To direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes.

IN THE SENATE OF THE UNITED STATES

OCTOBER 18, 2007

Mr. LIEBERMAN (for himself, Mr. WARNER, Mr. HARKIN, Mr. COLEMAN, Mrs. DOLE, Ms. COLLINS, Mr. CARDIN, Ms. KLOBUCHAR, and Mr. CASEY) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

To direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) Short Title.—This Act may be cited as the “America’s Climate Security Act of 2007”.

(b) Table of Contents.—The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.
Sec. 2. Findings.
Sec. 3. Purposes.
Sec. 4. Definitions.

TITLE I—CAPPING GREENHOUSE GAS EMISSIONS

Subtitle A—Tracking Emissions

Sec. 1101. Purpose.
Sec. 1102. Definitions.
Sec. 1103. Reporting requirements.
Sec. 1104. Data quality and verification.
Sec. 1105. Federal greenhouse gas registry.
Sec. 1106. Enforcement.

Subtitle B—Reducing Emissions

Sec. 1201. Emission allowance account.
Sec. 1202. Compliance obligation.
Sec. 1203. Penalty for noncompliance.

TITLE II—MANAGING AND CONTAINING COSTS EFFICIENTLY

Subtitle A—Trading

Sec. 2101. Sale, exchange, and retirement of emission allowances.
Sec. 2102. No restriction on transactions.
Sec. 2103. Allowance transfer system.
Sec. 2104. Allowance tracking system.

Subtitle B—Banking

Sec. 2201. Indication of calendar year.
Sec. 2202. Effect of time.

Subtitle C—Borrowing

Sec. 2301. Regulations.
Sec. 2302. Term.
Sec. 2303. Repayment with interest.

Subtitle D—Offsets

Sec. 2401. Outreach initiative on revenue enhancement for agricultural producers.
Sec. 2402. Establishment of domestic offset program.
Sec. 2403. Eligible agricultural and forestry offset project types.
Sec. 2404. Project initiation and approval.
Sec. 2405. Offset verification and issuance of allowances for agricultural and forestry projects.
Sec. 2406. Tracking of reversals for sequestration projects.
Sec. 2407. Examinations.
Sec. 2408. Timing and the provision of offset allowances.
Sec. 2409. Offset registry.
Sec. 2410. Environmental considerations.
Sec. 2411. Program review.

Subtitle E—International Credits

Sec. 2501. Use of international allowances or credits.
Sec. 2502. Regulations.
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Subtitle F—Carbon Market Efficiency Board

Sec. 2504. Purposes.
Sec. 2505. Establishment of Carbon Market Efficiency Board.
Sec. 2506. Duties.
Sec. 2507. Powers.
Sec. 2508. Estimate of costs to economy of limiting greenhouse gas emissions.

TITLE III—ALLOCATING AND DISTRIBUTING ALLOWANCES

Subtitle A—Early Auctions

Sec. 3101. Allocation for early auctions.

Subtitle B—Annual Auctions

Sec. 3201. Allocation for annual auctions.

Subtitle C—Early Action

Sec. 3301. Allocation.
Sec. 3302. Distribution.

Subtitle D—States

Sec. 3401. Allocation for energy savings.
Sec. 3402. Allocation for States with programs that exceed Federal emission reduction targets.
Sec. 3403. General allocation.

Subtitle E—Electricity Consumers

Sec. 3501. Allocation.
Sec. 3502. Distribution.
Sec. 3503. Use.
Sec. 3504. Reporting.

Subtitle F—Bonus Allowances for Carbon Capture and Geological Sequestration

Sec. 3601. Allocation.
Sec. 3602. Qualifying projects.
Sec. 3603. Distribution.
Sec. 3604. 10-Year limit.
Sec. 3605. Exhaustion of bonus allowance account.

Subtitle G—Domestic Agriculture and Forestry

Sec. 3701. Allocation.
Sec. 3702. Agricultural and forestry greenhouse gas management research.
Sec. 3703. Distribution.

Subtitle H—International Forest Protection

Sec. 3801. Findings.
Sec. 3802. Definition of forest carbon activities.
Sec. 3803. Allocation.
Sec. 3804. Definition and eligibility requirements.
Sec. 3805. International forest carbon activities.
Sec. 3806. Reviews and discount.

Subtitle I—Covered Facilities

Sec. 3901. Allocation.
Sec. 3902. Distribution system.
Sec. 3903. Distributing emission allowances within the electric power sector.
Sec. 3904. Distributing emission allowances within the industrial sector.

TITLE IV—AUCTIONS AND USES OF AUCTION PROCEEDS

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Sec. 4102. Amounts in Funds.
Sec. 4103. Transfers to Funds.

Subtitle B—Climate Change Credit Corporation

Sec. 4201. Establishment.
Sec. 4202. Applicable laws.
Sec. 4203. Board of directors.

Subtitle C—Auctions

Sec. 4301. Early auctions.
Sec. 4302. Annual auctions.

Subtitle D—Energy Technology Deployment

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Sec. 4402. Zero- or low-carbon energy technologies deployment.
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Subtitle F—Climate Change Worker Training Program

Sec. 4601. Funding.
Sec. 4602. Purposes.
Sec. 4603. Establishment.
Sec. 4604. Grants to States.
Sec. 4605. Types of assistance.

Subtitle G—Adaptation Program for Natural Resources in United States and Territories

Sec. 4701. Definitions.
Sec. 4702. Adaptation fund.

Subtitle H—Climate Change and National Security Program

Sec. 4801. Interagency Climate Change and National Security Council.
Sec. 4802. Funding.

Subtitle I—Audits

Sec. 4901. Review and audit by Comptroller General of the United States.

TITLE V—ENERGY EFFICIENCY

Subtitle A—Appliance Efficiency

Sec. 5101. Residential boilers.
Sec. 5102. Regional variations in heating or cooling standards.

Subtitle B—Building Efficiency

Sec. 5201. Updating State building energy efficiency codes.
Sec. 5202. Conforming amendment.

TITLE VI—GLOBAL EFFORT TO REDUCE GREENHOUSE GAS EMISSIONS

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Sec. 6003. International negotiations.
Sec. 6004. Interagency review.
Sec. 6005. Presidential determinations.
Sec. 6006. International reserve allowance program.
Sec. 6007. Adjustment of international reserve allowance requirements.

TITLE VII—REVIEWS

Sec. 7001. National Academy of Sciences Review.
Sec. 7002. Transportation sector review.
Sec. 7003. Adaptation review.

TITLE VIII—FRAMEWORK FOR GEOLOGICAL SEQUESTRATION OF CARBON DIOXIDE

Sec. 8001. National drinking water regulations.
Sec. 8002. Assessment of geological storage capacity for carbon dioxide.
Sec. 8003. Study of the feasibility relating to construction of pipelines and geological carbon dioxide sequestration activities.
Sec. 8004. Liabilities for closed geological storage sites.

TITLE IX—MISCELLANEOUS

Sec. 9001. Paramount interest waiver.
Sec. 9002. Corporate environmental disclosure of climate change risks.
Sec. 9003. Administrative procedure and judicial review.
Sec. 9004. Retention of State authority.
Sec. 9005. Tribal authority.
Sec. 9006. Authorization of appropriations.

1 SEC. 2. FINDINGS.

2 Congress finds that—
(1) unchecked global warming poses a significant threat to—

(A) the national security and economy of the United States;

(B) public health and welfare in the United States;

(C) the well-being of other countries; and

(D) the global environment;

(2) under the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992, the United States is committed to stabilizing greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous anthropogenic 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 anthropogenic greenhouse gas emissions worldwide by 50 to 85 percent below 2000 levels by 2050;

(4) prompt, decisive action is critical, since global warming pollutants can persist in the atmosphere for more than a century;
(5) the ingenuity of the people of the United States will allow the United States to become a leader in curbing global warming;

(6) it is possible and desirable to cap greenhouse gas emissions, from sources that together account for the majority of those emissions in the United States, at the current level in 2012, and to lower the cap each year between 2012 and 2050, on the condition that the system includes—

(A) cost containment measures;

(B) periodic review of requirements;

(C) an aggressive program for deploying advanced energy technology;

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

(E) programs to mitigate the impacts of any unavoidable global climate change;

(7) Congress may need to update the emissions caps in order to account for continuing scientific data and steps taken, or not taken, by foreign countries;

(8) accurate emission data and timely compliance with the requirements of the greenhouse gas emission reduction and trading program established under this Act are needed to ensure that reductions
are achieved and to provide equity, efficiency, and
openness in the market for allowances subject to the
program; and

(9) additional policies external to a cap-and-
trade program may be required, including with re-
spect to—

(A) the transportation sector, where reduc-
ing greenhouse gas emissions requires changes
in the vehicle, in the fuels, and in consumer be-
behavior; and

(B) the built environment, where reducing
direct and indirect greenhouse gas emissions re-
quires changes in buildings, appliances, light-
ing, heating, cooling, and consumer behavior.

SEC. 3. PURPOSES.

The purposes of this Act are—

(1) to establish the core of a Federal program
that will reduce United States greenhouse gas emis-
sions substantially enough between 2007 and 2050
to avert the catastrophic impacts of global climate
change; and

(2) to accomplish that purpose while preserving
robust growth in the United States economy and
avoiding the imposition of hardship on United States
citizens.
SEC. 4. DEFINITIONS.

In this Act:

(1) ADDITIONAL AND 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, measured as the difference between—

(A) baseline greenhouse gas fluxes of an offset project; and

(B) greenhouse gas fluxes of the offset project.

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

(3) BASELINE.—The term “baseline” means the greenhouse gas flux or carbon stock that would have occurred in the absence of an offset allowance.

(4) BIOLOGICAL SEQUESTRATION; BIOLOGICALLY SEQUESTERED.—The terms “biological sequestration” and “biologically sequestered” mean—

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

(B) the storage of those greenhouse gases without reversal in the plants or related soils.
(5) **CARBON DIOXIDE EQUIVALENT.**—The term “carbon dioxide equivalent” means, for each greenhouse gas, the quantity of the greenhouse gas that the Administrator determines makes the same contribution to global warming as 1 metric ton of carbon dioxide.

(6) **CORPORATION.**—The term “Corporation” means the Climate Change Credit Corporation established by section 4201(a).

(7) **COVERED FACILITY.**—The term “covered facility” means—

(A) any facility within the electric power sector that contains fossil fuel-fired electricity generating units that together emit more than 10,000 carbon dioxide equivalents of greenhouse gas in any year;

(B) any facility within the industrial sector that emits more than 10,000 carbon dioxide equivalents of greenhouse gas in any year;

(C) any facility that in any year produces, or any entity that in any year imports, petroleum- or coal-based transportation fuel, the use of which will emit more than 10,000 carbon dioxide equivalents of greenhouse gas,
assuming no capture and permanent sequestration of that gas; or

(D) any facility that in any year produces,
or any entity that in any year imports, nonfuel chemicals that will emit more than 10,000 carbon dioxide equivalents of greenhouse gas, assuming no capture and destruction or permanent sequestration of that gas.

(8) DESTRUCTION.—The term “destruction” means the conversion of a greenhouse gas by thermal, chemical, or other means—

(A) to another gas with a low- or zero-global warming potential; and

(B) for which credit given reflects the extent of reduction in global warming potential actually achieved.

(9) ELECTRIC POWER SECTOR.—The term “electric power sector” means the “Electric Power Industry”, as that term is used in Table ES–7 of the Environmental Protection Agency document entitled “Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2005”.

(10) EMISSION ALLOWANCE.—The term “emission allowance” means an authorization to emit 1 carbon dioxide equivalent of greenhouse gas.
(11) **Emission Allowance Account.**—The term “Emission Allowance Account” means the aggregate of emission allowances that the Administrator establishes for a calendar year.

(12) **Facility.**—The term “facility” means—

(A) a building, structure, or installation located on 1 or more contiguous or adjacent properties of an entity in the United States; and

(B) at the option of the Administrator, any activity or operation that has a technical connection with the activities carried out at a facility, such as use of transportation fleets, pipelines, transmission lines, and distribution lines, but that is not conducted or located on the property of the facility.

(13) **Fair Market Value.**—The term “fair market value” means the average price, in a particular calendar year, of an emission allowance auctioned by the Corporation.

(14) **Geological Sequestration; Geologically Sequestered.**—The terms “geological sequestration” and “geologically sequestered” mean the long-term isolation of greenhouse gases, without reversal, in geological formations, in accordance with
section 1421(d) of the Safe Drinking Water Act (42 U.S.C. 300h(d)).

(15) GREENHOUSE GAS.—The term “greenhouse gas” means any of—

(A) carbon dioxide;

(B) methane;

(C) nitrous oxide;

(D) sulfur hexafluoride;

(E) a hydrofluorocarbon; or

(F) a perfluorocarbon.


(17) LEAKAGE.—The term “leakage” means—

(A) a potentially unaccounted increase in greenhouse gas emissions by a facility or entity caused by an offset project that produces an accounted reduction in greenhouse gas emissions; or

(B) a potentially unaccounted decrease in sequestration that is caused by an offset project that results in an accounted increase in sequestration.
(18) **Load-Serving Entity.**—The term “load-serving entity” means an entity, whether public or private—

(A) that has a legal, regulatory, or contractual obligation to deliver electricity 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.

(19) **New Entrant.**—The term “new entrant” means any facility that commences operation on or after January 1, 2008.

(20) **Offset Allowance.**—The term “offset allowance” means a unit of reduction in the quantity of emissions or an increase in sequestration equal to 1 carbon dioxide equivalent at a facility that is not a covered facility, where the reduction in emissions or increase in sequestration is eligible to be used as an additional means of compliance for the submission requirements established under section 1202.

(21) **Offset Project.**—The term “offset project” means a project, other than a project at a covered facility, that reduces greenhouse gas emissions or increases sequestration of carbon dioxide.
(22) Project developer.—The term “project developer” means an individual or entity implementing an offset project.

(23) Retail rate for distribution service.—

(A) In general.—The term “retail rate for distribution service” means the rate that a load-serving entity charges for the use of the system of the load-serving entity.

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

(24) Retire an emission allowance.—The term “retire an emission allowance” means to disqualify an emission allowance for any subsequent use, regardless of whether the use is a sale, exchange, or submission of the allowance in satisfying a compliance obligation.

(25) Reversal.—The term “reversal” means an intentional or unintentional loss of sequestered carbon dioxide to the atmosphere.

(26) Rural electric cooperative.—The term “rural electric cooperative” means a cooperatively-owned association that is eligible to receive

(27) SEQUESTERED AND SEQUESTRATION.—The terms “sequestered” and “sequestration” mean the capture, permanent separation, isolation, or removal of greenhouse gases from the atmosphere.

(28) STATE REGULATORY AUTHORITY.—The term “State regulatory authority” means any State agency that has ratemaking authority with respect to the retail rate for distribution service.


TITLE I—CAPPING GREENHOUSE GAS EMISSIONS

Subtitle A—Tracking Emissions

SEC. 1101. PURPOSE.

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

(1) is complete, consistent, transparent, and accurate;
(2) will collect reliable and accurate data that can be used by public and private entities to design efficient and effective energy security initiatives and greenhouse gas emission reduction strategies; and

(3) will provide appropriate high-quality data to be used for implementing greenhouse gas reduction policies.

SEC. 1102. DEFINITIONS.

In this subtitle:

(1) AFFECTED FACILITY.—

(A) IN GENERAL.—The term “affected facility” means—

(i) a covered facility;

(ii) another facility that emits a greenhouse gas, as determined by the Administrator; and

(iii) at the option of the Administrator, a vehicle fleet with emissions of more than 10,000 carbon dioxide equivalents per year, assuming no double-counting of emissions.

(B) EXCLUSIONS.—The term “affected facility” does not include any facility that—

(i) is not a covered facility;
(ii) is owned or operated by a small business (as described in part 121 of title 13, Code of Federal Regulations (or a successor regulation)); and

(iii) emits fewer than 10,000 carbon dioxide equivalents in any year.

(2) CARBON CONTENT.—The term “carbon content” means the quantity of carbon (in carbon dioxide equivalent) contained in a fuel.

(3) 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 high-quality greenhouse gas emission data from facilities, corporations, and other organizations to support various greenhouse gas emission reporting and reduction policies for the member States and Indian tribes.

(4) FEEDSTOCK FOSSIL FUEL.—The term “feedstock fossil fuel” means fossil fuel used as raw material in a manufacturing process.

(5) GREENHOUSE GAS EMISSIONS.—The term “greenhouse gas emissions” means emissions of a greenhouse gas, including—
(A) stationary combustion source emissions emitted as a result of combustion of fuels in stationary equipment, such as boilers, furnaces, burners, turbines, heaters, incinerators, engines, flares, and other similar sources;

(B) process emissions consisting of emissions from chemical or physical processes other than combustion;

(C) fugitive emissions consisting of intentional and unintentional emissions from equipment leaks, such as joints, seals, packing, and gaskets, or from piles, pits, cooling towers, and other similar sources; and

(D) biogenic emissions resulting from biological processes, such as anaerobic decomposition, nitrification, and denitrification.

