

AMENDMENT NO. _____ Calendar No. _____

Purpose: To provide a complete substitute.

IN THE SENATE OF THE UNITED STATES—110th Cong., 1st Sess.

S. 2191

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

Referred to the Committee on _____ and
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended
to be proposed by Mrs. BOXER

Viz:

1 Strike all after the enacting clause and insert the fol-
2 lowing:

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) **SHORT TITLE.**—This Act may be cited as the
5 “Lieberman-Warner Climate Security Act of 2007”.

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

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

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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.
- Sec. 1204. Rulemaking.

TITLE II—MANAGING AND CONTAINING COSTS EFFICIENTLY

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- 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 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.
- Sec. 2412. Retail carbon offsets.

Subtitle E—International Emission Allowances

- Sec. 2501. Use of international emission allowances.
- Sec. 2502. Regulations.

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Sec. 2503. Facility certification.

Subtitle F—Carbon Market Efficiency Board

Sec. 2601. Purposes.

Sec. 2602. Establishment of Carbon Market Efficiency Board.

Sec. 2603. Duties.

Sec. 2604. Powers.

Sec. 2605. Estimate of costs to economy of limiting greenhouse gas emissions.

TITLE III—ALLOCATING AND DISTRIBUTING ALLOWANCES

Subtitle A—Auctions

Sec. 3101. Allocation for early auctions.

Sec. 3102. Allocation for annual auctions.

Subtitle B—Early Action

Sec. 3201. Allocation.

Sec. 3202. Distribution.

Subtitle C—States

Sec. 3301. Allocation for energy savings.

Sec. 3302. Allocation for States with programs that exceed Federal emission reduction targets.

Sec. 3303. General allocation.

Sec. 3304. Allocation for mass transit.

Subtitle D—Electricity Consumers

Sec. 3401. Allocation.

Sec. 3402. Distribution.

Sec. 3403. Use.

Sec. 3404. Reporting.

Subtitle E—Natural Gas 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.

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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.
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- Sec. 3901. General allocation and distribution.
- Sec. 3902. Distributing emission allowances to owners and operators of fossil fuel-fired electric power generating covered facilities.
- Sec. 3903. Distributing additional emission allowances to rural electric cooperatives.
- Sec. 3904. Distributing emission allowances to owners and operators of energy intensive manufacturing facilities.
- Sec. 3905. Distributing emission allowances to owners and operators of facilities and other entities that produce or import petroleum-based fuel.
- Sec. 3906. Distributing emission allowances to hydrofluorocarbon producers and importers.

Subtitle J—Reducing Methane Emissions From Landfills and Coal Mines

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TITLE IV—AUCTIONS AND USES OF AUCTION PROCEEDS

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- Sec. 4101. Establishment.
- Sec. 4102. Amounts in Funds.

Subtitle B—Climate Change Credit Corporation

- Sec. 4201. Establishment.
- Sec. 4202. Applicable laws.
- Sec. 4203. Board of directors.
- Sec. 4204. Review and audit by Comptroller General.

Subtitle C—Auctions

- Sec. 4301. Early auctions.
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Subtitle D—Energy Technology Deployment

- Sec. 4401. General allocations.
- Sec. 4402. Zero- or low-carbon energy technologies deployment.
- Sec. 4403. Advanced coal and sequestration technologies program.
- Sec. 4404. Fuel from cellulosic biomass.
- Sec. 4405. Advanced technology vehicles manufacturing incentive program.
- Sec. 4406. Sustainable energy program.

Subtitle E—Energy Consumers

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- Sec. 4501. Proportions of funding availability.
- Sec. 4502. Rural energy assistance program.

Subtitle F—Climate Change Worker Training Program

- Sec. 4601. Funding.
- Sec. 4602. Purposes.
- Sec. 4603. Establishment.
- Sec. 4604. Activities.
- Sec. 4605. Worker protections and nondiscrimination requirements.
- Sec. 4606. Workforce training and safety.

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

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

Subtitle H—International Climate Change Adaptation and National Security Program

- Sec. 4801. Findings.
- Sec. 4802. Purposes.
- Sec. 4803. Establishment.
- Sec. 4804. Funding.

Subtitle I—Emergency Firefighting Programs

- Sec. 4901. Findings.
- Sec. 4902. Bureau of Land Management emergency firefighting program.
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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

- Sec. 6001. Definitions.
- Sec. 6002. Purposes.
- 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 AND RECOMMENDATIONS

- Sec. 7001. National Academy of Sciences Reviews.
- Sec. 7002. Environmental Protection Agency review.

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- Sec. 7003. Environmental Protection Agency recommendations.
- Sec. 7004. Presidential recommendations.
- Sec. 7005. Adaptation assessments and plan.

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. Administrative procedure and judicial review.
- Sec. 9003. Retention of State authority.
- Sec. 9004. Tribal authority.
- Sec. 9005. Authorization of appropriations.

TITLE X—CONTROL OF HYDROFLUOROCARBON CONSUMPTION

- Sec. 10001. Applicability.
- Sec. 10002. Definitions.
- Sec. 10003. Cap on hydrofluorocarbon consumption and importation into United States.
- Sec. 10004. Hydrofluorocarbon consumption allowance account.
- Sec. 10005. Allocation of hydrofluorocarbon consumption allowances.
- Sec. 10006. Compliance obligation.
- Sec. 10007. Sale, exchange, and other uses of hydrofluorocarbon consumption allowances.
- Sec. 10008. Allowance transfer system.
- Sec. 10009. Banking and borrowing.
- Sec. 10010. Hydrofluorocarbon destruction allowances.

TITLE XI—AMENDMENTS TO CLEAN AIR ACT

- Sec. 11001. National recycling and emission reduction program.
- Sec. 11002. Servicing of motor vehicle air conditioners.

