reduce their compliance obligations in a calendar year by demonstrating to the Administrator the quantity of HFCs that they have destroyed in that year;
(19) establish a system whereby the Administrator establishes and distributes allowances, on a discounted basis, to entities for their destruction of chlorofluorocarbons or hydroclorofluorocarbons; and
(20) require that the Administrator use all proceeds from the sale of allowances at auction to assist—
(A) with research into commercial HFC alternatives that have lower global-warming potential than HFCs;
(B) with the recovery, reclamation, and destruction of HFCs;
(C) manufacturers in the United States whose products currently contain HFCs to transition to manufacturing products that do not contain HFCs; and
(D) with the promotion of efficient manufactured products that contain refrigerants with low global-warming potential.

Section 1502 National Recycling and Emission Reduction Program

Section 608 of the Clean Air Act (42 U.S.C. 7671g) is amended –

(1) by redesignating subsections (a) through (c) as subsections (b) through (d), respectively;

(2) by inserting before subsection (b) (as so redesignated) the following:
"(a) Definition of Hydrofluorocarbon Substitute. – In this section, the term "hydrofluorcarbon substitute" means a hydrofluorocarbon—
"(1) with a global warming potential of more than 150; and
"(2) that is used in or for types of equipment, appliances or processes that previously relied on class I or class II substances.";

(3) in subsection (b) (as so redesignated) –
(A) in the matter following paragraph (3), by striking "Such regulations" and inserting the following:
"(5) The regulations";
(B) by redesignating paragraph (3) as paragraph (4); and
(C) by inserting after paragraph (2) the following:
"(3)(A) Not later than 1 year after date of enactment of this Act, the Administrator shall promulgate regulations establishing standards and requirements regarding the sale or distribution, or offer for sale and distribution in interstate commerce, use, and disposal of hydrofluorcarbons substitutes for class I and class II substances not covered by paragraph (1), including the use, recycling, and disposal of those hydrofluorocarbon substitutes during the maintenance, service, repair, or disposal of appliances and industrial process refrigeration equipment.
"(B) The standards and requirements established under subparagraph (A) shall take effect not later than 1 year after the date of promulgation of the regulations.";

(4) in subsection (c) (as so redesignated)—
(A) by redesignating paragraphs (1) through (3) as subparagraphs (A) through (C), respectively, and indenting the subparagraphs appropriately;
(B) by striking the subsection designation and heading and all that follows through "following—" and inserting the following:
"(c) Safe Disposal. – The regulations under subsection (b) shall –
"(1) establish standards and requirements for the safe disposal of class I and class II substances and hydrofluorocarbon substitutes for those substances; and
"(2) include each of the following:";
(C) in subparagraph (A) (as redesignated by subparagraph (A)), by inserting "(or hydrofluorocarbon substitutes for those substances)" after "class I or class II substances"; and
(D) in paragraphs (2) and (3), by inserting "(or a hydrofluorocarbon substitute for such a substance)" after "class I or class II substance" each place it appears.

Section 1503 Fire Suppression Agents

Section 605(a) of the Clean Air Act (42 U.S.C. 7671d(a)) is amended by striking "or" at the end of paragraph (2), striking the period at the end of paragraph (3), and inserting "; or" and adding the following new paragraph after paragraph (3):
"(4) the Administrator determines that the substance is used as a fire suppression agent for military, commercial aviation, industrial, space, or national-security applications, and reduces overall risk to human health and the environment compared to alternatives.".

Title XVI Periodic Reviews and Recommendations

Section 1601 National Academy of Sciences Reviews

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator shall offer to enter into a contract with the National Academy of Sciences, under which the Academy shall, not later than January 1, 2012, and every 3 years thereafter, make public and submit to the Administrator a report.

(b) LATEST SCIENTIFIC INFORMATION.—Each report submitted pursuant to subsection (a) shall—
(1) address recent scientific reports on climate change, including the most recent assessment by the Intergovernmental Panel on Climate Change; and
(2) include a description of—
(A) trends in, and projections for, total United States greenhouse-gas emissions, including the Inventory of United States Greenhouse Gas Emissions and Sinks;
(B) trends in, and projections for, total worldwide greenhouse-gas emissions;
(C) current and projected future atmospheric concentrations of greenhouse gases;
(D) current and projected future global average temperature, including an analysis of whether an increase of global average temperature in excess of 3.6 degrees Fahrenheit (2 degrees Celsius) above the preindustrial average has occurred or is more likely than not to occur in the foreseeable future;
(E) current and projected adverse impacts of global climate change on human populations, wildlife, and natural resources; and
(F) trends in, and projections for, the health of the oceans and ocean ecosystems, including predicted changes in ocean acidity, temperatures, extent of coral reefs, and other indicators of ocean ecosystem health, resulting from anthropogenic carbon dioxide emissions and climate change.