(6) 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).

(7) REGISTRY.—The term “Registry” means the Federal greenhouse gas registry established under section 1105(a).

(8) SOURCE.—The term “source” means any building, structure, installation, unit, point, oper-
ation, vehicle, land area, or other item that emits or
may emit a greenhouse gas.

SEC. 1103. REPORTING REQUIREMENTS.

(a) In General.—Subject to this section, each af-
affected facility shall submit to the Administrator, for inclu-
sion in the Registry, periodic reports, including annual
and quarterly data, that—

(1) include the quantity and type of fossil fuels,
including feedstock fossil fuels, that are extracted,
produced, refined, imported, exported, or consumed
at or by the facility;

(2) include the quantity of hydrofluorocarbons,
perfluorocarbons, sulfur hexafluoride, nitrous oxide,
carbon dioxide that has been captured and sequest-
tered, and other greenhouse gases generated, pro-
duced, imported, exported, or consumed at or by the
facility;

(3) include the quantity of electricity generated,
imported, exported, or consumed by or at the facil-
ity, and information on the quantity of greenhouse
gases emitted when the imported, exported, or con-
sumed electricity was generated, as determined by
the Administrator;

(4) include the aggregate quantity of all green-
house gas emissions from sources at the facility, in-
including stationary combustion source emissions, process emissions, and fugitive emissions;

(5) include greenhouse gas emissions expressed in metric tons of each greenhouse gas emitted and in the quantity of carbon dioxide equivalents of each greenhouse gas emitted;

(6) include a list and description of sources of greenhouse gas emissions at the facility;

(7) quantify greenhouse gas emissions in accordance with the measurement standards established under section 1104;

(8) include other data necessary for accurate and complete accounting of greenhouse gas emissions, as determined by the Administrator;

(9) include an appropriate certification regarding the accuracy and completeness of reported data, as determined by the Administrator; and

(10) are submitted electronically to the Administrator, in such form and to such extent as may be required by the Administrator.

(b) DE MINIMIS EXEMPTIONS.—

(1) IN GENERAL.—The Administrator may determine—

(A) whether certain sources at a facility should be considered to be eligible for a de
minimis exemption from a requirement for reporting under subsection (a); and

(B) the level of greenhouse gases emitted from a source that would qualify for such an exemption.

(2) FACTORS.—In making a determination under paragraph (1), the Administrator shall consider the availability and suitability of simplified techniques and tools for quantifying emissions and the cost to measure those emissions relative to the purposes of this title, including the goal of collecting complete and consistent facility-wide data.

(c) VERIFICATION OF REPORT REQUIRED.—Before including the information from a report required under this section in the Registry, the Administrator shall verify the completeness and accuracy of the report using information provided under this section, obtained under section 9003(c), or obtained under other provisions of law.

(d) TIMING.—

(1) CALENDAR YEARS 2004 THROUGH 2007.—For a baseline period of calendar years 2004 through 2007, each affected facility shall submit required annual data described in this section to the Administrator not later than March 31, 2009.
(2) Subsequent calendar years.—For calendar year 2008 and each subsequent calendar year, each affected facility shall submit quarterly data described in this section to the Administrator not later than 60 days after the end of the applicable quarter.

(e) No Effect on Other Requirements.—Nothing in this title affects any requirement in effect as of the date of enactment of this Act relating to the reporting of—

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

(2) greenhouse gas emission data; or

(3) other relevant data.

SEC. 1104. DATA QUALITY AND VERIFICATION.

(a) Protocols and Methods.—

(1) In general.—The Administrator shall establish by regulation, taking into account the work done by the Climate Registry, comprehensive protocols and methods to ensure the accuracy, completeness, consistency, and transparency of data on greenhouse gas emissions and fossil fuel production, refining, importation, exportation, and consumption submitted to the Registry that include—
(A) accounting and reporting standards for fossil fuel production, refining, importation, exportation, and consumption;

(B) a requirement that, where technologically feasible, submitted data are monitored using monitoring systems for fuel flow or emissions, such as continuous emission monitoring systems or equivalent systems of similar rigor, accuracy, quality, and timeliness;

(C) a requirement that, if a facility has already been directed to monitor emissions of a greenhouse gas using a continuous emission monitoring system under existing law, that system be used in complying with this Act with respect to the greenhouse gas;

(D) for cases in which the Administrator determines that monitoring emissions with the precision, reliability, accessibility, and timeliness similar to that provided by a continuous emission monitoring system are not technologically feasible, standardized methods for calculating greenhouse gas emissions in specific industries using other readily available and reliable information, such as fuel consumption, materials consumption, production, or other rel-
event activity data, on the condition that those methods do not underreport emissions, as compared with the continuous emission monitoring system;

(E) information on the accuracy of measurement and calculation methods;

(F) methods to avoid double-counting of greenhouse gas emissions;

(G) protocols to prevent an affected facility from avoiding the reporting requirements of this title; and

(H) protocols for verification of data submitted by affected facilities.

(2) Best Practices.—The protocols and methods developed under paragraph (1) shall incorporate and conform to the best practices from the most recent Federal, State, and international protocols for the measurement, accounting, reporting, and verification of greenhouse gas emissions to ensure the accuracy, completeness, and consistency of the data.

(b) Verification; Information by Reporting Entities.—Each affected facility shall—

(1) provide information sufficient for the Administrator to verify, in accordance with the proto-
cols and methods developed under subsection (a),
that the fossil fuel data and greenhouse gas emission
data of the affected facility have been completely
and accurately reported; and

(2) ensure the submission or retention, for the
5-year period beginning on the date of provision of
the information, of—

(A) data sources;
(B) information on internal control activi-
ties;
(C) information on assumptions used in re-
porting emissions and fuels;
(D) uncertainty analyses; and
(E) other relevant data and information to
facilitate the verification of reports submitted to
the Registry.

(c) WAIVER OF REPORTING REQUIREMENTS.—The
Administrator may waive reporting requirements for spe-
cific facilities if the Administrator determines that suffi-
cient and equally or more reliable data are available under
other provisions of law.

(d) MISSING DATA.—If information, satisfactory to
the Administrator, is not provided for an affected facility,
the Administrator shall—
(1) prescribe methods to estimate emissions for
the facility for each period for which data are miss-
ing, reflecting the highest emission levels that may
reasonably have occurred during the period for
which data are missing; and

(2) take appropriate enforcement action pursu-
ant to this section and section 9003(b).

SEC. 1105. FEDERAL GREENHOUSE GAS REGISTRY.

(a) ESTABLISHMENT.—The Administrator shall es-
tablish a Federal greenhouse gas registry.

(b) ADMINISTRATION.—In establishing the Registry,
the Administrator shall—

(1) design and operate the Registry;

(2) establish an advisory body that is broadly
representative of private enterprise, agriculture, en-
vironmental groups, and State, tribal, and local gov-
ernments to guide the development and management
of the Registry;

(3) provide coordination and technical assist-
ance for the development of proposed protocols and
methods, taking into account the duties carried out
by the Climate Registry, to be published by the Ad-
ministrator;
(4)(A) develop an electronic format for reporting under guidelines established under section 1104(a)(1); and

(B) make the electronic format available to reporting entities;

(5) verify and audit the data submitted by reporting entities;

(6) establish consistent policies for calculating carbon content and greenhouse gas emissions for each type of fossil fuel reported under section 1103;

(7) calculate carbon content and greenhouse gas emissions associated with the combustion of fossil fuel data reported by reporting entities;

(8) immediately publish on the Internet all information contained in the Registry, except in any case in which publishing the information would result in a disclosure of—

(A) information vital to national security, 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).

(c) Third-Party Verification.—The Administrator may use the services of third parties that have no conflicts of interest to verify reports required under section 1103.

(d) Regulations.—The Administrator shall—

(1) not later than 180 days after the date of enactment of this Act, propose regulations to carry out this section; and

(2) not later than July 1, 2008, promulgate final regulations to carry out this section.

SEC. 1106. Enforcement.

(a) Civil Actions.—The Administrator may bring a civil action in United States district court against the owner or operator of an affected facility that fails to comply with any requirement of this subtitle.

(b) Penalty.—Any person that has violated or is violating this subtitle shall be subject to a civil penalty of not more than $25,000 per day of each violation.

Subtitle B—Reducing Emissions


(a) In General.—The Administrator shall establish a separate quantity of emission allowances for each of calendar years 2012 through 2050.
(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 OF EMISSION ALLOWANCES.—

(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 limits the authority of the United States 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 facility.

(d) ALLOWANCES FOR EACH CALENDAR YEAR.—The numbers of emission allowances established by the Administrator for each of calendar years 2012 through 2050 shall be as follows:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Number of Emission Allowances (in Millions)</th>
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<tbody>
<tr>
<td>2012</td>
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<td>2014</td>
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<tr>
<td>Calendar Year</td>
<td>Number of Emission Allowances (in Millions)</td>
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<td>---------------</td>
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SEC. 1202. COMPLIANCE OBLIGATION.

(a) In General.—Not later than 90 days after the end of a calendar year, the owner or operator of a covered facility shall submit to the Administrator an emission allowance, an offset allowance awarded pursuant to subtitle D of title II, or an international allowance or credit obtained in compliance with regulations promulgated under section 2502, for each carbon dioxide equivalent of greenhouse gas that—

(1) was emitted by that facility during the preceding year;

(2) will, assuming no capture and permanent geological sequestration of that gas, be emitted from the use of any petroleum- or coal-based transportation fuel that was produced or imported at that facility during the preceding year; and
(3) will, assuming no capture and destruction or permanent geological sequestration of that gas, be emitted from any nonfuel chemical that was produced or imported at that facility during the preceding year.

(b) Retirement of Allowances.—Immediately upon receipt of an emission allowance under subsection (a), the Administrator shall retire the emission allowance.

c) Determination of Compliance.—Not later than July 1 of each year, the Administrator shall determine whether the owners and operators of all covered facilities are in full compliance with subsection (a) for the preceding year.

SEC. 1203. Penalty for Noncompliance.

(a) Excess Emissions Penalty.—

(1) In general.—The owner or operator of any covered facility that fails for any year to submit to the Administrator by the deadline described in section 1202(a) or 2303, 1 or more of the emission allowances due pursuant to either of those sections shall be liable for the payment to the Administrator of an excess emissions penalty.

(2) Amount.—The amount of an excess emissions penalty required to be paid under paragraph (1) shall be, as determined by the Administrator, an
amount equal to the product obtained by multi-
plying—

(A) the number of excess emission allow-
ances that the owner or operator failed to sub-
mit; and

(B) the greater of—

(i) $200; or

(ii) a dollar figure representing 3
times the mean market value of an emis-
sion allowance during the calendar year for
which the emission allowances were due.

(3) TIMING.—An excess emissions penalty re-
quired under this subsection shall be immediately
due and payable to the Administrator, without de-
mand, in accordance with such regulations as shall
be promulgated by the Administrator by the date
that is 1 year after the date of enactment of this
Act.

(4) DEPOSIT.—The Administrator shall deposit
each excess emissions penalty paid under this sub-
section in the Treasury of the United States.

(5) NO EFFECT ON LIABILITY.—An excess
emissions penalty due and payable by the owner or
operator of a covered facility under this subsection
shall not diminish the liability of the owner or oper-
ator 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) Excess Emission Allowance.—

(1) IN GENERAL.—The owner or operator of a
covered facility that fails for any year to submit to
the Administrator by the deadline described in sec-
tion 1202(a) or 2303 1 or more of the emission al-
lowances due pursuant to either of those sections
shall be liable to offset the excess emissions by an
equal quantity, in tons, during—

(A) the following calendar year; or

(B) such longer period as the Adminis-
trator may prescribe.

(2) PLAN.—

(A) IN GENERAL.—Not later than 60 days
after the end of the calendar year during which
a covered facility emits excess emissions, the
owner or operator of the covered facility shall
submit to the Administrator, and to the State
in which the covered facility is located, a pro-
posed plan to achieve the required offsets for
the excess emissions.

(B) Condition of operation.—Upon
approval of a proposed plan described in sub-
paragraph (A) by the Administrator, the plan, as submitted, modified, or conditioned, shall be considered to be a condition of the operating permit for the covered facility, without further review or revision of the permit.

(C) Deduction of allowances.—For each covered facility that, in any calendar year, emits excess emissions, the Administrator shall deduct, from emission allowances allocated to the covered facility for the calendar year, or for succeeding years during which offsets are required, emission allowances equal to the excess quantity, in tons, of the excess emissions.

(e) Prohibition.—It shall be unlawful for the owner or operator of any facility liable for a penalty and offset under this section to fail—

(1) to pay the penalty in accordance with this section;

(2) to provide, and thereafter comply with, a proposed plan for compliance as required by subsection (b)(2); and

(3) to offset excess emissions as required by subsection (b)(1).
(d) No Effect on Other Section.—Nothing in this subtitle limits or otherwise affects the application of section 9003(b).

TITLE II—MANAGING AND CONTAINING COSTS EFFICIENTLY

Subtitle A—Trading

SEC. 2101. SALE, EXCHANGE, AND RETIREMENT OF EMISSION ALLOWANCES.

Except as otherwise provided in this Act, the lawful holder of an emission allowance may sell, exchange, transfer, submit for compliance in accordance with section 1202, or retire the emission allowance.

SEC. 2102. NO RESTRICTION ON TRANSACTIONS.

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

SEC. 2103. ALLOWANCE TRANSFER SYSTEM.

(a) In General.—Not later than 18 months after the date of enactment of this Act, the Administrator shall promulgate regulations to carry out the provisions of this Act relating to emission allowances, including regulations providing that the transfer of emission 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 Admin-
istrator in accordance with those regulations.

(b) Transfers.—

(1) In general.—The regulations promulgated
under subsection (a) shall permit the transfer of al-
lowances prior to the issuance of the allowances.

(2) Deduction and Addition of Trans-
fers.—A recorded pre-allocation transfer of allow-
ances shall be—

(A) deducted by the Administrator from
the number of allowances that would otherwise
be distributed to the transferor; and

(B) added to those allowances distributed
to the transferee.

SEC. 2104. ALLOWANCE TRACKING SYSTEM.

The regulations promulgated under section 2103(a)
shall include a system for issuing, recording, and tracking
emission allowances that shall specify all necessary proce-
dures and requirements for an orderly and competitive
functioning of the emission allowance system.

Subtitle B—Banking

SEC. 2201. INDICATION OF CALENDAR YEAR.

An emission allowance submitted to the Adminis-
trator by the owner or operator of a covered facility in
accordance with section 1202(a) shall not be required to
indicate in the identification number of the emission allowance the calendar year for which the emission allowance is submitted.

SEC. 2202. EFFECT OF TIME.

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

Subtitle C—Borrowing

SEC. 2301. REGULATIONS.

(a) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, the Administrator shall promulgate regulations under which, subject to subsection (b), the owner or operator of a covered facility 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 1202(a).

(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 subsection 1201(a).
SEC. 2302. TERM.

The owner or operator of a covered facility shall not submit, and the Administrator shall not accept, a borrowed emission allowance in partial satisfaction of the compliance obligation under section 1202(a) for any calendar year that is more than 5 years earlier than the calendar year included in the identification number of the borrowed emission allowance.

SEC. 2303. REPAYMENT WITH INTEREST.

For each borrowed emission allowance submitted in partial satisfaction of the compliance obligation under subsection 1202(a) for a particular calendar year (referred to in this section as the “use year”), the number of emission allowances that the owner or operator is required to submit under section 1202(a) for the year from which the borrowed emission allowance was taken (referred to in this section as the “source year”) shall be increased by an amount equal to the product obtained by multiplying—

(1) 1.1; and

(2) the number of years beginning after the use year and before the source year.

Subtitle D—Offsets

SEC. 2401. OUTREACH INITIATIVE ON REVENUE ENHANCEMENT FOR AGRICULTURAL PRODUCERS.

(a) Establishment.—The Secretary of Agriculture, acting through the Chief of the Natural Resources Con-
reservation 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, 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—

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

(B) workshops; and

(C) technical assistance; and

(3) may include the creation and development of regional marketing centers or coordination with existing centers (including centers within the Natural Resources Conservation Service or the Cooperative State Research, Education, and Extension Service or at land-grant colleges and universities).

(c) HANDBOOK.—

(1) IN GENERAL.—Not later than 2 years 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 described in section 2404; and

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

SEC. 2402. ESTABLISHMENT OF DOMESTIC OFFSET PROGRAM.

(a) ALTERNATIVE MEANS OF COMPLIANCE.—Beginning with calendar year 2012, the owner or operator of a covered entity may satisfy 15 percent of the total allowance submission requirement of the covered entity under section 1202(a) by submitting offset allowances generated in accordance with this subtitle.