1 SEC. 2. FINDINGS.

2 Congress finds that—

3 (1) unchecked global warming poses a signifi-
4 cant threat to—

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

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

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

2 (D) the global environment;

3 (2) under the United Nations Framework Con-
4 vention on Climate Change, done at New York on
5 May 9, 1992, the United States is committed to sta-
6 bilizing greenhouse gas concentrations in the atmos-
7 phere at a level that will prevent dangerous anthro-
8 pogenic interference with the climate system;

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

17 (4) prompt, decisive action is critical, since
18 global warming pollutants can persist in the atmos-
19 phere for more than a century;

20 (5) the ingenuity of the people of the United
21 States will allow the United States to become a lead-
22 er in curbing global warming;

23 (6) it is possible and desirable to cap green-
24 house gas emissions, from sources that together ac-
25 count for the majority of those emissions in the

1 United States, at or slightly below the current level
2 in 2012, and to lower the cap each year between
3 2012 and 2050, on the condition that the system in-
4 cludes—

5 (A) cost containment measures;

6 (B) periodic review of requirements;

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

9 (D) programs to assist low- and middle-in-
10 come energy consumers; and

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

13 (7) Congress may need to update the emissions
14 caps in order to account for continuing scientific
15 data and steps taken, or not taken, by foreign coun-
16 tries;

17 (8) accurate emission data and timely compli-
18 ance with the requirements of the greenhouse gas
19 emission reduction and trading program established
20 under this Act are needed to ensure that reductions
21 are achieved and to provide equity, efficiency, and
22 openness in the market for allowances subject to the
23 program;

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

4 (A) the transportation sector, where reduc-
5 ing greenhouse gas emissions requires changes
6 in vehicles, in fuels, and in consumer behavior;
7 and

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

12 (10) significant and sustained domestic invest-
13 ments are required to support an aggressive pro-
14 gram for developing and deploying advanced tech-
15 nologies to reduce greenhouse gas emissions;

16 (11) all, or virtually all, emissions of green-
17 house gases from the combustion of natural gas in
18 the United States should be reduced through the in-
19 clusion in a cap-and-trade system of entities that sell
20 natural gas in the United States;

21 (12) including natural gas in a cap-and-trade
22 system in the United States should be carried out in
23 a way that minimizes, to the extent feasible, the
24 number of entities required to submit emission al-
25 lowances for the natural gas sold by the entities;

1 (13) including natural gas in a cap-and-trade
2 system in the United States promotes substantial re-
3 ductions in total United States greenhouse gas emis-
4 sions while also minimizing, to the extent feasible,
5 the activities within the industrial sector that neces-
6 sitate the submission of emission allowances;

7 (14) emissions of sulfur dioxide, nitrogen ox-
8 ides, and mercury to the atmosphere from coal-fired
9 electric power generating facilities in the United
10 States inflicts harm on the public health, economy,
11 and natural resources of the United States;

12 (15) fossil fuel-fired electric power generating
13 facilities emit approximately 67 percent of the total
14 sulfur dioxide emissions, 23 percent of the total ni-
15 trogen oxide emissions, 40 percent of the total car-
16 bon dioxide emissions, and 40 percent of the total
17 mercury emissions in the United States;

18 (16) while the reductions in emissions of sulfur
19 dioxide, nitrogen oxides, and mercury that will occur
20 in the presence of a declining cap on the greenhouse
21 gas emissions from coal-fired electric power gener-
22 ating facilities are larger than those that would
23 occur in the absence of such a cap, new, stricter
24 Federal limits on emissions of sulfur dioxide, nitro-

1 gen oxides, and mercury may still be needed to pro-
2 tect public health; and

3 (17) many existing fossil fuel-fired electric
4 power generating facilities were exempted by Con-
5 gress from emissions limitations applicable to new
6 and modified units based on an expectation by Con-
7 gress that, over time, the units would be retired or
8 updated with new pollution control equipment, but
9 many of the exempted facilities nevertheless continue
10 to operate and emit pollutants at relatively high
11 rates and without new pollution control equipment.

12 **SEC. 3. PURPOSES.**

13 The purposes of this Act are—

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

19 (2) to accomplish that purpose while preserving
20 robust growth in the United States economy, cre-
21 ating new jobs, and avoiding the imposition of hard-
22 ship on United States citizens.

23 **SEC. 4. DEFINITIONS.**

24 In this Act:

1 (1) ADDITIONAL; ADDITIONALITY.—The terms
2 “additional” and “additionality” mean the extent to
3 which reductions in greenhouse gas emissions or in-
4 creases in sequestration are incremental to business-
5 as-usual, measured as the difference between—

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

8 (B) greenhouse gas fluxes of the offset
9 project.

10 (2) ADMINISTRATOR.—The term “Adminis-
11 trator” means the Administrator of the Environ-
12 mental Protection Agency.

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

16 (4) BIOLOGICAL SEQUESTRATION; BIO-
17 LOGICALLY SEQUESTERED.—The terms “biological
18 sequestration” and “biologically sequestered”
19 mean—

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

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

1 (5) CARBON DIOXIDE EQUIVALENT.—The term
2 “carbon dioxide equivalent” means, for each green-
3 house gas, the quantity of the greenhouse gas that
4 the Administrator determines makes the same con-
5 tribution to global warming as 1 metric ton of car-
6 bon dioxide.

7 (6) CORPORATION.—The term “Corporation”
8 means the Climate Change Credit Corporation es-
9 tablished by section 4201(a).