(c) PERFORMANCE OF THIS ACT.—Each report submitted pursuant to subsection (a) shall also include a description 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 technologies, including solar, wind, geothermal, and nuclear technologies; and
(D) above- and below-ground biological sequestration technologies;
(4) the extent to which this Act and other policies are accelerating the development and commercial deployment of technologies and practices that reduce and limit greenhouse-gas emissions;
(5) the extent to which the allocations and distributions of emission allowances and auction proceeds under this Act are advancing the purposes of this Act;
(6) the feasibility of retiring quantities of the emission allowances established pursuant to subsection (a) of section 201;
(7) the feasibility of establishing policies for reducing greenhouse-gas emissions over and above the policies established by this Act;

(8) whether use and trading of emission allowances is resulting in increases in criteria, hazardous, and toxic pollutants;
(9) whether the transformation of the market and technologies deployed in response to carbon controls and reductions are resulting in increases in criteria, hazardous, and toxic pollutants;
(10) whether 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 criteria, hazardous, and toxic pollutants in environmental justice communities, specifically; and
(11) with respect to the offset programs established under this Act—
(A) the uncertainty and additionality of domestic offsets, international offsets and international markets;
(B) the impacts of changing the restrictions on the market and the economic costs of the offsets program;
(C) the interaction with the cost management efforts of the Carbon Market Efficiency Board;
(D) the impacts on deforestation in foreign countries; and
(E) the progress covered entities are making in reducing emissions from their covered activities.

Section 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 review submitted by the National Academy of Sciences pursuant to section 1601.

(b) CATEGORIES OF LEGISLATION.—The legislative measures eligible for inclusion in the recommendations required by subsection (a) shall include measures—
(1) that would expand the definition of the term “covered facility” under this Act;
(2) that would expand the scope of the compliance obligation established by section 202;
(3) that would adjust quantities of emission allowances available in one or more calendar years;
(4) that would establish other policies for reducing greenhouse-gas emissions over and above those policies established by this Act;
(5) that would 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) that would prevent or abate any direct, indirect, or cumulative increases in criteria, hazardous, and toxic air pollutants resulting from the use and trading of emission allowances or from transformations in technologies or markets.

(c) CONSISTENCY WITH REVIEWS.—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 reviews submitted by the National Academies of Sciences pursuant to section 1601.

(d) ONGOING EVALUATION OF IMPACTS.— The Administrator shall, no later than 90 days after the date of enactment, establish an advisory committee including representatives of impacted communities to advise EPA on the implementation of Executive Order 12898 (59 FR 7629), in implementing this Act.

(e) SAVINGS CLAUSE.—Nothing in this Title limits the authority of the Administrator, a State, or any person to use authorities under this Act or any other law to adopt or enforce any rule.

Section 1603 Presidential Recommendations

(a) ESTABLISHMENT OF THE INTERAGENCY CLIMATE CHANGE TASK FORCE.—Not later than January 1, 2018, the President shall establish an 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 Task Force.

(c) CHAIRMAN.—The Administrator shall act as Chairman of the Interagency Climate Change Task Force.

(d) REPORT TO THE PRESIDENT.—
(1) IN GENERAL.—Not later than April 1, 2019, the Interagency Climate Change Task Force shall make public and submit to the President a consensus report making recommendations, including specific legislation for the President to recommend to Congress.
(2) BASIS.—The report submitted pursuant to paragraph (1) shall be based on the third set of recommendations submitted by the Administrator to Congress pursuant to section 1602.
(3) INCLUSIONS.—The Interagency Climate Change Task Force shall include with the consensus report an explanation for each significant inconsistency between the consensus report and the third set of recommendations submitted by the Administrator to Congress pursuant to section 1602.

(e) PRESIDENTIAL RECOMMENDATION TO CONGRESS.—Not later than July 1, 2020, the President shall submit to Congress the text of a proposed Act based upon the consensus report submitted to the President pursuant to subsection (d).

Title XVII Miscellaneous

Subtitle A Climate Security Act Administrative Fund

Section 1711 Establishment

There is established in the Treasury a Fund to be known as the “Climate Security Act Administrative Fund.”

Section 1712 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, for the purpose of raising cash to deposit into the Climate Security Act Administrative Fund, auction 0.75 percent of the quantity of emission allowances established pursuant to subsection (a) of section 201 for the calendar year that lies three years in the future.

(b) SECOND PERIOD.— Annually over the course of at least 4 auctions spaced evenly over a period beginning 330 days before, and ending 60 days before, the beginning of each calendar year from 2031 through 2050, the Administrator shall, for the purpose of raising cash to for deposit into the Climate

Security Act Administrative Fund, auction 1 percent of the quantity of emission allowances established for that year pursuant to subsection (a) of section 201.