(b) REGULATIONS REQUIRED.—Not later than 18 months after the date of enactment of this Act, the Ad-
ministrator, in consultation with the Secretary of Agri-
culture, shall promulgate regulations authorizing the
issuance and certification of offset allowances from certain
agricultural, forestry, and other land use-related projects
undertaken within the United States, and certain other
projects identified by the Administrator under section
2403(b)(4), including provisions that—

(1) ensure that those offsets represent real,
verifiable, additional, permanent, and enforceable re-
ductions in greenhouse gas emissions or increases in
biological sequestration;

(2) specify the types of offset projects eligible
to generate offset allowances, in accordance with
section 2403;

(3) establish procedures for project initiation
and approval, in accordance with section 2404;

(4) establish procedures to monitor, quantify,
and discount reductions in greenhouse gas emissions
or increases in biological sequestration, in accord-
ance with subsections (d) through (g) of section
2404;

(5) establish procedures for verification, reg-
istration, and issuance of offset allowances, in ac-
cordance with section 2405; and
(6) ensure permanence of offsets by mitigating
and compensating for reversals, in accordance with
section 2406.

c) Offset Allowances Awarded.—The Adminis-
trator shall issue offset allowances for qualifying emission
reductions and biological sequestrations from offset
projects that satisfy the applicable requirements of this
subtitle.

d) Ownership.—Initial ownership of an offset al-
lowance shall lie with a project developer, unless otherwise
specified in a legally-binding contract or agreement.

e) Transferability.—An offset allowance gen-
erated pursuant to this subtitle may be sold, traded, or
transferred, on the conditions that—

(1) the offset allowance has not expired or been
retired or canceled; and

(2) liability and responsibility for mitigating
and compensating for reversals of registered offset
allowances is specified in accordance with section
2406(b).

Sec. 2403. Eligible Agricultural and Forestry Offset
Project Types.

(a) In General.—Offset allowances from agricul-
tural, 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 Agricultural, Forestry, and Other Land Use-Related Projects.—Subject to the requirements promulgated pursuant to section 2402(b), the types of operations eligible to generate offset allowances under this subtitle include—

(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 the date of enactment of this Act; 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 noncovered fugitive emissions;

(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 2402; and

(5) combinations of any of the offset practices described in paragraphs (1) through (4).

(c) EXCLUSION.—A project participating in a Federal, State, or local cost-sharing, competitive grant, or
technical assistance program shall not be eligible to generate offset allowances under this subtitle.

(d) Earned Allowances.—

(1) In general.—Any project approved by the Administrator shall earn offset allowances in proportion to the private investment in the project, as described in paragraph (2).

(2) Private investment.—

(A) In general.—Except as provided in subparagraph (B), the private share of investment in the project shall be assumed to be 50 percent.

(B) Demonstration of investment.—Subparagraph (A) shall not apply in any case in which a project elects to demonstrate the private share of investment in the project in accordance with rules established by the Administrator.

SEC. 2404. PROJECT INITIATION AND APPROVAL.

(a) Project Approval.—A project developer—

(1) may submit a petition for offset project approval at any time following the effective date of regulations promulgated under section 2402(b); 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 Adminis-
trator 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 Adminis-
trator shall—

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

(B) determine whether the greenhouse gas
initiation certification indicates a significant de-
viation 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 2402, the Administrator 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 methods and formats determined to be acceptable to the Administrator;

(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; and

(K) subject to the requirements of this subtitle, any other information identified by the Administrator as being necessary to meet the objectives of this subtitle.

(e) GREENHOUSE GAS INITIATION CERTIFICATION.—

(1) IN GENERAL.—In reviewing a petition submitted under subsection (b), the Administrator shall seek to exclude each activity that undermines the integrity of the offset program established under this subtitle, such as the conversion or clearing of land, or marked change in management regime, in anticipation of offset project initiation.
(2) **Greenhouse Gas Initiation Certification Requirements.**—A greenhouse gas initiation certification developed under this subsection shall include—

(A) the estimated greenhouse gas flux or carbon stock for the offset project for each of the 4 complete calendar years preceding the effective date of the regulations promulgated under section 2402(b); and

(B) the estimated greenhouse gas flux or carbon stock for the offset project, averaged across each of the 4 calendar years preceding the effective date of the regulations promulgated under section 2402(b).

(3) **Determination of Significant Deviation.**—Based on standards developed by the Administrator—

(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.

(f) Development of Monitoring and Quantification Tools for Agricultural and Forestry Projects.—

(1) In General.—Subject to section 2402(b),
the Administrator, in consultation with the Secre-
tary 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
2403(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, tech-
niques, 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 consulta-
tion 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 2403(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 bio-
physical characteristics;

(B) in the case of an emission reduction
project, use as a basis emissions from pre-
existing or comparable 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 produc-
tion, 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 For-
ery Projects.—

(1) In general.—The Administrator, in con-
sultation with the Secretary of Agriculture, shall de-
develop standardized methods for use in determining
and discounting for uncertainty for each offset project type listed under section 2403(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, to encourage better measurement and accounting.

(i) ACQUISITION OF NEW DATA AND REVIEW OF METHODS FOR AGRICULTURAL AND FORESTRY PROJECTS.—The Administrator, in consultation 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 consultation 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.

SEC. 2405. OFFSET VERIFICATION AND ISSUANCE OF ALLOWANCES FOR AGRICULTURAL AND FORESTRY PROJECTS.

(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 2404, 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.—Not later than 18 months after the date of enactment of this Act, the Administrator shall promulgate regulations establishing a process and requirements for ac-
creditation 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 complete petition required under section 2404(b), the Administrator shall—

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

(B) notify the project developer of that determination.

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

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

(B) issue the offset allowances.

(3) **Appeal and review.**—The Administrator shall establish mechanisms for the appeal and review of determinations made under this subsection.
SEC. 2406. TRACKING OF REVERSALS FOR SEQUESTRATION PROJECTS.

(a) Reversal Certification.—

(1) In general.—Subject to section 2402, the Administrator shall promulgate regulations requiring 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 person that submitted the offset allowance to the Administrator for the purpose of compliance with section 1202(a), unless otherwise specified in a legally-binding contract or agreement.

(d) Compensation for Reversals.—The unmitigated reversal of 1 or more registered offset allowances 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) Adjustment of Baseline.—

(1) In General.—If the Administrator determines that, as a result of activities or behavior that is inconsistent with the purposes of this subtitle, a significant deviation exists between the average annual greenhouse gas flux or carbon stock for a given year pursuant to the certification submitted under subsection (a), the baseline for that project shall be adjusted by a quantity equal to the difference between—
(A) the estimated greenhouse gas flux or carbon stock at the end of the year prior to the year in which the significant deviation occurred; and

(B) the estimated greenhouse gas flux or carbon stock at the end of the year in which the significant deviation occurred.

(2) 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 offset allowances.

SEC. 2407. EXAMINATIONS.

(a) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations governing the examination and auditing of offset allowances.

(b) REQUIREMENTS.—The regulations promulgated under this section shall specifically consider—

(1) principles for initiating and conducting examinations;
(2) the type or scope of examinations, including—

(A) reporting and recordkeeping; and

(B) site review or visitation;

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

(4) the establishment of an appeal process.

SEC. 2408. 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 regulations promulgated under section 2407(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 operating under other Federal, State, or private reporting programs or registries as of the effective date of regulations promulgated under section 2407(a) if the Administrator determines that the offset projects and banked offset allowances 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 regulations promulgated under section 2407(a) shall be ineligible for transition into the Registry.

SEC. 2409. OFFSET REGISTRY.

In addition to the requirements established by section 2404, an offset allowance registered under this subtitle shall be accompanied in the Registry by—

(1) a verification report submitted pursuant to section 2405(a);

(2) a reversal certification submitted pursuant to section 2406(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.

SEC. 2410. ENVIRONMENTAL CONSIDERATIONS.

(a) Coordination to Minimize Negative Effects.—In promulgating regulations under this subtitle, the Administrator, in consultation 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 envi-
vironment 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 consultation 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 18 months after the date of enactment of this Act, the Administrator, in consultation with the Secretary of Agriculture, shall promulgate regulations for the selection, use, and storage of native and non-native 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.

SEC. 2411. PROGRAM REVIEW.

Not later than 5 years after the date of enactment of this Act, and periodically thereafter, the Administrator shall review and revise, as necessary, the regulations promulgated under this subtitle.

Subtitle E—International Credits

SEC. 2501. USE OF INTERNATIONAL ALLOWANCES OR CREDITS.

The owner or operator of a covered facility may satisfy up to 15 percent of the allowance submission requirement of the covered facility under section 1202(a) by submitting allowances or credits obtained on a foreign greenhouse gas emissions trading market, on the condition that the Administrator has certified the market in accordance with the regulations promulgated pursuant to section 2502(a).

SEC. 2502. REGULATIONS.

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations, taking into consideration protocols adopted in accordance with the United Nations Frame-
work Convention on Climate Change, done at New York on May 9, 1992—

(1) approving the use under this subtitle of credits from such foreign greenhouse gas emissions trading markets as the regulations may establish; and

(2) permitting the use of international credits from the foreign country that issued the credits.

(b) REQUIREMENTS.—The regulations promulgated under subsection (a) shall require that, in order to be approved for use under this subtitle—

(1) a credit 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.

SEC. 2503. FACILITY CERTIFICATION.

The owner or operator of a covered facility who submits an international allowance or credit under this subtitle shall certify that the allowance or credit has not been
Subtitle F—Carbon Market Efficiency Board

SEC. 2601. PURPOSES.

The purposes of this subtitle are—

(1) to ensure that the imposition of limits on greenhouse gas emissions will not significantly harm the economy of the United States; and

(2) to establish a Carbon Market Efficiency Board to ensure the implementation and maintenance of a stable, functioning, and efficient market in emission allowances.

SEC. 2602. ESTABLISHMENT OF CARBON MARKET EFFICIENCY BOARD.

(a) Establishment.—There is established a board, to be known as the “Carbon Market Efficiency Board” (referred to in this subtitle as the “Board”).

(b) Purposes.—The purposes of the Board are—

(1) to promote the achievement of the purposes of this Act;

(2) to observe the national greenhouse gas emission market and evaluate periods during which the cost of emission allowances provided under Fed-
eral law might pose significant harm to the economy; and

(3) to submit to the President and Congress quarterly reports—

(A) describing—

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

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

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

(iv) any corrective measures that should be carried out to relieve excessive costs of the market; and

(v) plans to compensate for those measures to ensure that the long-term emission-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.

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

(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; and

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

(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.

(d) TERM; VACANCIES.—

(1) TERM.—

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

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

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

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

(C) REMOVAL.—

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

(ii) NOTIFICATION.—The President shall submit to Congress a notification of any determination by the President to remove a member of the Board for cause under clause (i).

(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.

(f) Meetings.—

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

(2) Presiding officer.—A meeting of the Board shall be presided over by—
(A) the Chairperson;

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

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

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

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

SEC. 2603. DUTIES.

(a) INFORMATION GATHERING.—

(1) AUTHORITY.—The Board shall collect and analyze relevant market information to promote a full understanding of the dynamics of the emission allowance market established under this Act.

(2) INFORMATION.—The Board shall gather such information as the Board determines to be appropriate regarding the status of the market, including information relating to—
(A) emission allowance allocation and availability;

(B) the price of emission allowances;

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

(D) economic effect thresholds that could warrant implementation of cost relief measures described in section 2604(a) after the initial 2-year period described in section 2603(d)(2);

(E) in the event any cost relief measures described in section 2604(a) are taken, the effects of those measures on the market;

(F) maximum levels of cost relief measures that are necessary to achieve avoidance of economic harm and preserve achievement of the purposes of this Act; and

(G) the success of the market in promoting achievement of the purposes of this Act.

(b) TREATMENT AS PRIMARY ACTIVITY.—

(1) IN GENERAL.—During the initial 2-year period of operation of the Board, information gath-
(2) **Subsequent Authority.**—After the 2-year period described in paragraph (1), the Board shall assume authority to implement the cost-relief measures described in section 2604(a).

(e) **Study.**—

(1) **In General.**—During the 2-year period beginning on the date on which the emission allowance market established under this Act begins operation, the Board shall conduct a study of other markets for tradeable permits to emit covered greenhouse gases.

(2) **Report.**—Not later than 180 days after the beginning of the period described in paragraph (1), the Board shall submit to Congress a report describing the status of the market, specifically with respect to volatility within the market and the average price of emission allowances during that 180-day period.

(d) **Employment of Cost Relief Measures.**—

(1) **In General.**—If the Board determines that the emission allowance market established under this Act poses a significant harm to the economy of the United States, the Board shall carry out such cost relief measures relating to that market as
the Board determines to be appropriate under sec-

(2) INITIAL PERIOD.—During the 2-year period
beginning on the date on which the emission allow-
ance market established under this Act begins oper-
ation, if the Board determines that the average daily
closing price of emission allowances during a 180-
day period exceeds the upper range of the estimate
provided under section 2605, the Board shall—

(A) increase the quantity of emission al-
lowances that covered facilities may borrow
from the prescribed allocations of the covered
facilities for future years; and

(B) take subsequent action as described in
section 2604(a)(2).

(3) REQUIREMENTS.—Any action carried out
pursuant to this subsection shall be subject to the
requirements of section 2604(a)(3)(B).

(e) REPORTS.—The Board shall submit to the Presi-
dent and Congress quarterly reports—

(1) describing the status of the emission allow-
ance market established under this Act, the eco-

omic effects of the market, regional, industrial, and
consumer responses to the market, energy invest-
ment responses to the market, any corrective meas-
ures that should be carried out to relieve excessive
costs of the market, and plans to compensate for
those measures; and

(2) that are prepared independently by the
Board, and not in partnership with Federal agen-
cies.

SEC. 2604. POWERS.

(a) COST RELIEF MEASURES.—

(1) IN GENERAL.—Beginning on the day after
the date of expiration of the 2-year period described
in section 2603(b), the Board may carry out 1 or
more of the following cost relief measures to ensure
functioning, stable, and efficient markets for emis-
sion allowances:

(A) Increase the quantity of emission al-
lowances that covered facilities may borrow
from the prescribed allocations of the covered
facilities for future years.

(B) Expand the period during which a cov-
ered facility may repay the Administrator for
an emission allowance as described in subpara-
graph (A).

(C) Lower the interest rate at which an
emission allowance may be borrowed as de-
scribed in subparagraph (A).
(D) Increase the quantity of allowances or credits 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 1202(a), on the condition that the Administrator has certified the market in accordance with the regulations promulgated pursuant to section 2502(a).

(E) Increase the quantity of offset allowances generated in accordance with subtitle D that the owner or operator of any covered facility may use to satisfy the total allowance submission requirement of the covered facility under section 1202(a).

(F) Expand the total quantity of emission allowances made available to all covered facilities at any given time by borrowing against the total allowable quantity of emission allowances to be provided for future years.

(2) SUBSEQUENT ACTIONS.—On determination by the Board to carry out a cost relief measure pursuant to paragraph (1), the Board shall—

(A) allow the cost relief measure to be used only during the applicable allocation year;
(B) exercise the cost relief measure incrementally, and only as needed to avoid significant economic harm during the applicable allocation year;

(C) 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;

(D) in accordance with section 2603(e), 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

(E) 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.

(3) ACTION ON EXPANSION OF BORROWING.—

(A) IN GENERAL.—If the Board carries out a cost relief measure pursuant to paragraph (1) that results in the expansion of borrowing
of emission allowances under this Act, and if
the average daily closing price of emission al-
lowances for the 180-day period beginning on
the date on which borrowing is so expanded ex-
cceeds the upper range of the estimate provided
under section 2605, the Board shall increase
the quantity of emission allowances available for
the applicable allocation year in accordance
with this paragraph.

(B) REQUIREMENTS.—An increase in the
quantity of emission allowances under subpara-
graph (A) shall—

(i) apply to all covered facilities;

(ii) be allocated in accordance with
the applicable formulas and procedures es-
tablished under this Act;

(iii) be equal to not more than 5 per-
cent of the total quantity of emission al-
lowances otherwise available for the appli-
cable allocation year under this Act;

(iv) remain in effect only for the ap-
pllicable allocation year;

(v) specify the date by which the in-
crease shall be repaid by covered facilities
through a proportionate reduction of emis-
sion allowances available for subsequent al-
location years; and

(vi) require the repayment under
clause (v) to be made by not later than the
date that is 15 years after the date on
which the increase is provided.

(b) ASSESSMENTS.—Not more frequently than semi-
annually, the Board may levy on owners and operators of
covered facilities, in proportion to the capital stock and
surplus of the participants, an assessment sufficient to
pay the estimated expenses of the Board and the salaries
of members of and employees of the Board during the
180-day period beginning on the date on which the assess-
ment is levied, taking into account any deficit carried for-
ward from the preceding 180-day period.