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

12 (A) any facility that uses more than 5,000
13 tons of coal in a calendar year;

14 (B) any facility that is a natural gas proc-
15 essing plant or that produces natural gas in the
16 State of Alaska, or any entity that imports nat-
17 ural gas (including liquefied natural gas);

18 (C) any facility that in any year produces,
19 or any entity that in any year imports,
20 petroleum- or coal-based fuel, the combustion of
21 which will emit a group I greenhouse gas, as-
22 suming no capture and permanent sequestra-
23 tion of that gas;

24 (D) any facility that in any year produces,
25 or any entity that in any year imports, more

1 than 10,000 carbon dioxide equivalents of
2 chemicals that are group I greenhouse gas, as-
3 suming no capture and destruction or perma-
4 nent sequestration of that gas; or

5 (E) any facility that in any year emits as
6 a byproduct of the production of
7 hydrochlorofluorocarbons more than 10,000
8 carbon dioxide equivalents of
9 hydrofluorocarbons.

10 (8) DESTRUCTION.—The term “destruction”
11 means the conversion of a greenhouse gas by ther-
12 mal, chemical, or other means—

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

15 (B) for which credit given reflects the ex-
16 tent of reduction in global warming potential
17 actually achieved.

18 (9) EMISSION ALLOWANCE.—The term “emis-
19 sion allowance” means an authorization to emit 1
20 carbon dioxide equivalent of greenhouse gas.

21 (10) EMISSION ALLOWANCE ACCOUNT.—The
22 term “Emission Allowance Account” means the ag-
23 gregate of emission allowances that the Adminis-
24 trator establishes for a calendar year.

25 (11) FACILITY.—The term “facility” means—

1 (A) 1 or more buildings, structures, or in-
2 stallations located on 1 or more contiguous or
3 adjacent properties of an entity in the United
4 States; and

5 (B) at the option of the Administrator, any
6 activity or operation that—

7 (i) emits 10,000 carbon dioxide
8 equivalents in any year; and

9 (ii) has a technical connection with
10 the activities carried out at a facility, such
11 as use of transportation fleets, pipelines,
12 transmission lines, and distribution lines,
13 but that is not conducted or located on the
14 property of the facility.

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

18 (13) GEOLOGICAL SEQUESTRATION; GEOLOGI-
19 CALLY SEQUESTERED.—The terms “geological se-
20 questration” and “geologically sequestered” mean
21 the permanent isolation of greenhouse gases, without
22 reversal, in geological formations, in accordance with
23 part C of the Safe Drinking Water Act (42 U.S.C.
24 300h et seq.).

1 (14) GROUP I GREENHOUSE GAS.—The term
2 “group I greenhouse gas” means any of—

3 (A) carbon dioxide;

4 (B) methane;

5 (C) nitrous oxide;

6 (D) sulfur hexafluoride; or

7 (E) a perfluorocarbon.

8 (15) GROUP II GREENHOUSE GAS.—The term
9 “group II greenhouse gas” means a
10 hydrofluorocarbon.

11 (16) LEAKAGE.—The term “leakage” means—

12 (A) a significant unaccounted increase in
13 greenhouse gas emissions by a facility or entity
14 caused by an offset project that produces an ac-
15 counted reduction in greenhouse gas emissions,
16 as determined by the Administrator; or

17 (B) a significant unaccounted decrease in
18 sequestration that is caused by an offset project
19 that results in an accounted increase in seques-
20 tration, as determined by the Administrator.

21 (17) LOAD-SERVING ENTITY.—The term “load-
22 serving entity” means an entity, whether public or
23 private—

1 (A) that has a legal, regulatory, or con-
2 tractual obligation to deliver electricity to retail
3 consumers; and

4 (B) whose rates and costs are, except in
5 the case of a registered electric cooperative, reg-
6 ulated by a State agency, regulatory commis-
7 sion, municipality, or public utility district.

8 (18) NATURAL GAS PROCESSING PLANT.—The
9 term “natural gas processing plant” means a facility
10 in the United States that is designed to separate
11 natural gas liquids from natural gas.

12 (19) NEW ENTRANT.—The term “new entrant”
13 means any facility that commences operation on or
14 after January 1, 2008.

15 (20) OFFSET ALLOWANCE.—The term “offset
16 allowance” means a unit of reduction in the quantity
17 of emissions or an increase in sequestration equal to
18 1 carbon dioxide equivalent at an entity that is not
19 a covered facility, where the reduction in emissions
20 or increase in sequestration is eligible to be used as
21 an additional means of compliance for the submis-
22 sion requirements established under section 1202.

23 (21) OFFSET PROJECT.—The term “offset
24 project” means a project, other than a project at a

1 covered facility, that reduces greenhouse gas emis-
2 sions or increases sequestration of carbon dioxide.

3 (22) PROJECT DEVELOPER.—The term “project
4 developer” means an individual or entity imple-
5 menting an offset project.

6 (23) RETAIL RATE FOR DISTRIBUTION SERV-
7 ICE.—

8 (A) IN GENERAL.—The term “retail rate
9 for distribution service” means the rate that a
10 load-serving entity charges for the use of the
11 system of the load-serving entity.

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

15 (24) RETIRE AN EMISSION ALLOWANCE.—The
16 term “retire an emission allowance” means to dis-
17 qualify an emission allowance for any subsequent
18 use, regardless of whether the use is a sale, ex-
19 change, or submission of the allowance in satisfying
20 a compliance obligation.

21 (25) REVERSAL.—The term “reversal” means
22 an intentional or unintentional loss of sequestered
23 carbon dioxide to the atmosphere in significant
24 quantities, as determined by the Administrator, in

1 order to accomplish the purposes of this Act in an
2 effective and efficient manner.

3 (26) RURAL ELECTRIC COOPERATIVE.—The
4 term “rural electric cooperative” means a coopera-
5 tively-owned association that was in existence as of
6 October 18, 2007, and is eligible to receive loans
7 under section 4 of the Rural Electrification Act of
8 1936 (7 U.S.C. 904).