Section 1713 Deposits

The Administrator shall deposit all proceeds of auctions conducted pursuant to section 1712, immediately upon receipt of those proceeds, into the Climate Security Act Administrative Fund.

Section 1714 Disbursements from the Climate Security Act Fund

No disbursements shall be made from the Climate Security Act Administrative Fund except pursuant to an appropriation Act.

Section 1715 Use of Funds

In each calendar year from 2012 through 2050, all funds deposited into the Climate Security Act Administrative Fund in the preceding year pursuant to section 1713 shall be made available for funding the administration of the requirements and programs set forth in, and established by, this Act, by—
(1) the Administrator;
(2) the Secretaries of the other Federal agencies directed to take actions by this Act;
(3) the Carbon Market Efficiency Board established by section 431; and
(4) the Climate Change Technology Board established by section 441.

Subtitle B Paramount Interest Waiver

Section 1721 In General

If the President determines that a national security, energy security, or economic security emergency exists, and that it is in the paramount interest of the United States to modify any requirement under this Act to minimize the effects of the emergency, the President may make an emergency declaration.

Section 1722 Presidential Proclamation

After making an emergency declaration under section 1721, the President shall declare by Proclamation the action or actions to minimize the emergency.

Section 1723 Congressional Rescission or Modification

A Proclamation issued under section 1722 shall be considered final action by the President, and Congress shall have 30 days to rescind or modify it.

Section 1724 Consultation

(a) Consultation – In making an emergency determination under section 1721, the President shall, to the maximum extent practicable, consult with and take into account any advice received from –
(1) the National Security Advisor;
(2) the Secretary of the Treasury;

(3) the Secretary of Energy;
(4) the Administrator;
(5) the relevant Committees of Congress; and
(6) the Carbon Market Efficiency Board established by section 431.

(b) Report to Federal Agencies – the President shall report to the federal agencies of jurisdiction the details of the action or actions declared in the Proclamation every 30 days during which the Proclamation is in effect.

Section 1725 Limitation

A Proclamation issued under section 1722 shall expire after 6 months. The President shall have opportunity to request an extension, subject to same conditions as initial Proclamation. Congress shall have 30 days to disapprove an extension.

Section 1726 Report

(a) PUBLIC COMMENT.—The President shall accept public comment on a Proclamation issued under section 1722 for 30 days after the Proclamation is issued.

(b) REPORT.—The President shall respond to the public comments and explain the reasons for the declaration and the action or actions declared in the Proclamation not later than 60 days after the Proclamation is issued.

(c) NO DELAY.—Notwithstanding subsections (a) and (b), the President may make the Proclamation effective immediately upon issuance.

Section 1727 No Delegation

The President shall not delegate to any other person a determination under section 1721 or a Proclamation under section 1722.

Subtitle C Administrative Procedure and Judicial Review

Section 1731 Rulemaking Procedures

Any rule, requirement, regulation, method, standard, program, determination, or final agency action made or promulgated pursuant to this Act, with the exception of the establishment of allowances and the allocation of allowances to programs by the Administrator, shall be subject to the rulemaking procedures described in sections 551 through 557 of Title 5, United States Code.

Section 1732 Enforcement

(a) VIOLATIONS.—It shall be unlawful for any person owning or operating a covered entity to violate any prohibition of, requirement of, provision of, or regulation promulgated pursuant to this Act, and such action shall be a violation of this Act. In addition to the specific enforcement provisions provided for under the Act, the operation of any covered entity to emit greenhouse gases in excess of the number of

allowances held shall be deemed a violation, with each carbon dioxide equivalent emitted in excess of emission allowances held constituting a separate violation.

(b) ENFORCEMENT.—
(1) Each provision of this Act and any regulation issued pursuant to this Act shall be fully enforceable pursuant to sections 113, 303 and 304 of the Clean Air Act (42 U.S.C. 7413, 7603, 7604).
(2) For purposes of enforcement under these sections, all requirements under this Act shall constitute requirements of the Clean Air Act, and, for purposes of enforcement under section 304 of the Clean Air Act (42 U.S.C. 7604), all requirements of this Act shall constitute emission standards or limitations under the Clean Air Act.
(3) All provisions related to mandatory duties of the Administrator or any other federal official shall be fully enforceable pursuant to section 304 of the Clean Air Act (42 U.S.C. 7604).
(4) The district courts of the United States shall have jurisdiction to compel agency action (including discretionary agency action) that has been unreasonably delayed.