(e) 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 al-
location or trading program established under Fed-
eral 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 allowances issued under this Act for the period of calendar years 2012 through 2050.

SEC. 2605. ESTIMATE OF COSTS TO ECONOMY OF LIMITING GREENHOUSE GAS EMISSIONS.

Not later than July 1, 2014, the Director of the Congressional Budget Office, using economic and scientific analyses, shall submit to Congress a report that describes—

(1) the projected price range at which emission allowances are expected to trade during the 2-year period of the initial greenhouse gas emission market established under Federal law; and

(2) the projected impact of that market on the economy of the United States.

TITLE III—ALLOCATING AND DISTRIBUTING ALLOWANCES

Subtitle A—Early Auctions

SEC. 3101. ALLOCATION FOR EARLY AUCTIONS.

Not later than 180 days after the date of enactment of this Act, the Administrator shall allocate 6 percent of the emission allowances established for calendar year
2012, 4 percent of the emission allowances established for calendar year 2013, and 2 percent of the emissions established for calendar 2014, to the Corporation for early auctioning in accordance with section 4301.

**Subtitle B—Annual Auctions**

**SEC. 3201. ALLOCATION FOR ANNUAL AUCTIONS.**

Not later than January 1, 2012, and annually thereafter through January 1, 2050, the Administrator shall allocate to the Corporation a percentage of emission allowances for that calendar year, for annual auctioning, as follows:

<table>
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<tr>
<th>Calendar Year</th>
<th>Percentage of Emission Allowance Account Allocated to the Corporation</th>
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<tbody>
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Subtitle C—Early Action

SEC. 3301. ALLOCATION.

Not later than 2 years after the date of enactment of this Act, the Administrator shall allocate to owners or operators of covered facilities, in recognition of actions of the owners and operators taken since January 1, 1994, that resulted in verified and credible reductions of greenhouse gas emissions—

(1) 5 percent of the emission allowances established for calendar year 2012;

(2) 4 percent of the emission allowances established for calendar year 2013;

(3) 3 percent of the emission allowances established for calendar year 2014;

(4) 2 percent of the emission allowances established for calendar year 2015; and

(5) 1 percent of the emission allowances established for calendar year 2016.

SEC. 3302. DISTRIBUTION.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator shall establish, by regulation, procedures and standards for use in distributing, to owners and operators of covered facilities, emission allowances allocated under section 3301.
(b) CONSIDERATION.—The procedures and standards established under subsection (a) shall provide for consideration of verified and credible emission reductions registered before the date of enactment of this Act under—

(1) the Climate Leaders Program, or any other voluntary greenhouse gas reduction program of the United States Environmental Protection Agency and United States Department of Energy;

(2) the Voluntary Reporting of Greenhouse Gases Program of the Energy Information Administration;

(3) State or regional greenhouse gas emission reduction programs that include systems for tracking and verifying the greenhouse gas emission reductions; and

(4) voluntary entity programs that resulted in entity-wide reductions in greenhouse gas emissions.

c) DISTRIBUTION.—Not later than 4 years after the date of enactment of this Act, the Administrator shall distribute all emission allowances allocated under section 3301.

Subtitle D—States

SEC. 3401. ALLOCATION FOR ENERGY SAVINGS.

(a) ALLOCATION.—Not later than January 1, 2012, and annually thereafter through January 1, 2050, the Ad-
ministrator shall allocate 1 percent of the Emission Allow-
ance Account among States that—

(1) have adopted regulations by not later than
the date on which the allowance allocations are
made, that subject regulated natural gas and electric
utilities that deliver gas or electricity in the State to
regulations that—

(A) automatically adjust the rates charged
by natural gas and electric utilities to fully re-
cover fixed costs of service without regard to
whether their actual sales are higher or lower
than the forecast of sales on which the tariffed
rates were based; and

(B) make cost-effective energy-efficiency
investments by investor-owned natural gas or
electric utilities at least as rewarding to their
shareholders, on a risk-adjusted basis for the
equity capital invested, as power or energy pur-
chases, or investments in new energy supplies
or infrastructure; and

(2) have adopted, or whose political subdivisions
have adopted, regulations by not later than the date
on which allocations are made, that are as stringent
as, or more stringent than, the most recent energy
performance requirements of ASHRAE 90.1 and the

(b) Allocation for Building Efficiency.—Not later than January 1, 2012, and annually thereafter through January 1, 2050, the Administrator shall allocate 1 percent of the Emission Allowance Account among States that are in compliance with section 304(c)(3) of the Energy Conservation and Production Act (as amended by section 5201).

(c) Distribution.—Not later than 2 years after the date of enactment of this Act, the Administrator shall establish procedures and standards for the distribution of emission allowances to States in accordance with subsections (a) and (b).

(d) Use.—Any State receiving emission allowances under this section for a calendar year shall retire or use, in 1 or more of the ways described in section 3403(c)(1), not less than 90 percent of the emission allowances allocated to the State (or proceeds of the sale of those allowances) under this section for the calendar year.

SEC. 3402. ALLOCATION FOR STATES WITH PROGRAMS THAT EXCEED FEDERAL EMISSION REDUCTION TARGETS.

(a) Allocation.—Not later than January 1, 2012, and annually thereafter through January 1, 2050, the Ad-
ministrator shall allocate 2 percent of the Emission Allow-
ance Account for the year among States that have—

(1) before the date of enactment of this Act, en-
acted statewide greenhouse gas emission reduction
targets that are more stringent than the nationwide
targets established under title II; and

(2) by the time of an allocation under this sub-
section, imposed on covered facilities within the
States aggregate greenhouse gas emission limitations
more stringent than those imposed on covered facili-
ties under title II.

(b) DISTRIBUTION.—Not later than 2 years after the
date of enactment of this Act, the Administrator shall es-
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through January 1, 2050, the Administrator shall allocate 5 percent of the Emission Allowance Account for the year among States.

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

(1) For each calendar year, ⅓ of the quantity of allowances available for allocation to States under subsection (a) shall be allocated among individual States based on the proportion that—

(A) the expenditures of a State for the low-income home energy assistance program established under the Low-Income Home Energy Assistance Act of 1981 (42 U.S.C. 8621 et seq.) for the preceding calendar year; bears to

(B) the expenditures of all States for that program for the preceding calendar year.

(2) For each calendar year, ⅓ of the quantity of allowances available for allocation to States under subsection (a) shall be allocated among the States based on the proportion that—

(A) the population of a State, as determined by the most recent decennial census preceding the calendar year for which the alloca-
tion regulations are for the allocation year;
bears to

(B) the population of all States, as deter-
mined by that census.

(3) For each calendar year, \( \frac{1}{3} \) of the quantity
of allowances available for allocation to States under
subsection (a) shall be allocated among the States
based on the proportion that—

(A) the quantity of carbon dioxide that
would be emitted assuming that all of the coal
that is mined, natural gas that is processed,
and petroleum that is refined within the bound-
daries of a State during the preceding year is
completely combusted and that none of the car-on dioxide emissions are captured, as deter-
mined by the Secretary of Energy; bears to

(B) the aggregate quantity of carbon diox-
ide that would be emitted assuming that all of
the coal that is mined, natural gas that is proc-
essed, and petroleum that is refined in all
States for the preceding year is completely com-
busted and that none of the carbon dioxide
emissions are captured, as determined by the
Secretary of Energy.

(c) USE.—
(1) IN GENERAL.—During any calendar year, a State shall retire or use in 1 or more of the following ways not less than 90 percent 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 energy consumers.

(B) To promote energy efficiency (including support of electricity and natural gas demand reduction, waste minimization, and recycling programs).

(C) To promote investment in nonemitting electricity generation technology.

(D) To improve public transportation and passenger rail service and otherwise promote reductions in vehicle miles traveled.

(E) To encourage advances in energy technology that reduce or sequester greenhouse gas emissions.

(F) To address local or regional impacts of climate change, including the relocation of communities displaced by the impacts of climate change.
(G) To mitigate obstacles to investment by new entrants in electricity generation markets and energy-intensive manufacturing sectors.

(H) To address local or regional impacts of climate change policy, including providing assistance to displaced workers.

(I) To mitigate impacts on energy-intensive industries in internationally competitive markets.

(J) To reduce hazardous fuels, and to prevent and suppress wildland fire.

(K) To fund rural, municipal, and agricultural water projects that are consistent with the sustainable use of water resources.

(2) DEADLINE.—A State shall distribute or sell allowances for use in accordance with paragraph (1) by not later than 1 year before the beginning of each allowance allocation year.

(3) RETURN OF ALLOWANCES.—Not later than 330 days before the beginning of each allowance allocation year, a State shall return to the Administrator any allowances not distributed by the deadline under paragraph (2).

(d) PROGRAM FOR TRIBAL COMMUNITIES.—
(1) ESTABLISHMENT.—Not later than 3 years after the date of enactment of this Act, the Administrator, in consultation with the Secretary of the Interior, shall by regulation establish a program for tribal communities—

(A) that is designed to deliver assistance to tribal communities within the United States that face disruption or dislocation as a result of global climate change; and

(B) under which the Administrator shall distribute 0.5 percent of the Emission Allowance Account for each calendar among tribal governments of the tribal communities described in subparagraph (A).

(2) ALLOCATION.—Beginning in the first calendar year that begins after promulgation of the regulations referred to in paragraph (1), and annually thereafter until calendar year 2050, the Administrator shall allocate 0.5 percent of the Emission Allowance Account for each calendar year to the program established under paragraph (1).

(3) ALLOCATIONS TO STATES.—For each calendar year for which the Administrator allocates 0.5 percent of the Emission Allowance Account to the program established under paragraph (1), the gen-
eral allocation for States under subsection (a) shall be 4.5 percent of the Emission Allowance Account.

Subtitle E—Electricity Consumers

SEC. 3501. ALLOCATION.

Not later than April 1, 2012, and annually thereafter through January 1, 2050, the Administrator shall allocate among load-serving entities 10 percent of the Emission Allowance Account for the year.

SEC. 3502. DISTRIBUTION.

(a) In general.—For each calendar year, the emission allowances allocated under section 3501 shall be distributed by the Administrator to each load-serving entity based on the proportion that—

(1) the quantity of electricity delivered by the load-serving entity during the 3 calendar years preceding the calendar year for which the emission allowances are distributed, adjusted upward for electricity not delivered as a result of consumer energy-efficiency programs implemented by the load-serving entity and verified by the regulatory agency of the load-serving entity; bears to

(2) the total quantity of electricity delivered by all load-serving entities during those 3 calendar years.
(b) BASIS.—The Administrator shall base the determination of the quantity of electricity delivered by a load-serving entity for the purpose of subsection (a) on the most recent data available in annual reports filed with the Energy Information Administration of the Department of Energy.

SEC. 3503. USE.

(a) IN GENERAL.—Any load-serving entity that accepts emission allowances distributed under section 3502 shall—

(1) sell each emission allowance distributed to the load-serving entity by not later than 1 year after receiving the emission allowance; and

(2) pursue fair market value for each emission allowance sold in accordance with paragraph (1).

(b) PROCEEDS.—All proceeds from the sale of emission allowances under subsection (a) shall be used solely—

(1) to mitigate economic impacts on low- and middle-income energy consumers, including by reducing transmission charges or issuing rebates; and

(2) to promote energy efficiency on the part of energy consumers.

(c) INCLUSION IN RETAIL RATES.—To facilitate the prompt pass-through of the benefits from the sale of emission allowances to retail customers—
(1) any credit from the sale of allowances shall be reflected in the retail rates of a load-serving entity not later than 90 days after the sale of the allowances;

(2) the load-serving entity shall not be required to file a retail rate case in order to pass through the credit; and

(3) the amount of the credit shall not be subject to review by any State regulatory authority.

(d) PROHIBITION ON REBATES.—No load-serving entity may use any proceeds from the sale of emission allowances under subsection (a) to provide to any consumer a rebate that is based on the quantity of electricity used by the consumer.

SEC. 3504. REPORTING.

(a) IN GENERAL.—Each load-serving entity that accepts emission allowances distributed under section 3502 shall, for each calendar year for which the load-serving entity accepts emission allowances, submit to the Administrator a report describing—

(1) the date of each sale of each emission allowance during the preceding year;

(2) the amount of revenue generated from the sale of emission allowances during the preceding year; and
how, and to what extent, the load-serving entity used the proceeds of the sale of the emission allowances during the preceding year.

(b) AVAILABILITY OF REPORTS.—The Administrator shall make available to the public all reports submitted by any load-serving entity under subsection (b), including by publishing those reports on the Internet.

Subtitle F—Bonus Allowances for Carbon Capture and Geological Sequestration

SEC. 3601. ALLOCATION.

(a) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, the Administrator shall—

(1) establish a Bonus Allowance Account; and

(2) allocate 4 percent of the emission allowances established for calendar years 2012 through 2035 to the Bonus Allowance Account.

(b) INITIAL NUMBER OF ALLOWANCES.—As of January 1, 2012, there shall be 3,932,160,000 emission allowances in the Bonus Allowance Account.

SEC. 3602. QUALIFYING PROJECTS.

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 for a minimum of an 85-percent capture rate for carbon dioxide emissions on an annual basis 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 section 1421(d) of the Safe Drinking Water Act (42 U.S.C. 300h(d)) carbon dioxide resulting from electric power generation; and

(3) have begun operation during the period beginning on January 1, 2008, and ending on December 31, 2035.

SEC. 3603. DISTRIBUTION.

Subject to section 3604, 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 the number of metric tons of carbon dioxide geologically sequestered by the project and the bonus allowance rate for that calendar year, as provided in the following table:

<table>
<thead>
<tr>
<th>Year</th>
<th>Bonus Allowance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>4.5</td>
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<tr>
<td>2013</td>
<td>4.5</td>
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</table>
### Year Bonus Allowance Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Bonus Allowance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
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<tr>
<td>2015</td>
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<td>2038</td>
<td>0.5</td>
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<tr>
<td>2039</td>
<td>0.5</td>
</tr>
</tbody>
</table>

SEC. 3604. 10-YEAR LIMIT.

A qualifying project may receive annual emission allowances under this subsection only for—

(1) the first 10 years of operation; or

(2) if the unit covered by the qualifying project began operating before January 1, 2012, the period of calendar years 2012 through 2021.

SEC. 3605. 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 distrib-
uted under section 3603 for the calendar year, the Admin-
istrator shall, for the calendar year—

(1) distribute the remaining bonus allowances
only to qualifying projects that were already quali-
fying 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 Al-
lowance Account is projected to be fully used based
on projects already in operation.

Subtitle G—Domestic Agriculture
and Forestry

SEC. 3701. ALLOCATION.

Not later than January 1, 2012, and annually there-
after through January 1, 2050, the Administrator shall
allocate to the Secretary of Agriculture 5 percent of the
Emission Allowance Account for the calendar year for use
in—

(1) reducing greenhouse gas emissions from the
agriculture and forestry sectors of the United States
economy; and

(2) increasing greenhouse gas sequestration
from those sectors.
(a) Report.—Not later than 1 year after the date of enactment of this Act, the Secretary of Agriculture, in consultation with 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;

(3) the proposed priority for additional research;

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

(5) the manner in which carbon credits that are specific to agricultural and forestry operations should be valued and allotted.

(b) Standardized System of Soil Carbon Measurement and Certification for the Agricultural and Forestry Sectors.—

(1) In general.—As soon as practicable after the date of enactment of this Act, the Secretary of Agriculture shall establish a standardized system of
carbon measurement and certification for the agricultural and forestry sectors.

(2) ADMINISTRATION.—In establishing the system, the Secretary of Agriculture shall—

(A) create a standardized system of measurements for agricultural and forestry greenhouse gases; and

(B) delineate the most appropriate system of certification of credit by public or private entities.

(c) RESEARCH.—After the date of submission of the report described in paragraph (1), the President and the Secretary of Agriculture (in collaboration with 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.

SEC. 3703. DISTRIBUTION.

Taking into account the report prepared under subsection 3702(a), the Secretary of Agriculture shall establish, by regulation, a program under which agricultural and forestry sequestration allowances may be distributed to entities that carry out sequestration projects on agricul-
tural and forest land that achieve long-term greenhouse
gas emission mitigation benefits.

Subtitle H—International Forest
Protection

SEC. 3801. 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 per-
cent of the total greenhouse gas emissions of the de-
veloping world;

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

(4) encouraging reduced deforestation and
other forest carbon activities 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 would otherwise be practicable; and

(C) substantially benefit biodiversity, conservation, and indigenous and other forest-dependent people in developing countries.

SEC. 3802. DEFINITION OF FOREST CARBON ACTIVITIES.