9 (27) SEQUESTERED AND SEQUESTRATION.—
10 The terms “sequestered” and “sequestration” mean
11 the capture, permanent separation, isolation, or re-
12 moval of greenhouse gases from the atmosphere, as
13 determined by the Administrator.

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

18 **TITLE I—CAPPING GREENHOUSE**
19 **GAS EMISSIONS**
20 **Subtitle A—Tracking Emissions**

21 **SEC. 1101. PURPOSE.**

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

24 (1) is complete, consistent, transparent, and ac-
25 curate;

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

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

8 **SEC. 1102. DEFINITIONS.**

9 In this subtitle:

10 (1) **AFFECTED FACILITY.**—

11 (A) **IN GENERAL.**—The term “affected fa-
12 cility” means—

13 (i) a covered facility;

14 (ii) another facility that emits a
15 greenhouse gas, as determined by the Ad-
16 ministrator; and

17 (iii) at the option of the Adminis-
18 trator, a vehicle fleet with emissions of
19 more than 10,000 carbon dioxide equiva-
20 lents in any year, assuming no double-
21 counting of emissions.

22 (B) **EXCLUSIONS.**—The term “affected fa-
23 cility” does not include any facility that—

24 (i) is not a covered facility;

1 (ii) is owned or operated by a small
2 business (as described in part 121 of title
3 13, Code of Federal Regulations (or a suc-
4 cessor regulation)); and
5 (iii) emits fewer than 10,000 carbon
6 dioxide equivalents in any year.

7 (2) CARBON CONTENT.—The term “carbon con-
8 tent” means the quantity of carbon (in carbon diox-
9 ide equivalent) contained in a fuel.

10 (3) CLIMATE REGISTRY.—The term “Climate
11 Registry” means the greenhouse gas emissions reg-
12 istry jointly established and managed by more than
13 40 States and Indian tribes to collect high-quality
14 greenhouse gas emission data from facilities, cor-
15 porations, and other organizations to support var-
16 ious greenhouse gas emission reporting and reduc-
17 tion policies for the member States and Indian
18 tribes.

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

22 (5) GREENHOUSE GAS EMISSIONS.—The term
23 “greenhouse gas emissions” means emissions of a
24 greenhouse gas, including—

1 (A) stationary combustion source emissions
2 emitted as a result of combustion of fuels in
3 stationary equipment, such as boilers, furnaces,
4 burners, turbines, heaters, incinerators, engines,
5 flares, and other similar sources;

6 (B) process emissions consisting of emis-
7 sions from chemical or physical processes other
8 than combustion;

9 (C) fugitive emissions consisting of inten-
10 tional and unintentional emissions from equip-
11 ment leaks, such as joints, seals, packing, and
12 gaskets, or from piles, pits, cooling towers, and
13 other similar sources; and

14 (D) biogenic emissions resulting from bio-
15 logical processes, such as anaerobic decomposi-
16 tion, nitrification, and denitrification.

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

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

24 (8) SOURCE.—The term “source” means any
25 building, structure, installation, unit, point, oper-

1 ation, vehicle, land area, or other item that emits or
2 may emit a greenhouse gas.

3 **SEC. 1103. REPORTING REQUIREMENTS.**

4 (a) IN GENERAL.—Subject to this section, each af-
5 fected facility shall submit to the Administrator, for inclu-
6 sion in the Registry, periodic reports, including annual
7 and quarterly data, that—

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

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

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

24 (4) include the aggregate quantity of all green-
25 house gas emissions from sources at the facility, in-

1 including stationary combustion source emissions,
2 process emissions, and fugitive emissions;

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

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

9 (7) quantify greenhouse gas emissions in ac-
10 cordance with the measurement standards estab-
11 lished under section 1104;

12 (8) include other data necessary for accurate
13 and complete accounting of greenhouse gas emis-
14 sions, as determined by the Administrator;

15 (9) include an appropriate certification regard-
16 ing the accuracy and completeness of reported data,
17 as determined by the Administrator; and

18 (10) are submitted electronically to the Admin-
19 istrator, in such form and to such extent as may be
20 required by the Administrator.

21 (b) DE MINIMIS EXEMPTIONS.—

22 (1) IN GENERAL.—The Administrator may de-
23 termine—

24 (A) whether certain sources at a facility
25 should be considered to be eligible for a de

1 minimis exemption from a requirement for re-
2 porting under subsection (a); and

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

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

13 (c) VERIFICATION OF REPORT REQUIRED.—Before
14 including the information from a report required under
15 this section in the Registry, the Administrator shall verify
16 the completeness and accuracy of the report using infor-
17 mation provided under this section, obtained under section
18 9002(c), or obtained under other provisions of law.

19 (d) TIMING.—

20 (1) CALENDAR YEARS 2004 THROUGH 2007.—
21 For a baseline period of calendar years 2004
22 through 2007, each affected facility shall submit re-
23 quired annual data described in this section to the
24 Administrator not later than March 31, 2009.

1 (2) SUBSEQUENT CALENDAR YEARS.—For cal-
2 endar year 2008 and each subsequent calendar year,
3 each affected facility shall submit quarterly data de-
4 scribed in this section to the Administrator not later
5 than 60 days after the end of the applicable quarter.

6 (e) NO EFFECT ON OTHER REQUIREMENTS.—Noth-
7 ing in this title affects any requirement in effect as of the
8 date of enactment of this Act relating to the reporting
9 of—

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

12 (2) greenhouse gas emission data; or

13 (3) other relevant data.