(c) JUDICIAL REVIEW.—Any person may petition for judicial review of any regulation promulgated, or final action carried out, by the Administrator or any other federal official or agency pursuant to this Act. Such petition may be filed in the United States Court of Appeals for the appropriate circuit and otherwise only in accordance with Section 307(b) of the Clean Air Act (42 U.S.C. 7607(b)), provided, however, that petitions concerning actions of the Administrator may only be filed in the United States Court of Appeals for the District of Columbia.

(d) LITIGATION COSTS.—The court may award costs of litigation (including reasonable attorney and expert witness fees) in accordance with section 307(f) of the Clean Air Act (42 U.S.C. 7607(f)).

Section 1733 Recordkeeping, Inspections, Monitoring, Entry, and Subpoenas

(a) POWERS OF THE ADMINISTRATOR.—The Administrator shall have the same powers and authority provided under sections 114 and 307(a) of the Clean Air Act (42 U.S.C. 7414, 7607(a)) in carrying out, administering, and enforcing this Act.

(b) JUDICIAL REVIEW.—A petition for judicial review of any regulation promulgated, or final action carried out, pursuant to this Act may be filed only—
(1) in the United States Court of Appeals for the District of Columbia; and
(2) in accordance with section 307(b) of the Clean Air Act (42 U.S.C. 7607(b)).

(c) REMEDY.—
(1) In selecting a remedy for arbitrary, capricious, or unlawful action by the Administrator in implementing this Act, a court should avoid vacating the Administrator's action where such relief could jeopardize the full and timely attainment of the emissions reductions required under this Act.
(2) Upon finding that final action by the Administrator is arbitrary, capricious, or contrary to law, the court shall direct the Administrator to take final action fully remedying all deficiencies found by the Court as expeditiously as practicable, and no later than the shorter of—
(A) 1 year of the Court's finding; and
(B) the time frame allowed by this Act for the original agency action.

(d) LITIGATION COSTS.—In reviewing any action pursuant to subsection (b), the court may award costs of litigation (including reasonable attorney and expert witness fees) in accordance with section 307(f) of

the Clean Air Act (42 U.S.C. 7607(f)).

Subtitle D State Authority

Section 1741 Retention of State Authority

(a) IN GENERAL.—Except as provided in subsection (b), nothing in this Act precludes, diminishes, or abrogates the right of any State to adopt or enforce—
(1) any standard, limitation, prohibition, or cap relating to emissions of greenhouse gas; or
(2) any requirement relating to control, abatement, mitigation, or avoidance of emissions of greenhouse gas.

(b) EXCEPTION.—Notwithstanding subsection (a), no State may adopt a standard, limitation, prohibition, cap, or requirement that is less stringent than the applicable standard, limitation, prohibition, or requirements under this Act.

Subtitle E Tribal Authority

Section 1751

For the purposes of this Act, the Administrator may treat any federally recognized Indian tribe as a State, in accordance with section 301(d) of the Clean Air Act (42 U.S.C. 7601(d)).

Subtitle F Retail Carbon Offsets

Section 1761 Definition of Retail Carbon Offset

Definition of Retail Carbon Offset.—In this subtitle, 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.

Section 1762 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.

Subtitle G Clean Air Act

Section 1771 Integration

(a) REPORT.—Not later than 2 years after the date of enactment, the President shall submit to Congress a report on any direct regulation of carbon-dioxide emissions that has occurred or may occur under the Clean Air Act (42 U.S.C. 7401-7671q).

(b) RECOMMENDATIONS.—The report shall make recommendations designed to ensure efficiency and certainty in the Federal government's regulation of carbon-dioxide emissions.

Subtitle H Study on State-Federal Program Interaction

Section 1781 Study

The Administrator shall enter into a contract with the National Academies of Science or with a University or collaboration of Universities to conduct a study of—
(1) the reasonably foreseeable economic and environmental benefits and costs that may accrue to a State, and the Nation, from the operation by that State of a cap and trade program for greenhouse gases, in addition to the federal program described within this Act;
(2) the reasonably foreseeable economic and environmental benefits and costs that may accrue to a State, and the Nation, from the operation by that State of programs that achieve greenhouse-gas reductions through mechanisms other than cap and trade, including but not limited to: efficiency standards for vehicles, buildings, and appliances; renewable electricity standards; land use planning and transportation policy; and fuel carbon intensity standards, in addition to the federal program described within this Act; and
(3) the reasonably foreseeable effect on federal allowance prices, allowance price volatility, cost to businesses and consumers, including low-income consumers, economic growth, and total cumulative emissions associated with State programs described in paragraphs (1) and (2), in comparison to a national greenhouse gas control policy strictly limited to the federal program described within this Act.

Subtitle I Funding

Section 1791 Committees of Appropriate Jurisdiction

No revenue or outlays may be disbursed from Treasury Funds established by this Act except pursuant to legislation reported by the Committees of appropriate jurisdiction.