In this subtitle, the term “forest carbon activities” means—

(1) activities directed at reducing greenhouse gas emissions from deforestation and forest degradation in countries other than the United States; and

(2) activities directed at increasing sequestration of carbon through restoration of forests, and degraded land in countries other than the United States that has not been forested prior to restoration, afforestation, and improved forest management, that meet the eligibility requirements promulgated under section 3804(a).

SEC. 3803. ALLOCATION.

Not later than January 1, 2012, and annually thereafter through January 1, 2050, the Administrator shall allocate and distribute 3 percent of the Emission Allowance Account for the calendar year for use in carrying out
forest carbon activities in countries other than the United States.

SEC. 3804. DEFINITION AND ELIGIBILITY REQUIREMENTS.

(a) 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; and

(B) to avoid the introduction of invasive nonnative species.

(b) 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, and verifiable, with reliable measuring and monitoring and appropriate accounting for leakage.

SEC. 3805. INTERNATIONAL FOREST CARBON ACTIVITIES.

(a) In General.—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.
(b) **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 that meets international standards.
(3) **Other forest carbon activities.**—A forest carbon activity, other than a reduction in deforestation or forest degradation, shall be eligible for crediting, subject to the quality criteria for forest carbon credits identified in this Act or in regulations promulgated under this Act.

(e) **Recognition of credits.**—With respect to countries other than countries described in subsection (a), the Administrator—

(1) shall recognize credits from forest carbon activities, subject to the quality criteria for forest carbon credits identified in this Act and regulations promulgated under this Act; and

(2) is encouraged to identify other incentives, including economic and market-based incentives, to encourage developing countries with largely-intact native forests to protect those forests.

**SEC. 3806. Reviews and discount.**

(a) **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 credit program under this subtitle.

(b) **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 forest carbon credits imported into the United States from those countries.

Subtitle I—Covered Facilities

SEC. 3901. ALLOCATION.

Not later than April 1, 2012, and annually thereafter through January 1, 2035, the Administrator shall allocate percentages of the Emission Allowance Account for the calendar year to owners or operators of covered facilities within the electric power sector and the industrial sector, as follows:

<table>
<thead>
<tr>
<th>Calendar</th>
<th>Percentage of Emission Allowance Account Allocated to the Electric Power Sector</th>
<th>Percentage of Emission Allowance Account Allocated to the Industrial Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>20</td>
<td>20</td>
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<tr>
<td>2013</td>
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</tr>
<tr>
<td>2021</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>
Calendar | Percentage of Emission Allowance Account Allocated to the Electric Power Sector | Percentage of Emission Allowance Account Allocated to the Industrial Sector
--- | --- | ---
2022 | 14 | 14
2023 | 13 | 13
2024 | 12 | 12
2025 | 11 | 11
2026 | 10 | 10
2027 | 9 | 9
2028 | 8 | 8
2029 | 7 | 7
2030 | 6 | 6
2031 | 5 | 5
2032 | 4 | 4
2033 | 3 | 3
2034 | 2 | 2
2035 | 1 | 1

1 SEC. 3902. DISTRIBUTION SYSTEM.

Not later than 1 year after the date of enactment of this Act, the Administrator shall establish a system for distributing to covered facilities within the electric power and industrial sectors the emission allowances allocated under section 3901.

7 SEC. 3903. DISTRIBUTING EMISSION ALLOWANCES WITHIN THE ELECTRIC POWER SECTOR.

(a) New Entrees.—

(1) In General.—As part of the system established under section 3902, the Administrator shall, for each calendar year, set aside, from the quantity of emission allowances represented by the percent-
ages described in the table contained in section 3901
for the electric power sector, a quantity of emission
allowances for distribution to new entrant covered
electric power sector facilities.

(2) Calculation of allowances.—The
quantity of emission allowances distributed by the
Administrator for a calendar year to a new covered
electric power sector facility under paragraph (1)
shall be equal to the product obtained by multi-
plying—

(A) the average greenhouse gas emission
rate of all covered electric power sector facilities
that commenced operations during the 5 years
preceding the date of enactment of this Act;
and

(B) the electricity generated by the facility
during the calendar year, adjusted downward
on a pro rata basis for each new facility in the
event that insufficient allowances are available
under section 3901 for a calendar year.

(b) Facilities owned by a rural electric co-

operative.—

(1) In general.—As part of the system estab-
lished under section 3902, the Administrator shall,
for each calendar year, set aside, from the quantity
of emission allowances represented by the percentages described in the table contained in section 3901 for the electric power sector, a quantity of emission allowances for distribution to covered electric power sector facilities that are owned or operated by a rural electric cooperative.

(2) **Calculation of Allowances.**—The quantity of emission allowances distributed by the Administrator in a calendar year under paragraph (1) to a covered electric power sector facility that is owned or operated by a rural electric cooperative shall be equal to the quantity of carbon dioxide equivalents that the covered electric power sector facility emitted during calendar year 2006.

(c) **Incumbents.**—

(1) **In General.**—As part of the system established under section 3902, the Administrator shall, for each calendar year, distribute to covered electric power sector facilities (other than facilities owned or operated by a rural electric cooperative) that were operating during the calendar year preceding the year in which this Act was enacted the emission allowances represented by the percentages described in the table contained in section 3901 for the electric power sector.
power sector that remain after the distribution of emission allowances under subsections (a) and (b).

(2) CAlCULATION OF ALLOWANCES.—The quantity of emission allowances distributed to a covered electric power sector facility under paragraph (1) shall be equal to the product obtained by multiplying—

(A) the quantity of emission allowances available for distribution under paragraph (1); and

(B) the quotient obtained by dividing—

(i) the annual average quantity of carbon dioxide equivalents emitted by the covered electric power sector facility during the 3 calendar years preceding the date of enactment of this Act; by

(ii) the annual average of the aggregate quantity of carbon dioxide equivalents emitted by all covered electric power sector facilities during those 3 calendar years.

SEC. 3904. DISTRIBUTING EMISSION ALLOWANCES WITHIN THE INDUSTRIAL SECTOR.

(a) NEW ENTRANTS.—

(1) IN GENERAL.—As part of the system established under section 3902, the Administrator shall,
for each calendar year, set aside, from the quantity of emission allowances represented by the percentages described in the table contained in section 3901 for the industrial sector, a quantity of emission allowances for distribution to new entrant covered industrial sector facilities.

(2) **Calculation of allowances.**—The quantity of emission allowances distributed by the Administrator in a calendar year to a new covered industrial sector facility under paragraph (1) shall be calculated pursuant to such formula as shall be established under the system established under section 3902.

(b) **Incumbents.**—

(1) **In general.**—As part of the system established under section 3902, the Administrator shall, for each calendar year, distribute to covered industrial sector facilities that were operating during the calendar year preceding the year in which this Act was enacted the emission allowances represented by the percentages described in the table contained in section 3901 for the industrial sector that remain after the distribution of emission allowances under subsection (a).
(2) **Calculation of allowances.**—The quantity of emission allowances distributed to a covered industrial sector facility under paragraph (1) shall be equal to the product obtained by multiplying—

(A) the quantity of emission allowances available for distribution under paragraph (1); and

(B) the quotient obtained by dividing—

(i) the annual average quantity of carbon dioxide equivalents emitted by the covered industrial sector facility during the 3 calendar years preceding the date of enactment of this Act; by

(ii) the annual average of the aggregate quantity of carbon dioxide equivalents emitted by all covered industrial sector facilities during those 3 calendar years.

(c) **Revocation of distribution upon facility shutdown.**—If a covered facility within the industrial sector receives a distribution of emission allowances under this section for a calendar year and is subsequently permanently shut down during that calendar year, the owner or operator of the facility shall promptly return to the Ad-
ministrator a number of emission allowances equal to the
difference between—

(1) the number of carbon dioxide equivalents
emitted by the facility in that calendar year prior to
the shutdown; and

(2) the number of emission allowances distrib-
uted to the facility by the Administrator for that cal-
endar year.

TITLE IV—AUCTIONS AND USES
OF AUCTION PROCEEDS
Subtitle A—Funds

SEC. 4101. ESTABLISHMENT.

There are established in the Treasury of the United
States the following funds:

(1) The Energy Assistance Fund.

(2) The Climate Change Worker Training
Fund.

(3) The Adaptation Fund.

(4) The Climate Change and National Security
Fund.

SEC. 4102. AMOUNTS IN FUNDS.

Each Fund established by section 4101 shall consist
of such amounts as are appropriated to the respective
Fund under section 4103.
SEC. 4103. TRANSFERS TO FUNDS.

There are appropriated to each Fund established by section 4101, out of funds of the Treasury not otherwise appropriated, amounts equivalent to amounts deposited in each respective Fund under section 4302(b)(2).

Subtitle B—Climate Change Credit Corporation

SEC. 4201. ESTABLISHMENT.

(a) In General.—There is established, as a non-profit corporation without stock, a corporation to be known as the “Climate Change Credit Corporation”.

(b) Treatment.—The Corporation shall not be considered to be an agency or establishment of the Federal Government.

SEC. 4202. APPLICABLE LAWS.

The Corporation shall be subject to this title and, to the extent consistent with this title, the District of Columbia Business Corporation Act (D.C. Code section 29-301 et seq.).

SEC. 4203. BOARD OF DIRECTORS.

(a) In General.—The Corporation shall have a board of directors composed of 5 individuals who are citizens of the United States, of whom 1 shall be elected annually by the board to serve as Chairperson.
(b) **Political Affiliation.**—Not more than 3 members of the board serving at any time may be affiliated with the same political party.

(c) **Appointment and Term.**—A member of the board shall be appointed by the President, by and with the advice and consent of the Senate, for a term of 5 years.

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

### Subtitle C—Auctions

#### SEC. 4301. EARLY AUCTIONS.

(a) **Initiation of Auctioning.**—Not later than 1 year after the date of enactment of this Act, the Corporation shall begin auctioning the emission allowances allocated to the Corporation under section 3101.

(b) **Completion of Auctioning.**—Not later than December 31, 2011, the Corporation shall complete auctioning of all allowances allocated to the Corporation under section 3101.

(c) **Proceeds from Early Auctioning.**—The Corporation shall use to carry out programs established under subtitle D all proceeds of early auctioning conducted by the Corporation under this section.
SEC. 4302. ANNUAL AUCTIONS.

(a) IN GENERAL.—Not later than 30 days after the beginning of a calendar year identified in the table contained in section 3201, and annually thereafter through calendar year 2050, the Corporation shall auction all of the allowances allocated to the Corporation for that year by the Administrator under section 3201.

(b) PROCEEDS FROM ANNUAL AUCTIONING.—

(1) IN GENERAL.—For each of calendar years 2012 through 2050, the Corporation shall use to carry out the programs established under subtitle D 55 percent of the proceeds from annual auctions that the Corporation conducts for the calendar year under this section.

(2) DEPOSIT OF FUNDS.—For each of calendar years 2012 through 2050, the Corporation shall, subject to subtitle H, deposit into the following Funds established by section 4101 the following percentages of the proceeds from auctions that the Corporation conducts for the calendar year under this section:

<table>
<thead>
<tr>
<th>Fund</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Assistance Fund</td>
<td>20</td>
</tr>
<tr>
<td>Climate Change Worker Training Fund</td>
<td>5</td>
</tr>
<tr>
<td>Adaptation Fund</td>
<td>20</td>
</tr>
</tbody>
</table>
Subtitle D—Energy Technology Deployment

SEC. 4401. IN GENERAL.

For each calendar year, the Corporation shall use the amounts described in section 4301(c) and 4302(b) to carry out the programs established under this subtitle, as follows:

(1) Not more than 45 percent of the funds shall be used to carry out the zero- or low-carbon energy technologies program under section 4402.

(2) Not more than 35 percent of the funds shall be used as follows:

   (A) Not more than 28 percent shall be used to carry out the advanced coal and sequestration technologies program under section 4403.

   (B) Not more than 7 percent shall be used to carry out the cellulosic biomass ethanol technology deployment programs under section 4404.

(3) Not more than 20 percent shall be used to carry out the advanced technology vehicles manufacturing incentive program under section 4405.
SEC. 4402. ZERO- OR LOW-CARBON ENERGY TECHNOLOGIES

DEPLOYMENT.

(a) DEFINITIONS.—In this section:

(1) ENERGY SAVINGS.—The term “energy 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 energy-efficiency standard applicable to the product.

(2) HIGH-EFFICIENCY CONSUMER PRODUCT.—The term “high-efficiency consumer product” means a covered product to which an energy conservation standard applies under section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295), if the energy efficiency of the product exceeds the energy efficiency required under the standard.

(3) 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, or is fossil-fuel fired and emits into the atmosphere not more than 250 pounds of carbon dioxide per megawatt-hour (after adjustment for any carbon dioxide from the unit that is geologically sequestered); and
(B) was placed into commercial service after the date of enactment of this Act.

(b) FINANCIAL INCENTIVES PROGRAM.—During each fiscal year beginning on or after October 1, 2008, the Corporation shall competitively award financial incentives under this subsection in the technology categories of—

(1) the production of electricity from new zero- or low-carbon generation; and

(2) the manufacture of high-efficiency consumer products.

(c) REQUIREMENTS.—

(1) IN GENERAL.—The Corporation shall make awards under this section to producers of new zero- or low-carbon generation and to manufacturers of high-efficiency consumer products—

(A) 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

(B) in the case of manufacturers of high-efficiency consumer products, based on the bid of each manufacturer in terms of dollars per megawatt-hour or million British thermal units saved.

(2) ACCEPTANCE OF BIDS.—
(A) **IN GENERAL.**—In making awards under this subsection, the Corporation shall—

(i) solicit bids for reverse auction from appropriate producers and manufacturers, as determined by the Corporation; and

(ii) award financial incentives to the producers and manufacturers that submit the lowest bids that meet the requirements established by the Corporation.

(B) **FACTORS FOR CONVERSION.**—

(i) **IN GENERAL.**—For the purpose of assessing bids under subparagraph (A), the Corporation shall specify a factor for converting megawatt-hours of electricity and million British thermal units of natural gas to common units.

(ii) **REQUIREMENT.**—The conversion factor shall be based on the relative greenhouse gas emission benefits of electricity and natural gas conservation.

(d) **FORMS OF AWARDS.**—

(1) **ZERO- AND LOW-CARBON GENERATORS.**—An award for zero- or low-carbon generation under this subsection shall be in the form of a contract to provide a production payment for each year during
the first 10 years of commercial service of the generation unit in an amount equal to the product obtained by multiplying—

(A) the amount bid by the producer of the zero- or low-carbon generation; and

(B) the megawatt-hours estimated to be generated by the zero- or low-carbon generation unit each year.

(2) **HIGH-EFFICIENCY CONSUMER PRODUCTS.**—An award for a high-efficiency consumer product under this subsection shall be in the form of a lump sum payment in an amount equal to the product obtained by multiplying—

(A) the amount bid by the manufacturer of the high-efficiency consumer product; and

(B) the energy savings during the projected useful life of the high-efficiency consumer product, not to exceed 10 years, as determined by the Corporation.

**SEC. 4403. ADVANCED COAL AND SEQUESTRATION TECHNOLOGIES PROGRAM.**

(a) **ADVANCED COAL TECHNOLOGIES.**—

(1) **DEFINITION OF ADVANCED COAL GENERATION TECHNOLOGY.**—In this subsection, the term
“advanced coal generation technology” means advanced a coal-fueled power plant technology that—

(A) achieves a minimum efficiency of 30 percent with respect to higher heating value of the feedstock, after all parasitic requirements for carbon dioxide capture and compression to 2,000 pounds per square inch absolute have been subtracted;

(B) provides for the capture and geological sequestration of at least 85 percent of carbon dioxide produced at the facility, as determined by the Corporation; and

(C) has an emission rate of not more than 250 pounds of carbon dioxide per megawatt-hour of net electricity generation, after subtracting the carbon dioxide that is captured and sequestered.

(2) Demonstration Projects.—The Corporation shall use not less than ¼ of the amounts made available to carry out this section for each fiscal year to support demonstration projects using advanced coal generation technology, including retrofit technology that could be deployed on existing coal generation facilities.

(3) Deployment Incentives.—
(A) IN GENERAL.—The Corporation shall use not less than ¼ of the amounts made available to carry out this subsection for each fiscal year to provide Federal financial incentives to facilitate the deployment of not more than 20 gigawatts of advanced coal generation technologies.

(B) ADMINISTRATION.—In providing incentives under this paragraph, the Corporation shall—

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

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

(C) FUNDING REQUIREMENTS.—

(i) SEQUESTRATION ACTIVITIES.—The Corporation shall provide incentives only to projects that will capture and sequester at least 85 percent of the carbon dioxide produced by the project facilities.
(ii) **Storage Agreement Required.**—The Corporation shall require a binding storage agreement for the carbon dioxide captured in a project under this subsection, in a geological storage project permitted by the Administrator under regulations promulgated pursuant to section 1421(d) of the Safe Drinking Water Act (42 U.S.C. 300h(d)).