14 **SEC. 1104. DATA QUALITY AND VERIFICATION.**

15 (a) PROTOCOLS AND METHODS.—

16 (1) IN GENERAL.—The Administrator shall es-
17 tablish by regulation, taking into account the work
18 done by the Climate Registry, comprehensive proto-
19 cols and methods to ensure the accuracy, complete-
20 ness, consistency, and transparency of data on
21 greenhouse gas emissions and fossil fuel production,
22 refining, importation, exportation, and consumption
23 submitted to the Registry that include—

1 (A) accounting and reporting standards for
2 fossil fuel production, refining, importation, ex-
3 portation, and consumption;

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

10 (C) a requirement that, if a facility has al-
11 ready been directed to monitor emissions of a
12 greenhouse gas using a continuous emission
13 monitoring system under existing law, that sys-
14 tem be used in complying with this Act with re-
15 spect to the greenhouse gas;

16 (D) for cases in which the Administrator
17 determines that monitoring emissions with the
18 precision, reliability, accessibility, and timeli-
19 ness similar to that provided by a continuous
20 emission monitoring system are not techno-
21 logically feasible, standardized methods for cal-
22 culating greenhouse gas emissions in specific in-
23 dustries using other readily available and reli-
24 able information, such as fuel consumption, ma-
25 terials consumption, production, or other rel-

1 evant activity data, on the condition that those
2 methods do not underreport emissions, as com-
3 pared with the continuous emission monitoring
4 system;

5 (E) information on the accuracy of meas-
6 urement and calculation methods;

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

9 (G) protocols to prevent an affected facility
10 from avoiding the reporting requirements of
11 this title (such as by reorganizing into multiple
12 entities or outsourcing activities that result in
13 greenhouse gas emissions); and

14 (H) protocols for verification of data sub-
15 mitted by affected facilities.

16 (2) BEST PRACTICES.—The protocols and
17 methods developed under paragraph (1) shall incor-
18 porate and conform to the best practices from the
19 most recent Federal, State, and international proto-
20 cols for the measurement, accounting, reporting, and
21 verification of greenhouse gas emissions to ensure
22 the accuracy, completeness, and consistency of the
23 data.

24 (b) VERIFICATION; INFORMATION BY REPORTING
25 ENTITIES.—Each affected facility shall—

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

7 (2) ensure the submission or retention, for the
8 5-year period beginning on the date of provision of
9 the information, of—

10 (A) data sources;

11 (B) information on internal control activi-
12 ties;

13 (C) information on assumptions used in re-
14 porting emissions and fuels;

15 (D) uncertainty analyses; and

16 (E) other relevant data and information to
17 facilitate the verification of reports submitted to
18 the Registry.

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

1 (d) MISSING DATA.—If information, satisfactory to
2 the Administrator, is not provided for an affected facility,
3 the Administrator shall—

4 (1) prescribe methods to estimate emissions for
5 the facility for each period for which data are miss-
6 ing, reflecting the highest emission levels that may
7 reasonably have occurred during the period for
8 which data are missing; and

9 (2) take appropriate enforcement action pursu-
10 ant to this section and section 9002(b).

11 **SEC. 1105. FEDERAL GREENHOUSE GAS REGISTRY.**

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

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

16 (1) design and operate the Registry;

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

22 (3) provide coordination and technical assist-
23 ance for the development of proposed protocols and
24 methods, taking into account the duties carried out

1 by the Climate Registry, to be published by the Ad-
2 ministrator;

3 (4)(A) develop an electronic format for report-
4 ing under guidelines established under section
5 1104(a)(1); and

6 (B) make the electronic format available to re-
7 porting entities;

8 (5) verify and audit the data submitted by re-
9 porting entities;

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

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

16 (8) immediately publish on the Internet all in-
17 formation contained in the Registry, except in any
18 case in which publishing the information would re-
19 sult in a disclosure of—

20 (A) information vital to national security,
21 as determined by the President; or

22 (B) confidential business information that
23 cannot be derived from information that is oth-
24 erwise publicly available and that would cause
25 significant calculable competitive harm if pub-

1 lished (except that information relating to
2 greenhouse gas emissions shall not be consid-
3 ered to be confidential business information).

4 (c) **THIRD-PARTY VERIFICATION.**—The Adminis-
5 trator may use the services of third parties that have no
6 conflicts of interest to verify reports required under sec-
7 tion 1103.

8 (d) **REGULATIONS.**—The Administrator shall—

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

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

14 **SEC. 1106. ENFORCEMENT.**

15 (a) **CIVIL ACTIONS.**—The Administrator may bring
16 a civil action in United States district court against the
17 owner or operator of an affected facility that fails to com-
18 ply with any requirement of this subtitle.

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

1 **Subtitle B—Reducing Emissions**

2 **SEC. 1201. EMISSION ALLOWANCE ACCOUNT.**

3 (a) **IN GENERAL.**—The Administrator shall establish
4 a separate quantity of emission allowances for each of cal-
5 endar years 2012 through 2050.

6 (b) **IDENTIFICATION NUMBERS.**—The Administrator
7 shall assign to each emission allowance established under
8 subsection (a) a unique identification number that in-
9 cludes the calendar year for which that emission allowance
10 was established.

11 (c) **LEGAL STATUS OF EMISSION ALLOWANCES.**—

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

14 (2) **TERMINATION OR LIMITATION.**—Nothing in
15 this Act or any other provision of law limits the au-
16 thority of the United States to terminate or limit an
17 emission allowance.

18 (3) **OTHER PROVISIONS UNAFFECTED.**—Noth-
19 ing in this Act relating to emission allowances shall
20 affect the application of, or compliance with, any
21 other provision of law to or by a covered facility.