(iii) **Projects Using Certain Coals.**—In providing incentives under this paragraph, the Corporation shall set aside not less than 25 percent of any amounts made available to carry out this subsection for projects using lower-rank coals, such as subbituminous coal and lignite.

(4) **Distribution of Funds.**—A project that receives an award under this subsection may elect 1 of the following Federal financial incentives:

(A) A loan guarantee.

(B) A cost-sharing grant to cover the incremental cost of installing and operating carbon capture and storage equipment (for which utilization costs may be covered for the first 10 years of operation).
(C) Production payments of not more than 
1.5 cents per kilowatt-hour of electric output 
during the first 10 years of commercial service 
of the project.

(5) LIMITATION.—A project may not receive an 
award under this subsection if the project receives 
an award under section 4402.

(b) SEQUESTRATION.—

(1) IN GENERAL.—The Corporation shall use 
not less than 1⁄2 of the amounts made available to 
carry out this subsection for each fiscal year for 
large-scale geological carbon storage demonstration 
projects that store carbon dioxide captured from fa-
cilities for the generation of electricity using coal 
gasification or other advanced coal combustion pro-
cesses, including facilities that receive assistance 
under subsection (a).

(2) PROJECT CAPITAL AND OPERATING 
costs.—The Corporation shall provide assistance 
under this paragraph to reimburse the project owner 
for a percentage of the incremental project capital 
and operating costs of the project that are attrib-
utable to carbon capture and sequestration, as the 
Secretary determines to be appropriate.
SEC. 4404. FUEL FROM CELLULOSIC BIOMASS.

(a) In General.—The Corporation shall provide deployment incentives under this section to encourage a variety of projects to produce transportation fuels from cellulosic biomass, relying on different feedstocks in different regions of the United States.

(b) Project Eligibility.—Incentives under this section shall be provided on a competitive basis to projects that produce fuels that—

(1) meet United States fuel and emission specifications;

(2) help diversify domestic transportation energy supplies; and

(3) improve or maintain air, water, soil, and habitat quality, and protect scarce water supplies.

(c) Incentives.—Incentives under this section may consist of—

(1) loan guarantees for the construction of production facilities and supporting infrastructure; or

(2) production payments through a reverse auction in accordance with subsection (d).

(d) Reverse Auction.—

(1) In General.—In providing incentives under this section, the Corporation shall—
(A) prescribe rules under which producers
of fuel from cellulosic biomass may bid for pro-
duction payments under subsection (c)(2); and
(B) solicit bids from producers of different
classes of transportation fuel, as the Corpora-
tion determines to be appropriate.

(2) REQUIREMENT.—The rules under section
4402 shall require that incentives shall be provided
to the producers that submit the lowest bid (in
terms of cents per gallon gasoline equivalent) for
each class of transportation fuel from which the Cor-
poration solicits a bid.

SEC. 4405. ADVANCED TECHNOLOGY VEHICLES MANUFA-
TURING INCENTIVE PROGRAM.

(a) DEFINITIONS.—In this section:

(1) ADVANCED TECHNOLOGY VEHICLE.—The
term "advanced technology vehicle" means a hybrid
or advanced diesel light duty motor vehicle that
meets—

(A) the Tier II Bin 5 emission standard
established in rules prescribed by the Adminis-
trator 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) at least 125 percent of the average base year combined fuel economy, calculated on an energy-equivalent basis, for vehicles of a substantially similar footprint.

(2) 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).
(3) Engineering Integration Costs.—The term “engineering integration costs” includes the cost of engineering tasks 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 qualifying components or advanced technology vehicles.

(4) Qualifying Component.—The term “qualifying component” means a component that the Secretary of Energy determines to be—

(A) specially designed for advanced technology vehicles; and

(B) installed for the purpose of meeting the performance requirements of advanced technology vehicles as specified in subparagraphs (A), (B), and (C) of paragraph (1).

(b) Manufacturer Facility Conversion Awards.—The Corporation shall provide facility conversion funding awards under this subsection to automobile manufacturers and component suppliers to pay up to 30 percent of the cost of—

(1) reequipping or expanding an existing manufacturing facility to produce—
1. (A) qualifying advanced technology vehicles; or

2. (B) qualifying components; and

3. (2) engineering integration of qualifying vehicles and qualifying components.

(c) PERIOD OF AVAILABILITY.—An award under subsection (b) shall apply to—

1. (1) facilities and equipment placed in service after the date of enactment of this Act and before January 1, 2016; and

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

Subtitle E—Energy Consumers

SEC. 4501. PROPORTIONS OF FUNDING AVAILABILITY.

All funds deposited into the Energy Assistance Fund established by section 4101 shall be made available, without further appropriation or fiscal year limitation, to the following programs in the following proportions:

1. (1) 50 percent of the funds to the low-income home energy assistance program established under the Low Income Home Energy Assistance Act of 1981 (42 U.S.C. 8621 et seq.).

2. (2) 25 percent of the funds to the Weatherization Assistance Program for Low-Income Persons established under part A of title IV of the Energy
Conservation and Production Act (42 U.S.C. 6861 et seq.).

(3) 25 percent of the funds to the rural energy assistance program described in section 4502.

SEC. 4502. RURAL ENERGY ASSISTANCE PROGRAM.

The Secretary of Energy shall carry out a program to use the funds made available under section 4501(3) to provide financial assistance to promote the availability of reasonably-priced electricity in off-grid rural regions in which electricity prices exceed 150 percent of the national average, as determined by the Secretary of Energy.

Subtitle F—Climate Change Worker Training Program

SEC. 4601. FUNDING.

All funds deposited into the Climate Change Worker Training Fund established by section 4101 shall be made available, without further appropriation or fiscal year limitation, to carry out the programs established under this subtitle.

SEC. 4602. PURPOSES.

The purposes of this subtitle are—

(1) to provide quality job training to any workers displaced by this Act;
(2) to provide assistance in the form of temporary wages and health care benefits to workers in training;

(3) to transition workers into jobs created as a result of this Act;

(4) to provide skilled workers to enterprises developing and marketing advanced technologies and practices that reduce greenhouse gas emissions of the United States; and

(5) to provide funding for State worker training programs.

SEC. 4603. ESTABLISHMENT.

Not later than 180 days after the date of enactment of this Act, the Secretary of Labor, in consultation with the Administrator and the Secretary of Energy, shall establish a climate change worker training program that achieves the purposes of this subtitle.

SEC. 4604. GRANTS TO STATES.

Not later than 1 year after the date of enactment of this Act, the Secretary of Labor shall establish a program to award grants to States, for use in funding State worker training programs, based on the impact of this Act on the workforce of each State, as determined by the Secretary of Labor.
SEC. 4605. TYPES OF ASSISTANCE.

The types of assistance that workers may receive under the climate change worker training program shall include, as determined by the Secretary of Labor—

(1) income replacement;

(2) health care credits;

(3) travel costs incidental to participation in a training program under this subtitle; and

(4) a portion of the cost of relocating to a new job.

Subtitle G—Adaptation Program for Natural Resources in United States and Territories

SEC. 4701. DEFINITIONS.

In this subtitle:

(1) Ecological process.—

(A) In general.—The term “ecological process” means a biological, chemical, or physical interaction between the biotic and abiotic components of an ecosystem.

(B) Inclusions.—The term “ecological process” includes—

(i) nutrient cycling;

(ii) pollination;

(iii) predator-prey relationships;

(iv) soil formation;
(v) gene flow;
(vi) larval dispersal and settlement;
(vii) hydrological cycling;
(viii) decomposition; and
(ix) disturbance regimes, such as fire
and flooding.

(2) 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 pro-
gram the object of which is to reintroduce indi-
viduals of a depleted indigenous species into
previously occupied range.

(3) 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.

(4) INDIAN TRIBE.—The term “Indian tribe”
has the meaning given the term in section 4 of the
Indian Self-Determination and Education Assistance
(5) **Plant.**—The term “plant” means any species of wild flora.

(6) **Secretary.**—The term “Secretary” means the Secretary of the Interior.

(7) **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.

**SEC. 4702. ADAPTATION FUND.**

(a) **In General.**—All amounts deposited in the Adaptation Fund established by section 4101 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, and associated ecological processes in adapting to and surviving the impacts of climate change (referred to in this subtitle as “adaptation activities”) pursuant to this subtitle.

(b) **Department of the Interior.**—Of the amounts made available to carry out this subtitle—

(1) 40 percent shall be allocated to the Secretary, 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 activi-
ties in accordance with comprehensive wildlife con-
servation strategies and, where appropriate, other
fish and wildlife conservation strategies, including—

(A) plans under the National Fish Habitat
Initiative of the National Fish and Wildlife
Foundation;

(B) North American Wetlands Conserva-
tion Act (16 U.S.C. 4401 et seq.);

(C) the Federal, State, and local partner-
ship known as “Partners in Flight”;

(D) coastal zone management plans;

(E) regional fishery management plans;

and

(F) recovery plans for threatened and en-
derangered species under section 6 of the Endan-
gered Species Act of 1973 (16 U.S.C. 1535);

(2) 20 percent shall be allocated to the Sec-
retary for use in funding adaptation activities car-
rried out—

(A) under endangered species, migratory
bird, and other fish and wildlife programs ad-
ministered 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, Bureau of Land Management, or National Park Service; or

(C) within Federal water managed by the Bureau of Reclamation; and

(3) 5 percent shall be allocated to the Secretary for adaptation activities carried out under cooperative grant programs, including—

(A) the Tribal Wildlife Grants program of the United States Fish and Wildlife Service;

(B) the cooperative endangered species conservation fund authorized under section 6(i) of the Endangered Species Act of 1973 (16 U.S.C. 1535(i));

(C) programs under the North American Wetlands Conservation Act (16 U.S.C. 4401 et seq.);

(D) 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);
(E) the multinational species conservation fund established under the heading “MULTI-
NATIONAL SPECIES CONSERVATION FUND” of title I of the Department of the Interior and Related Agencie Appropriations Act, 1999 (16 U.S.C. 4246);

(F) the Neotropical Migratory Bird Conservation Fund established by section 9(a) of the Neotropical Migratory Bird Conservation Act (16 U.S.C. 6108(a));

(G) the Coastal Program of the United States Fish and Wildlife Service; and

(H) the National Fish Habitat Action Plan.

(c) FOREST SERVICE.—Of the amounts made available each fiscal year to carry out this subtitle, 5 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.

(d) ENVIRONMENTAL PROTECTION AGENCY.—Of the amounts made available to carry out this subtitle, 12.5 percent shall be allocated to the Administrator for use in restoring and protecting—
(1) large-scale freshwater aquatic ecosystems, such as the Everglades, the Great Lakes, Flathead Lake, the Missouri River, and the Yellowstone River; and

(2) large-scale estuarine ecosystems, such as Chesapeake Bay and Long Island Sound.

(e) CORPS OF ENGINEERS.—Of the amounts made available to carry out this subtitle, 12.5 percent shall be allocated to the Corps of Engineers for use in restoring—

(1) large-scale freshwater aquatic ecosystems, such as the ecosystems described in subsection (d)(1); and

(2) large-scale estuarine ecosystems, such as Chesapeake Bay, California Bay Delta, Coastal Louisiana, Long Island Sound, and Puget Sound.

(f) DEPARTMENT OF COMMERCE.—Of the amounts made available to carry out this subtitle, 5 percent shall be allocated to the Secretary of Commerce for use in funding adaptation activities carried out in protecting and restoring coastal, estuarine, coral, and marine species and habitats, including adaptation activities in cooperative grant programs such as—

(1) the Coastal and Estuarine Land Conservation Program and the Community-Based Restoration
Program of the National Oceanic and Atmospheric Administration; and

(2) programs under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.).

(g) COST SHARING.—Notwithstanding any other provision of law, a State or Indian tribe that receives a grant under this section shall be required to provide 10 percent of the costs of each activity carried out using funds from the grant.

(h) COMPREHENSIVE ADAPTATION STRATEGY.—

(1) IN GENERAL.—Effective beginning on the date that is 18 months after the date of enactment of this Act, funds made available to the Federal agencies under this subtitle shall be used only for activities that are consistent with a comprehensive adaptation strategy that—

(A) is jointly approved by the head of each of the Federal agencies, after—

(i) consultation with States and Indian tribes; and

(ii) solicitation of public and independent scientific input; and

(B) describes the manner in which the Federal Government will assist fish and wildlife, fish and wildlife habitat, plants, and associated
ecological processes in adapting to and sur-
viving the impacts of climate change.

(2) UPDATING.—Each adaptation strategy de-
scribed in paragraph (1) shall be updated at least
every 5 years.

Subtitle H—Climate Change and
National Security Program

SEC. 4801. INTERAGENCY CLIMATE CHANGE AND NA-
TIONAL SECURITY COUNCIL.

(a) ESTABLISHMENT.—There is established a Cli-
mate Change and National Security Council (referred to
in this subtitle as the “Council”).

(b) MEMBERSHIP.—The Council shall include—

(1) the Secretary of State, who shall serve as
Chairperson of the Council;

(2) the Administrator;

(3) the Secretary of Defense; and

(4) the Director of National Intelligence.

(c) DUTIES.—The Council shall—

(1) submit annual reports to the President, the
Committees on Environment and Public Works and
Foreign Relations of the Senate, and the Commit-
tees on Energy and Commerce and Foreign Rela-
tions of the House of Representatives that de-
scribe—
(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 the potential negative impacts of climate change on sensitive populations and natural resources in different regions of the world, may threaten, cause, or exacerbate political instability or international conflict in those regions; and

(C) the ramifications of any potentially destabilizing impacts climate change may have on the national security of the United States, including—

(i) the creation of refugees; and

(ii) international or intranational conflicts over water, food, land, or other resources; and

(2) include in each annual report submitted under paragraph (1) recommendations on whether it is necessary to enhance the national security of the United States by funding programs with amounts made available under section 4802 that the Council determines would assist in avoiding the politically
destabilizing impacts of climate change in volatile regions of the world.

SEC. 4802. FUNDING.

Upon a determination for any calendar year by the President, based on any report and recommendations submitted by the Council under section 4801, that funds should be made available to carry out the recommendations—

(1) notwithstanding section 4302(b)(2), the Corporation shall deposit 5 percent of the proceeds from auctions that the Corporation conducts for that calendar year under section 4302(a) into the Climate Change and National Security Fund established by section 4101; and

(2) the President shall use those funds to implement the recommendations.

Subtitle I—Audits

SEC. 4901. REVIEW AND AUDIT BY COMPTROLLER GENERAL OF THE UNITED STATES.

Not later than January 1, 2014, and at least every 3 years thereafter, the Comptroller General of the United States shall review and audit the expenditures under this title to determine the efficacy of the programs, expenditures, and projects funded under this title.
TITLE V—ENERGY EFFICIENCY
Subtitle A—Appliance Efficiency

SEC. 5101. RESIDENTIAL BOILERS.

Section 325(f) of the Energy Policy and Conservation Act (42 U.S.C. 6925(f)) is amended—

(1) in the subsection heading, by inserting “AND BOILERS” after “FURNACES”;

(2) in paragraph (1), by striking “except that” and all that follows through subparagraph (A) and inserting “except that”;

(3) in subparagraph (B)—

(A) by striking “(B) the Secretary” and inserting “the Secretary”; and

(B) by redesignating clauses (i) through (iii) as subparagraphs (A) through (C), respectively, and indenting appropriately;

(4) by redesignating paragraph (3) as paragraph (4); and

(5) by inserting after paragraph (2) the following:

“(3) BOILERS.—

“(A) IN GENERAL.—Subject to subparagraphs (B) and (C), boilers manufactured on or after September 1, 2012, shall meet the following requirements:
Boiler Type Requirements | Minimum Annual Fuel Utilization Efficiency | Design
--- | --- | ---
Gas hot water | 82 percent | No constant burning pilot, automatic means for adjusting water temperature
Gas steam | 80 percent | No constant burning pilot
Oil hot water | 84 percent | Automatic means for adjusting temperature
Oil steam | 82 percent | None
Electric hot water | None | Automatic means for adjusting temperature
Electric steam | None | None

"(B) AUTOMATIC MEANS FOR ADJUSTING WATER TEMPERATURE.—

“(i) IN GENERAL.—The manufacturer shall equip each gas, oil, and electric hot water boiler (other than a boiler equipped with tankless domestic water heating coils) with an automatic means for adjusting the temperature of the water supplied by the boiler to ensure that an incremental change in inferred heat load produces a corresponding incremental change in the temperature of water supplied.

“(ii) CERTAIN BOILERS.—For a boiler that fires at 1 input rate, the requirements of this subparagraph may be satisfied by providing an automatic means that allows the burner or heating element to fire only when the means has determined that the
inferred heat load cannot be met by the residual heat of the water in the system.

“(iii) No inferred heat load.—When there is no inferred heat load with respect to a hot water boiler, the automatic means described in clauses (i) and (ii) shall limit the temperature of the water in the boiler to not more than 140 degrees Fahrenheit.

“(iv) Operation.—A boiler described in clause (i) or (ii) shall be operable only when the automatic means described in clauses (i), (ii), and (iii) is installed.

“(C) Exception.—A boiler that is manufactured to operate without any need for electricity, any electric connection, any electric gauges, electric pumps, electric wires, or electric devices of any sort, shall not be required to meet the requirements of this subsection.”.

SEC. 5102. REGIONAL VARIATIONS IN HEATING OR COOLING STANDARDS.

(a) In General.—Section 327 of the Energy Policy and Conservation Act (42 U.S.C. 6297) is amended—

(1) by redesignating subsections (e), (f), and (g) as subsections (f), (g), and (h), respectively; and
(2) by inserting after subsection (d) the fol-
lowing:

“(e) REGIONAL STANDARDS FOR SPACE HEATING
AND AIR CONDITIONING PRODUCTS.—

“(1) STANDARDS.—

“(A) IN GENERAL.—The Secretary may es-
tablish regional standards for space heating and
air conditioning products, other than window-
unit air-conditioners and portable space heaters.

“(B) NATIONAL MINIMUM AND REGIONAL
STANDARDS.—For each space heating and air
conditioning product, the Secretary may estab-
lish—

“(i) a national minimum standard;
and

“(ii) 2 more stringent regional stand-
ards for regions determined to have signifi-
cantly differing climatic conditions.

“(C) MAXIMUM SAVINGS.—Any standards
established for a region under subparagraph
(B)(ii) shall achieve the maximum level of en-
ergy savings that are technically feasible and
economically justified within that region.

“(D) ECONOMIC JUSTIFIABILITY STUDY.—
“(i) IN GENERAL.—As a preliminary step in determining the economic justifi-
ability of establishing a regional standard under subparagraph (B)(ii), the Secretary shall conduct a study involving stake-
holders, including—

“(I) a representative from the National Institute of Standards and Technology;

“(II) representatives of non-
governmental advocacy organizations;

“(III) representatives of product manufacturers, distributors, and in-
stallers;

“(IV) representatives of the gas and electric utility industries; and

“(V) such other individuals as the Secretary may designate.

“(ii) REQUIREMENTS.—The study under this subparagraph—

“(I) shall determine the potential benefits and consequences of pre-
scribing regional standards for heat-
ing and cooling products; and
“(II) may, if favorable to the standards, constitute the evidence of economic justifiability required under this Act.

“(E) Regional boundaries.—Regional boundaries used in establishing regional standards under subparagraph (B)(ii) shall—

“(i) conform to State borders; and

“(ii) include only contiguous States (other than Alaska and Hawaii), except that on the request of a State, the Secretary may divide the State to include a part of the State in each of 2 regions.

“(2) Noncomplying products.—If the Secretary establishes standards for a region, it shall be unlawful under section 332 to offer for sale at retail, sell at retail, or install within the region products that do not comply with the applicable standards.

“(3) Distribution in Commerce.—

“(A) In general.—Except as provided in subparagraph (B), no product manufactured in a manner that complies with a regional standard established under paragraph (1) shall be distributed in commerce without a prominent label affixed to the product that includes—
“(i) at the top of the label, in print of not less than 14-point type, the following statement: ‘It is a violation of Federal law for this product to be installed in any State outside the region shaded on the map printed on this label.’;

“(ii) below the notice described in clause (i), an image of a map of the United States with clearly defined State boundaries and names, and with all States in which the product meets or exceeds the standard established pursuant to paragraph (1) shaded in a color or a manner as to be easily visible without obscuring the State boundaries and names; and

“(iii) below the image of the map required under clause (ii), the following statement: ‘It is a violation of Federal law for this label to be removed, except by the owner and legal resident of any single-family home in which this product is installed.’.

“(B) Energy-efficiency rating.—A product manufactured that meets or exceeds all regional standards established under this para-
graph shall bear a prominent label affixed to
the product that includes at the top of the label,
in print of not less than 14-point type, the fol-
lowing statement: ‘This product has achieved an
energy-efficiency rating under Federal law al-
lowing its installation in any State.’.

“(4) RECORDKEEPING.—A manufacturer of
space heating or air conditioning equipment subject
to regional standards established under this sub-
section shall—

“(A) obtain and retain records on the in-
tended installation locations of the equipment
sold; and

“(B) make such records available to the
Secretary on request.”.

(b) CONFORMING AMENDMENTS.—Section 327 of the
Energy Policy and Conservation Act (42 U.S.C. 6297) is
amended—

(1) in subsection (b)—

(A) in paragraph (2), by striking “subsection (e)” and inserting “subsection (f)”; and

(B) in paragraph (3)—

(i) by striking “subsection (f)(1)” and
inserting “subsection (g)(1)”; and
(ii) by striking “subsection (f)(2)”
and inserting “subsection (g)(2)”; and
(2) in subsection (c)(3), by striking “subsection (f)(3)” and inserting “subsection (g)(3)”.

Subtitle B—Building Efficiency

SEC. 5201. UPDATING STATE BUILDING ENERGY 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 America’s Climate Security Act of 2007, 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 by 2010;
“(B) 50 percent by 2020; and
“(C) goals to be established by the Secretary in intermediate and subsequent years, 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 180 days 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 propose 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 economically justified; and

“(bb) 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 America’s Climate Security Act of 2007, 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 proposes 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 national 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).”.

SEC. 5202. 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.”.

TITLE VI—GLOBAL EFFORT TO REDUCE GREENHOUSE GAS EMISSIONS

SEC. 6001. DEFINITIONS.

In this title:
(1) **Baseline Emission Level.**—The term “baseline emission level” means, as determined by the Administrator, the total average annual greenhouse gas emissions attributed to a category of covered goods of a foreign country during the period beginning on January 1, 2012, and ending on December 31, 2014, based on—

(A) relevant data available for that period;

and

(B) to the extent necessary with respect to a specific category of covered goods, economic and engineering models and best available information on technology performance levels for the manufacture of that category of covered goods.

(2) **Comparable Action.**—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 to limit greenhouse gas emissions pursuant to this Act, as determined by the President, taking into consideration the level of economic development of the foreign country.

(3) **Compliance Year.**—The term “compliance year” means each calendar year for which the re-
quirements of this title apply to a category of covered goods of a covered foreign country that is imported into the United States.

(4) COVERED FOREIGN COUNTRY.—The term “covered foreign country” means a foreign country that is included on the covered list prepared under section 6006(b)(3).

(5) COVERED GOOD.—The term “covered good” means a good that (as identified by the Administrator by rule)—

(A) is a primary product;

(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.

(6) FOREIGN COUNTRY.—The term “foreign country” means a member of, or observer government to, the World Trade Organization (WTO), other than the United States.

(7) 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.

(8) INTERNATIONAL AGREEMENT.—The term
“international agreement” means any international
agreement to which the United States is a party, in-
cluding the Marrakesh agreement establishing the
World Trade Organization, done at Marrakesh on
April 15, 1994.

(9) 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 al-
lowances pursuant to section 6006(a)(2); and

(B) used for purposes of meeting the re-
quirements of section 6006.

(10) PRIMARY PRODUCT.—The term “primary
product” means—

(A) iron, steel, aluminum, cement, bulk
glass, or paper; or

(B) any other manufactured product
that—

(i) is sold in bulk for purposes of fur-
ther manufacture; and
(ii) generates, in the course of the manufacture of the product, direct greenhouse gas emissions and indirect greenhouse gas emissions that are comparable (on an emissions-per-dollar basis) to emissions generated in the manufacture of products by covered facilities in the industrial sector.

SEC. 6002. PURPOSES.

The purposes of this title are—

(1) to promote a strong global effort to significantly reduce greenhouse gas emissions;

(2) to ensure, to the maximum extent practicable, that greenhouse gas emissions occurring outside the United States do not undermine the objectives of the United States in addressing global climate change; and

(3) to encourage effective international action to achieve those objectives through—

(A) agreements negotiated between the United States and foreign countries; and

(B) measures carried out by the United States that comply with applicable international agreements.
SEC. 6003. INTERNATIONAL NEGOTIATIONS.

(a) FINDING.—Congress finds that the purposes described in section 6002 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 6002.

SEC. 6004. INTERAGENCY REVIEW.

(a) INTERAGENCY GROUP.—
(1) ESTABLISHMENT.—The President shall es-
   tablish an interagency group to carry out this sec-
   tion.

(2) CHAIRPERSON.—The chairperson of the
   interagency group established under paragraph (1)
   shall be the Secretary of State.

(3) REQUIREMENT.—The Administrator shall
   be a member of the interagency group.

(b) DETERMINATIONS.—

(1) IN GENERAL.—Subject to paragraph (2),
   the interagency group established under subsection
   (a)(1) shall determine whether, and the extent to
   which, each foreign country has taken comparable
   action to limit the greenhouse gas emissions of the
   foreign country.

(2) EXEMPTION.—The interagency group may
   exempt from a determination under paragraph (1)
   any foreign country on the excluded list under sec-
   tion 6006(b)(2).

(e) REPORT TO PRESIDENT.—Not later than Janu-
   ary 1, 2018, and annually thereafter, the interagency
   group shall submit to the President a report describing
   the determinations of the interagency group under sub-
   section (b).
SEC. 6005. PRESIDENTIAL DETERMINATIONS.

(a) In General.—Not later than January 1, 2019, and annually thereafter, the President shall determine whether each foreign country that is subject to interagency review under section 6004(b) has taken comparable action to limit the greenhouse gas emissions of the foreign country, taking into consideration—

(1) the baseline emission levels of the foreign country; and

(2) applicable reports submitted under section 6004(c).

(b) Reports.—The President shall—

(1) submit to Congress an annual report describing the determinations of the President under subsection (a) for the most recent calendar year; and

(2) publish the determinations in the Federal Register.

SEC. 6006. INTERNATIONAL RESERVE ALLOWANCE PROGRAM.

(a) Establishment.—

(1) In General.—The Administrator shall establish a program under which the Administrator, during the 1-year period beginning on January 1, 2019, and annually thereafter, shall offer for sale to United States importers international reserve allowances in accordance with this subsection.
(2) SOURCE.—International reserve allowances under paragraph (1) shall be issued from a special reserve of allowances that is separate from, and established in addition to, the quantity of allowances established under section 1201.

(3) PRICE.—

(A) IN GENERAL.—Subject to subparagraph (B), the Administrator shall establish, by rule, a methodology for determining the price of international reserve allowances for each compliance year at a level that does not exceed the market price of allowances established under section 1201 for the compliance year.

(B) MAXIMUM PRICE.—The price for an international reserve allowance under subparagraph (A) shall not exceed the clearing price for current compliance year allowances established at the most recent auction of allowances by the Corporation.

(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 re-
serve allowances.

(6) REGULATED ENTITIES.—International re-
serve allowances may not be submitted by regulated
entities to comply with the allowance submission re-
quirements of section 1202.

(7) PROCEEDS.—All proceeds from the sale of
international reserve allowances under this sub-
section shall be allocated to a program that the Ad-
ministrator, in coordination with the Secretary of
State, shall establish to mitigate the negative im-
pacts of global climate change on disadvantaged
communities in other countries.

(b) FOREIGN COUNTRY LISTS.—

(1) IN GENERAL.—Not later than January 1,
2020, and annually thereafter, the President shall
develop and publish in the Federal Register 2 lists
of foreign countries, in accordance with this sub-
section.

(2) EXCLUDED LIST.—

(A) IN GENERAL.—The President shall
identify and publish in a list, to be known as
the “excluded list”, 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 subparagraph (A) is a percentage of total global greenhouse gas emissions of not more than 0.5, as determined by the President, for the most recent calendar year for which emissions and other relevant data is available, taking into consideration, as necessary, the annual average deforestation rate during a representative period for a foreign country that is a developing country.

(3) **COVERED LIST.**—

(A) **IN GENERAL.**—The President 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).

(e) **WRITTEN DECLARATIONS.**—

(1) **IN GENERAL.**—Effective beginning January 1, 2020, a United States importer of any covered
good shall, as a condition of importation or withdrawal for consumption from a warehouse of the covered good, submit to the Administrator and the appropriate office of the U.S. Customs and Border Protection a written declaration with respect to each such importation or withdrawal.

(2) CONTENTS.—A written declaration under paragraph (1) shall contain a statement that—

(A) the applicable covered good is accompanied by a sufficient number of international reserve allowances, as determined under subsection (d); or

(B) the covered good is from a foreign country on the excluded list under subsection (b)(2).

(3) INCLUSION.—A written declaration described in paragraph (2)(A) shall include the unique serial number of each emission allowance associated with the importation of the applicable covered good.

(4) FAILURE TO DECLARE.—

(A) IN GENERAL.—Except as provided in subparagraph (B), an imported covered good that is not accompanied by a written declaration under this subsection shall not be per-
mitted to enter the customs territory of the United States.

(B) EXCEPTION FOR CERTAIN IMPORTS.—

Subparagraph (A) shall not apply to a covered good of a foreign country if the President determines that—

(i) the foreign country has taken comparable action to limit the greenhouse gas emissions of the foreign country, in accordance with section 6005;

(ii) the United Nations has identified the foreign country as among the least-developed of developing countries; or

(iii) the foreign country is on the excluded list under subsection (b)(2).

(5) CORRECTED DECLARATION.—

(A) IN GENERAL.—If, after making a declaration required under this subsection, an importer has reason to believe that the declaration contains information that is not correct, the importer shall provide a corrected declaration by not later than 30 days after the date of discovery of the error, in accordance with subparagraph (B).
(B) **METHOD.**—A corrected declaration under subparagraph (A) shall be in the form of a letter or other written statement to the Administrator and the office of the U.S. Customs and Border Protection to which the original declaration was submitted.

**(d) QUANTITY OF ALLOWANCES REQUIRED.**—

(1) **METHODOLOGY.**—

(A) **IN GENERAL.**—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.

(B) **FORMULA.**—The Administrator shall develop a general formula for calculating the international reserve allowance requirement that applies, on a per unit basis, to each covered good of a covered foreign country that is imported during each compliance year.

(2) **INITIAL COMPLIANCE YEAR.**—

(A) **IN GENERAL.**—Subject to subparagraph (B), the methodology under paragraph (1) shall establish an international reserve al-
allowance requirement (per unit imported into the United States) for the initial compliance year for each category of covered goods of each covered foreign country that is equal to the quotient obtained by dividing—

(i) the excess, if any, of the total emissions from the covered foreign country that are attributable to the category of covered goods produced during the most recent year for which data are available, over the baseline emission level of the covered foreign country for that category; and

(ii) the total quantity of the covered good produced in the covered foreign country during the most recent calendar year.

(B) Adjustments.—The Administrator shall adjust the requirement under subparagraph (A)—

(i) in accordance with the ratio that—

(I) the quantity of allowances that were allocated at no cost to entities within the industry sector manufacturing the covered goods for the compliance year during which the cov-
ered goods were imported into the United States; bears to

(II) the greenhouse gas emissions of that industry sector; and

(ii) to take into account the level of economic development of the covered foreign country in which the covered goods were produced.

(3) Subsequent compliance years.—For each subsequent compliance year, the Administrator shall revise, as appropriate, the international reserve allowance requirement applicable to each category of imported covered goods of each covered foreign country to reflect changes in the factors described in paragraph (2)(B).

(4) 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.

(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 President certify 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 President may establish for requirements relating to the enforceability of the cap and
trade program, including requirements for
monitoring, reporting, verification proce-
dures, and allowance tracking; and

(iii) is a comparable action.

(2) FOREIGN CREDITS.—

(A) IN GENERAL.—A United States im-
porter may submit, in lieu of an international
reserve allowance issued under this section, a
foreign credit or a credit for an international
offset project that the Administrator has au-
thorized for use under subtitle E of title II.

(B) APPLICATION.—The limitation on the
use of international reserve allowances by regu-
lated entities under subsection (a)(6) shall not
apply to a United States importer for purposes
of this paragraph.

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

(g) CONSISTENCY WITH INTERNATIONAL AGREE-
MENTS.—The Administrator, in consultation with the Sec-
retary of State, shall adjust the international reserve al-
lowance requirements established under this section (in-
cluding the quantity of international reserve allowances re-
quired for each category of covered goods of a covered for-
eign country) as the Administrator determines to be nec-
essary to ensure that the United States complies with all
applicable international agreements.

(h) TERMINATION.—The international reserve allow-
ance requirements of this section shall not apply to a cov-
ered good of a covered foreign country in any case in
which the President makes a determination described in
subsection (b)(2) with respect to the covered goods of that
covered foreign country.

(i) FINAL REGULATIONS.—Not later than January 1,
2019, the Administrator shall promulgate such regulations
as the Administrator determines to be necessary to carry
out this section.