22 (d) **ALLOWANCES FOR EACH CALENDAR YEAR.**—The
23 numbers of emission allowances established by the Admin-
24 istrator for each of calendar years 2012 through 2050
25 shall be as follows:

Calendar Year	Number of Emission Allowances (in Millions)
2012	5,775
2013	5,669
2014	5,562
2015	5,456
2016	5,349
2017	5,243
2018	5,137
2019	5,030
2020	4,924
2021	4,817
2022	4,711
2023	4,605
2024	4,498
2025	4,392
2026	4,286
2027	4,179
2028	4,073
2029	3,966
2030	3,860
2031	3,754
2032	3,647
2033	3,541
2034	3,435
2035	3,328
2036	3,222
2037	3,115
2038	3,009

Calendar Year	Number of Emission Allowances (in Millions)
2039	2,903
2040	2,796
2041	2,690
2042	2,584
2043	2,477
2044	2,371
2045	2,264
2046	2,158
2047	2,052
2048	1,945
2049	1,839
2050	1,732

1 **SEC. 1202. COMPLIANCE OBLIGATION.**

2 (a) IN GENERAL.—Not later than 90 days after the
3 end of a calendar year, the owner or operator of a covered
4 facility shall submit to the Administrator an emission al-
5 lowance, an offset allowance awarded pursuant to subtitle
6 D of title II, or an international emission allowance ob-
7 tained in compliance with regulations promulgated under
8 section 2502, for each carbon dioxide equivalent of—

9 (1) group I greenhouse gas that was emitted by
10 the use of coal by that covered facility during the
11 preceding year;

12 (2) group I greenhouse gas that will, assuming
13 no capture and permanent geological sequestration

1 of that gas, be emitted from the combustion of any
2 petroleum- or coal-based fuel that was produced or
3 imported by that covered facility during the pre-
4 ceding year;

5 (3) group I greenhouse gas that was produced
6 or imported by that facility during the preceding
7 year;

8 (4) group II greenhouse gas was emitted as a
9 byproduct of hydrochlorofluorocarbon production; or

10 (5) group I greenhouse gas that will, assuming
11 no capture and destruction or permanent geological
12 sequestration of that gas, be emitted—

13 (A) from the combustion of natural gas
14 that was, by that covered facility, processed, im-
15 ported, or produced and not reinjected into the
16 field; or

17 (B) from the combustion of natural gas
18 liquids that were processed or imported by that
19 covered facility during the preceding year.

20 (b) RETIREMENT OF ALLOWANCES.—Immediately
21 upon receipt of an emission allowance under subsection
22 (a), the Administrator shall retire the emission allowance.

23 (c) DETERMINATION OF COMPLIANCE.—Not later
24 than July 1 of each year, the Administrator shall deter-
25 mine whether the owners and operators of all covered fa-

1 cilities are in full compliance with subsection (a) for the
2 preceding year.

3 **SEC. 1203. PENALTY FOR NONCOMPLIANCE.**

4 (a) EXCESS EMISSIONS PENALTY.—

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

12 (2) AMOUNT.—The amount of an excess emis-
13 sions penalty required to be paid under paragraph
14 (1) shall be, as determined by the Administrator, an
15 amount equal to the product obtained by multi-
16 plying—

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

20 (B) the greater of—

21 (i) \$200; or

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

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

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

11 (5) NO EFFECT ON LIABILITY.—An excess
12 emissions penalty due and payable by the owner or
13 operator of a covered facility under this subsection
14 shall not diminish the liability of the owner or oper-
15 ator for any fine, penalty, or assessment against the
16 owner or operator for the same violation under any
17 other provision of this Act or any other law.

18 (b) EXCESS EMISSION ALLOWANCE.—

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

1 (A) the following calendar year; or

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

4 (2) PLAN.—

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

13 (B) CONDITION OF OPERATION.—Upon
14 approval of a proposed plan described in sub-
15 paragraph (A) by the Administrator, the plan,
16 as submitted, modified, or conditioned, shall be
17 considered to be a condition of the operating
18 permit for the covered facility, without further
19 review or revision of the permit.

20 (C) DEDUCTION OF ALLOWANCES.—For
21 each covered facility that, in any calendar year,
22 emits excess emissions, the Administrator shall
23 deduct, from emission allowances allocated to
24 the covered facility for the calendar year, or for
25 succeeding years during which offsets are re-

1 quired, emission allowances equal to the excess
2 quantity, in tons, of the excess emissions.

3 (c) PROHIBITION.—It shall be unlawful for the owner
4 or operator of any facility liable for a penalty and offset
5 under this section to fail—

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

8 (2) to provide, and thereafter comply with, a
9 proposed plan for compliance as required by sub-
10 section (b)(2); and

11 (3) to offset excess emissions as required by
12 subsection (b)(1).

13 (d) NO EFFECT ON OTHER SECTION.—Nothing in
14 this subtitle limits or otherwise affects the application of
15 section 9002(b).

16 **SEC. 1204. RULEMAKING.**

17 Not later than 2 years after the date of enactment
18 of this Act, the Administrator shall, by rule—

19 (1) expand the definition of the term “covered
20 facility” to ensure the inclusion of all greenhouse
21 gas emissions from natural gas sold for combustion
22 in the United States; and

23 (2) accordingly adjust the number of emission
24 allowances in the annual Emission Allowance Ac-
25 count established pursuant to section 1201.

1 **TITLE II—MANAGING AND CON-**
2 **TAINING COSTS EFFICIENTLY**
3 **Subtitle A—Trading**

4 **SEC. 2101. SALE, EXCHANGE, AND RETIREMENT OF EMIS-**
5 **SION ALLOWANCES.**

6 Except as otherwise provided in this Act, the lawful
7 holder of an emission allowance may, without restriction,
8 sell, exchange, transfer, submit for compliance in accord-
9 ance with section 1202, or retire the emission allowance.

10 **SEC. 2102. NO RESTRICTION ON TRANSACTIONS.**

11 The privilege of purchasing, holding, selling, exchang-
12 ing, and retiring emission allowances shall not be re-
13 stricted to the owners and operators of covered facilities.

14 **SEC. 2103. ALLOWANCE TRANSFER SYSTEM.**

15 (a) IN GENERAL.—Not later than 18 months after
16 the date of enactment of this Act, the Administrator shall
17 promulgate regulations to carry out the provisions of this
18 Act relating to emission allowances, including regulations
19 providing that the transfer of emission allowances shall
20 not be effective until such date as a written certification
21 of the transfer, signed by a responsible official of each
22 party to the transfer, is received and recorded by the Ad-
23 ministrator in accordance with those regulations.

24 (b) TRANSFERS.—

1 (1) IN GENERAL.—The regulations promulgated
2 under subsection (a) shall permit the transfer of al-
3 lowances prior to the issuance of the allowances.

4 (2) DEDUCTION AND ADDITION OF TRANS-
5 FERS.—A recorded pre-allocation transfer of allow-
6 ances shall be—

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

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

12 **SEC. 2104. ALLOWANCE TRACKING SYSTEM.**

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

18 **Subtitle B—Banking**

19 **SEC. 2201. INDICATION OF CALENDAR YEAR.**

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

1 **SEC. 2202. EFFECT OF TIME.**

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

5 **Subtitle C—Borrowing**

6 **SEC. 2301. REGULATIONS.**

7 (a) IN GENERAL.—Not later than 3 years after the
8 date of enactment of this Act, the Administrator shall pro-
9 mulgate regulations under which, subject to subsection
10 (b), the owner or operator of a covered facility may—

11 (1) borrow emission allowances from the Ad-
12 ministrator; and

13 (2) for a calendar year, submit borrowed emis-
14 sion allowances to the Administrator in satisfaction
15 of up to 15 percent of the compliance obligation
16 under section 1202(a).

17 (b) LIMITATION.—An emission allowance borrowed
18 under subsection (a) shall be an emission allowance estab-
19 lished by the Administrator for a specific future calendar
20 year under subsection 1201(a).

21 **SEC. 2302. TERM.**

22 The owner or operator of a covered facility shall not
23 submit, and the Administrator shall not accept, a bor-
24 rowed emission allowance in partial satisfaction of the
25 compliance obligation under section 1202(a) for any cal-
26 endar year that is more than 5 years earlier than the cal-

1 endar year included in the identification number of the
2 borrowed emission allowance.

3 **SEC. 2303. REPAYMENT WITH INTEREST.**

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

13 (1) 1.1; and

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

16 **Subtitle D—Offsets**

17 **SEC. 2401. OUTREACH INITIATIVE ON REVENUE ENHANCE-**
18 **MENT FOR AGRICULTURAL PRODUCERS.**

19 (a) ESTABLISHMENT.—The Secretary of Agriculture,
20 acting through the Chief of the Natural Resources Con-
21 servation Service, the Chief of the Forest Service, the Ad-
22 ministrator of the Cooperative State Research, Education,
23 and Extension Service, and land-grant colleges and univer-
24 sities, in consultation with the Administrator and the
25 heads of other appropriate departments and agencies,

1 shall establish an outreach initiative to provide informa-
2 tion to agricultural producers, agricultural organizations,
3 foresters, and other landowners about opportunities under
4 this subtitle to earn new revenue.

5 (b) COMPONENTS.—The initiative under this sec-
6 tion—

7 (1) shall be designed to ensure that, to the
8 maximum extent practicable, agricultural organiza-
9 tions and individual agricultural producers, for-
10 esters, and other landowners receive detailed prac-
11 tical information about—

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

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

17 (C) emerging domestic and international
18 markets for energy crops, allowances, and off-
19 sets; and

20 (D) local, regional, and national databases
21 and aggregation networks to facilitate achieve-
22 ment, measurement, registration, and sales of
23 offsets;

24 (2) shall provide—

1 (A) outreach materials, including the hand-
2 book published under subsection (c), to inter-
3 ested parties;

4 (B) workshops; and

5 (C) technical assistance; and

6 (3) may include the creation and development
7 of regional marketing centers or coordination with
8 existing centers (including centers within the Nat-
9 ural Resources Conservation Service or the Coopera-
10 tive State Research, Education, and Extension Serv-
11 ice or at land-grant colleges and universities).

12 (c) HANDBOOK.—

13 (1) IN GENERAL.—Not later than 2 years after
14 the date of enactment of this Act, the Secretary of
15 Agriculture, in consultation with the Administrator
16 and after an opportunity for public comment, shall
17 publish a handbook for use by agricultural pro-
18 ducers, agricultural cooperatives, foresters, other
19 landowners, offset buyers, and other stakeholders
20 that provides easy-to-use guidance on achieving, re-
21 porting, registering, and marketing offsets.

22 (2) DISTRIBUTION.—The Secretary of Agri-
23 culture shall ensure, to the maximum extent prac-
24 ticable, that the handbook—

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

3 (B) includes, with respect to the electronic
4 form of the handbook described in subpara-
5 graph (A), electronic forms and calculation
6 tools to facilitate the petition process described
7 in section 2404; and

8 (C) is distributed widely through land-
9 grant colleges and universities and other appro-
10 priate institutions.

11 **SEC. 2402. ESTABLISHMENT OF DOMESTIC OFFSET PRO-**
12 **GRAM.**

13 (a) ALTERNATIVE MEANS OF COMPLIANCE.—Begin-
14 ning with calendar year 2012, the owner or operator of
15 a covered entity may satisfy up to 15 percent of the total
16 allowance submission requirement of the covered entity
17 under section 1202(a) by submitting offset allowances
18 generated in accordance with this subtitle.