SEC. 6007. ADJUSTMENT OF INTERNATIONAL RESERVE AL-
LOWANCE REQUIREMENTS.

(a) IN GENERAL.—Not later than January 1, 2023,
and annually thereafter, the President shall prepare and
submit to Congress a report that assesses the effectiveness
of the applicable international reserve allowance require-
ments under section 6006 with respect to the covered
goods of each covered foreign country.

(b) INADEQUATE REQUIREMENTS.—If the President
determines that an applicable international reserve allow-
ance requirement is not adequate to achieve the purposes
of this title, the President, simultaneously with the sub-
mission of the report under subsection (a), shall—

(1) adjust the requirement; or

(2) take such other action as the President de-
dtermines to be necessary to improve the effectiveness
of the requirement, in accordance with all applicable
international agreements.

(c) EFFECTIVE DATE.—An adjustment under sub-
section (b)(1) shall take effect beginning on January 1
of the compliance year immediately following the date on
which the adjustment is made.

TITLE VII—REVIEWS

SEC. 7001. NATIONAL ACADEMY OF SCIENCES REVIEW.

(a) REPORT.—

(1) IN GENERAL.—Not later than January 1,
2012, and every 3 years thereafter, the Adminis-
trator shall offer to enter into a contract with the
National Academy of Sciences under which the
Academy shall submit to Congress and the Adminis-
trator reports evaluating the implementation of this
Act.

(2) CONTENTS OF REPORT.—Each report sub-
mitted to Congress under paragraph (1) shall in-
clude an analysis of—
(A) the extent to which the emission reductions required under this Act are being achieved;

(B) the extent to which the emission reductions achieved under this Act, taken together with actual steps taken by other countries to reduce greenhouse gas emissions, is predicted to stabilize atmospheric greenhouse gas concentrations at a level adequate to forestall dangerous anthropogenic interference with the climate system;

(C) 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 as a result of anthropogenic climate change;

(D)(i) predicted changes in ocean acidity, the extent of coral reefs, and other indicators of ocean ecosystem health due to anthropogenic carbon dioxide; and

(ii) any additional actions that should be taken by the United States or other countries to protect the health of the oceans;
(E) the status of the best available science
and the status of technologies to reduce, se-
quester, or avoid greenhouse gas emissions;

(F) whether the percentage of allowances
for any calendar year that are auctioned, allo-
cated, or devoted to other purposes under this
Act should be modified;

(G) the effectiveness of auction revenues in
meeting the stated purposes of this Act; and

(H) whether additional measures, including
an increase in the earned income tax credit, a
reduction in payroll taxes, or the implementa-
tion of electronic benefit transfers by State
health and human services agencies to reach
low-income individuals who are not required to
file Federal income tax returns, are needed to
help low- and moderate-income individuals re-
spond to changes in the cost of energy-related
goods and services.

(b) TECHNOLOGY REPORTS.—

(1) DEFINITION.—In this subsection, the term
“technologically infeasible,” with respect to a tech-
nology, means that the technology—

(A) will not be demonstrated beyond lab-
oratory-scale conditions;
(B) would be unsafe;

(C) would not reliably reduce greenhouse gas emissions; or

(D) would prevent the activity to which the technology applies from meeting or performing the primary purpose of the activity (such as generating electricity or transporting goods or individuals).

(2) REPORTS.—Not later than 180 days 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, not later than 2 years after the date of enactment of this Act and every 3 years thereafter, shall submit to Congress and the Administrator a report that describes or analyzes—

(A) the status of current greenhouse gas emission reduction technologies, including—

(i) technologies for capture and disposal of greenhouse gases;

(ii) efficiency improvement technologies;

(iii) zero-greenhouse gas emitting energy technologies; and
(iv) above- and below-ground biological sequestration technologies;

(B) whether the requirements of this Act (including regulations promulgated under this Act)—

(i) promote the development and deployment of greenhouse gas emission reduction technologies; or

(ii) mandate a level of emission control or reduction that, based on available or expected technology, will be technically infeasible at the time at which the requirements become effective;

(C) the projected date on which any technology determined to be technologically infeasible will become technologically feasible;

(D) whether any technology determined to be technologically infeasible cannot reasonably be expected to become technologically feasible prior to calendar year 2050; and

(E) the costs of available alternative greenhouse gas emission reduction strategies that could be used or pursued in lieu of any technologies that are determined to be technologically infeasible.
SEC. 7002. TRANSPORTATION SECTOR REVIEW.

(a) Review.—Not later than January 1, 2010, the Administrator shall conduct a comprehensive review and analysis to determine whether any of the following have occurred:

(1)(A) The motor vehicle fuel and motor vehicle and nonroad regulations within the scope of Executive Order 13432 (72 Fed. Reg. 27717; relating to cooperation among agencies in protecting the environment with respect to greenhouse gas emissions from motor vehicles, nonroad vehicles, and nonroad engines) have been finalized and implemented by Federal agencies and departments.

(B) Any other transportation-related programs, including corporate average fuel economy standard reform, greenhouse gas vehicle emissions standards, renewable fuel volume mandates, low carbon fuel standards, and activities to reduce vehicle miles traveled have been finalized and implemented by a Federal agency or department.

(2) Any regulation or program described in paragraph (1) is expected to achieve at least 1 of the following, as compared to the baseline greenhouse gas emissions consistent with the reference case contained in the report of the Energy Information Ad-
administration entitled “Annual Energy Outlook 2006”:

(A) At least a 6.2-percent reduction in cumulative greenhouse gas emissions from the light-duty motor vehicle sector, including light-duty vehicles and light-duty trucks, during the period beginning on January 1, 2010, and ending on December 31, 2020.

(B) A cumulative reduction of approximately 1,140,000 metric tons of carbon dioxide equivalent, measured on a full fuel cycle basis.

(b) REPORT.—If the Administrator determines that a reduction described in subsection (a)(2)(A) will not be achieved, the Administrator shall submit to Congress, not later than January 1, 2010, a report describing—

(1) any additional action of the Administrator that will be necessary to reduce greenhouse gas emissions from the light-duty motor vehicle sector; and

(2) recommendations of the Administrator with respect to actions that could be established by Congress to ensure that the United States transportation sector will achieve—

(A) the reductions described in subsection (a)(2)(B); and
(B) any additional reductions necessary for that sector to assume an equitable share of responsibility for reducing greenhouse gas emissions.

SEC. 7003. ADAPTATION REVIEW.

(a) Regional Estimates.—

(1) Estimates.—

(A) In general.—The Administrator, in consultation with the officials described in paragraph (2) and relevant State agencies, shall conduct 6 regional infrastructure cost assessments in various regions of the United States, and a national cost assessment, to provide estimates of the range of costs that should be anticipated for adaptation to the impacts of climate change.

(B) Various probabilities.—The Administrator shall develop the estimates under subparagraph (A) for low, medium, and high probabilities of climate change and the potential impacts of climate change.

(2) Description of officials.—The officials referred to in paragraph (1) are—

(A) the Secretary of Agriculture;

(B) the Secretary of Commerce;
(C) the Secretary of Defense;
(D) the Secretary of Energy;
(E) the Secretary of Health and Human Services;
(F) the Secretary of Homeland Security;
(G) the Secretary of Housing and Urban Development;
(H) the Secretary of the Interior;
(I) the Secretary of Transportation;
(J) the Director of United States Geological Survey; and
(K) the heads of such other Federal agencies and departments as the Administrator determines to be necessary.

(3) Submission to Congress.—Not later than 1 year after the date of enactment of this Act, the Administrator shall submit to Congress a report describing the results of the assessments conducted under this subsection.

(b) Adaptation Plan.—

(1) In General.—Not later than 180 days after the date of enactment of this Act, the Administrator shall submit to Congress a climate change adaptation plan for the United States, based on—
(A) assessments performed by the United Nations Intergovernmental Panel on Climate Change in accordance with the Global Change Research Act of 1990 (15 U.S.C. 2921 et seq.); and

(B) any other scientific, peer-reviewed regional assessments.

(2) INCLUSIONS.—The adaptation plan under paragraph (1) shall include—

(A) a prioritized list of vulnerable systems and regions in the United States;

(B) requirements for coordination between Federal, State, and local governments to ensure that key public infrastructure, safety, health, and land use planning and control issues are addressed;

(C) requirements for coordination among the Federal Government, industry, and communities;

(D) an assessment of climate change science research needs, including probabilistic assessments as an aid to planning;

(E) an assessment of climate change technology needs; and
(F) regional and national cost assessments for the range of costs that should be anticipated for adapting to the impacts of climate change.

(c) IMPACTS OF CLIMATE CHANGE ON LOW-INCOME POPULATIONS.—

(1) IN GENERAL.—The Administrator shall conduct research on the impact of climate change on low-income populations in all countries, including—

(A) an assessment of the adverse impact of climate change on—

(i) low-income populations in the United States; and

(ii) developing countries;

(B)(i) an identification of appropriate climate change adaptation measures and programs for developing countries and low-income populations;

(ii) an assessment of the impact of the measures and programs on low-income populations; and

(C) an estimate of the costs of developing and implementing those climate change adaptation and mitigation programs.

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

TITLE VIII—FRAMEWORK FOR GEOLOGICAL SEQUESTRATION OF CARBON DIOXIDE

SEC. 8001. 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 America’s Climate Security Act of 2007, the Administrator shall promulgate regulations for permitting commercial-scale underground injection of carbon dioxide for purposes of geological sequestration to address climate change, including provisions—

“(A) for monitoring and controlling the long-term storage of carbon dioxide and avoiding, to the maximum extent practicable, any re-
lease of carbon dioxide into the atmosphere, and for ensuring protection of underground sources of drinking water, human health, and the environment; and

“(B) relating to long-term liability associated with commercial-scale geological sequestration.

“(2) SUBSEQUENT REPORTS.—Not later than 5 years after the date on which regulations are promulgated pursuant to paragraph (1), and not less frequently than once every 5 years thereafter, the Administrator shall submit to Congress a report that contains an evaluation of the effectiveness of the regulations, based on current knowledge and experience, with particular emphasis on any new information on potential impacts of commercial-scale geological sequestration on drinking water, human health, and the environment.

“(3) REVISION.—If the Administrator determines, based on a report under paragraph (2), that regulations promulgated pursuant to paragraph (1) require revision, the Administrator shall promulgate revised regulations not later than 1 year after the date on which the applicable report is submitted to Congress under paragraph (2).”.
(b) CONFORMING AMENDMENT.—Section 1447(a)(4) of the Safe Drinking Water Act (42 U.S.C. 300j–6(a)(4)) is amended by striking “section 1421(d)(2)” and inserting “section 1421(e)(2)”.

SEC. 8002. 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, or oil or gas reservoir 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 Can-
ada 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 ca-
capacity for carbon dioxide storage in accordance with
the methodology.

(2) GEOLOGICAL VERIFICATION.—As part of
the assessment, the Secretary shall carry out a drill-
ing program to supplement the geological data rel-
evant to determining storage capacity in carbon di-
oxide in geological storage formations, including—

(A) well log data;

(B) core data; and

(C) fluid sample data.

(3) PARTNERSHIP WITH OTHER DRILLING PRO-
GRAMS.—As part of the drilling program under
paragraph (2), the Secretary shall enter into part-
nerships, as appropriate, with other entities to col-
lect 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 max-
imum 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.
SEC. 8003. STUDY OF THE FEASIBILITY RELATING TO CONSTRUCTION OF PIPELINES AND GEOLOGICAL CARBON DIOXIDE SEQUESTRATION ACTIVITIES.

(a) IN GENERAL.—The Secretary of Energy, in coordination with the Administrator, the Federal Energy Regulatory Commission, the Secretary of Transportation, and the Secretary of the Interior, 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 of pipelines to be used for the transportation of carbon dioxide for the purpose of sequestration or enhanced oil recovery; or

(B) the geological sequestration of carbon dioxide;
(2) any market risk (including throughput risk) relating to—

(A) the construction of pipelines to be used for the transportation of carbon dioxide for the purpose of sequestration or enhanced oil recovery; or

(B) 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 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 and transportation of carbon dioxide;

(5) any preventive measure to ensure the integration 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 Federal Energy Regulatory Commission, the Secretary of Transportation, and the Secretary of the Interior.

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

SEC. 8004. LIABILITIES FOR CLOSED GEOLOGICAL STORAGE SITES.

(a) ESTABLISHMENT OF TASK FORCE.—As soon as practicable after the date of enactment of this Act, the Administrator shall establish a task force, to be composed of an equal number of stakeholders, the public, subject matter experts, and members of the private sector, to conduct a study of the legal framework, environmental and safety considerations, and cost implications of potential Federal assumption of liability with respect to closed geological storage sites.

(b) REPORT.—Not later than 18 months after the date of enactment of this Act, the task force established under subsection (a) shall submit to Congress a report describing the results of the study conducted under subsection (a), including recommendations of the task force, if any, with respect to the framework described in that subsection.
TITLE IX—MISCELLANEOUS

SEC. 9001. PARAMOUNT INTEREST WAIVER.

(a) In General.—If the President determines that a national security emergency exists and, in light of information that was not available as of the date of enactment of this Act, 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, after opportunity for public notice and comment, temporarily adjust, suspend, or waive any regulations promulgated pursuant to this Act to achieve that minimization.

(b) Consultation.—In making an emergency determination under subsection (a), the President shall, to the maximum extent practicable, consult with and take into account any advice received from—

(1) the National Academy of Sciences;

(2) the Secretary of Energy; and

(3) the Administrator.

(c) Judicial Review.—An emergency determination under subsection (a) shall be subject to judicial review in accordance with section 307 of the Clean Air Act (42 U.S.C. 7607).
SEC. 9002. CORPORATE ENVIRONMENTAL DISCLOSURE OF CLIMATE CHANGE RISKS.

(a) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Securities and Exchange Commission (referred to in this section as the “Commission”) shall promulgate regulations in accordance with section 13 of the Securities Exchange Act of 1934 (15 U.S.C. 78m) direct each issuer of securities under that Act, to inform, based on the current expectations and projections and knowledge of facts of the issuer, securities investors of material risks relating to—

(1) the financial exposure of the issuer because of the net global warming pollution emissions of the issuer; and

(2) the potential economic impacts of global warming on the interests of the issuer.

(b) UNIFORM FORMAT FOR DISCLOSURE.—In carrying out subsection (a), the Commission shall enter into an agreement with the Financial Accounting Standards Board, or another appropriate organization that establishes voluntary standards, to develop a uniform format for disclosing to securities investors information on the risks described in subsection (a).

(e) INTERIM INTERPRETIVE RELEASE.—

(1) In general.—Not later than 1 year after the date of enactment of this Act, the Commission
shall issue an interpretive release clarifying that
under items 101 and 303 of Regulation S–K of the
Commission under part 229 of title 17, Code of Fed-
eral Regulations (as in effect on the date of enact-
ment of this Act)—

(A) the commitments of the United States
to reduce emissions of global warming pollution
under the United Nations Framework Conven-
tion on Climate Change, done at New York on
May 9, 1992, are considered to be a material
effect; and

(B) global warming constitutes a known
trend.

(2) Period of Effectiveness.—The inter-
pretive release issued under paragraph (1) shall re-
main in effect until the effective date of the final
regulations promulgated under subsection (a).

SEC. 9003. ADMINISTRATIVE PROCEDURE AND JUDICIAL
REVIEW.

(a) Rulemaking Procedures.—Any rule, require-
ment, regulation, method, standard, program, determina-
tion, or final action made or promulgated pursuant to any
title of this Act, with the exception of sections 3101, 3201,
3301, and 3901, shall be subject to the rulemaking proce-
dures described in sections 551 through 557 of title 5, United States Code.

(b) ENFORCEMENT.—Each provision of this Act (including provisions relating to mandatory duties of the Administrator) shall be fully enforceable pursuant to sections 113, 303, and 304 of the Clean Air Act (42 U.S.C. 7413, 7603, 7604).

c) RECORDKEEPING, INSPECTIONS, MONITORING, ENTRY, AND SUBPOENAS.—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.

d) JUDICIAL REVIEW.—A petition for judicial review of any regulation promulgated, or final action carried out, by the Administrator 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)).

SEC. 9004. RETENTION OF STATE AUTHORITY.

(a) IN GENERAL.—Except as provided in subsection (b), in accordance with section 116 of the Clean Air Act (42 U.S.C. 7416) and section 510 of the Federal Water
Pollution Control Act (33 U.S.C. 1370), nothing in this Act precludes or abrogates the right of any State to adopt or enforce—

(1) any standard, cap, limitation, or prohibition relating to emissions of greenhouse gas; or

(2) any requirement relating to control, abatement, or avoidance of emissions of greenhouse gas.

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

SEC. 9005. TRIBAL AUTHORITY.

For 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)).

SEC. 9006. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated such sums as are necessary to carry out this Act.