19 (b) REGULATIONS REQUIRED.—

20 (1) IN GENERAL.—Not later than 18 months
21 after the date of enactment of this Act, the Adminis-
22 trator, in conjunction with the Secretary of Agri-
23 culture, shall promulgate regulations authorizing the
24 issuance and certification of offset allowances.

25 (2) CERTAIN SOURCES.—

1 (A) IN GENERAL.—For offsets from
2 sources of greenhouse gases not linked to agri-
3 cultural, forestry, or other land use-related
4 projects, the regulations promulgated under this
5 subsection shall require that the owner of the
6 project establish the project baseline and reg-
7 ister emissions under the Federal Greenhouse
8 Gas Registry established under section 1105.

9 (B) REQUIREMENT.—The regulations de-
10 scribed in subparagraph (A) shall—

11 (i) authorize the issuance and certifi-
12 cation of offset allowances for greenhouse
13 gas emission reductions below the project
14 baseline; and

15 (ii) ensure that those offsets represent
16 real, verifiable, additional, permanent, and
17 enforceable reductions in greenhouse gas
18 emissions or increases in sequestration.

19 (3) AGRICULTURAL, FORESTRY, AND OTHER
20 LAND USE-RELATED PROJECTS.—For offsets from
21 certain agricultural, forestry, and other land use-re-
22 lated projects undertaken within the United States,
23 the regulations promulgated under this subsection
24 shall include provisions that—

1 (A) ensure that those offsets represent
2 real, verifiable, additional, permanent, and en-
3 forceable reductions in greenhouse gas emis-
4 sions or increases in biological sequestration;

5 (B) specify the types of offset projects eli-
6 gible to generate offset allowances, in accord-
7 ance with section 2403;

8 (C) establish procedures for project initi-
9 ation and approval, in accordance with section
10 2404;

11 (D) establish procedures to monitor, quan-
12 tify, and discount reductions in greenhouse gas
13 emissions or increases in biological sequestra-
14 tion, in accordance with subsections (d) through
15 (g) of section 2404;

16 (E) establish procedures for third-party
17 verification, registration, and issuance of offset
18 allowances, in accordance with section 2405;

19 (F) ensure permanence of offsets by miti-
20 gating and compensating for reversals, in ac-
21 cordance with section 2406; and

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

24 (c) OFFSET ALLOWANCES AWARDED.—The Adminis-
25 trator shall issue offset allowances for qualifying emission

1 reductions and biological sequestrations from offset
2 projects that satisfy the applicable requirements of this
3 subtitle.

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

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

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

12 (2) liability and responsibility for mitigating
13 and compensating for reversals of registered offset
14 allowances is specified in accordance with section
15 2406(b).

16 **SEC. 2403. ELIGIBLE OFFSET PROJECT TYPES.**

17 (a) IN GENERAL.—Offset allowances from agricul-
18 tural, forestry, and other land use-related projects shall
19 be limited to those allowances achieving an offset of 1 or
20 more greenhouse gases by a method other than a reduc-
21 tion of combustion of greenhouse gas-emitting fuel.

22 (b) CATEGORIES OF ELIGIBLE OFFSET PROJECTS.—
23 Subject to the requirements promulgated pursuant to sec-
24 tion 2402(b), the types of operations eligible to generate
25 offset allowances under this subtitle include—

1 (1) agricultural and rangeland sequestration
2 and management practices, including—

3 (A) altered tillage practices;

4 (B) winter cover cropping, continuous
5 cropping, and other means to increase biomass
6 returned to soil in lieu of planting followed by
7 fallowing;

8 (C) conversion of cropland to rangeland or
9 grassland, on the condition that the land has
10 been in nonforest use for at least 10 years be-
11 fore the date of initiation of the project;

12 (D) reduction of nitrogen fertilizer use or
13 increase in nitrogen use efficiency;

14 (E) reduction in the frequency and dura-
15 tion of flooding of rice paddies; and

16 (F) reduction in carbon emissions from or-
17 ganic soils;

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

20 (A) afforestation or reforestation of acre-
21 age not forested as of October 18, 2007; and

22 (B) forest management resulting in an in-
23 crease in forest stand volume;

24 (3) manure management and disposal, includ-
25 ing—

- 1 (A) waste aeration; and
- 2 (B) methane capture and combustion;
- 3 (4) subject to the requirements of this subtitle,
- 4 any other terrestrial offset practices identified by the
- 5 Administrator, including—
- 6 (A) the capture or reduction of fugitive
- 7 greenhouse gas emissions for which no covered
- 8 facility is required under section 1202(a) to
- 9 submit any emission allowances, offset allow-
- 10 ances, or international emission allowances;
- 11 (B) methane capture and combustion at
- 12 nonagricultural facilities; and
- 13 (C) other actions that result in the avoid-
- 14 ance or reduction of greenhouse gas emissions
- 15 in accordance with section 2402; and
- 16 (5) combinations of any of the offset practices
- 17 described in paragraphs (1) through (4).

18 **SEC. 2404. PROJECT INITIATION AND APPROVAL.**

- 19 (a) **PROJECT APPROVAL.**—A project developer—
- 20 (1) may submit a petition for offset project ap-
- 21 proval at any time following the effective date of
- 22 regulations promulgated under section 2402(b); but
- 23 (2) may not register or issue offset allowances
- 24 until such approval is received and until after the

1 emission reductions or sequestrations supporting the
2 offset allowances have actually occurred.

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

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

9 (2) a greenhouse gas initiation certification, as
10 described under subsection (e); and

11 (3) subject to the requirements of this subtitle,
12 any other information identified by the Adminis-
13 trator in the regulations promulgated under section
14 2402 as necessary to meet the objectives of this sub-
15 title.

16 (c) APPROVAL AND NOTIFICATION.—

17 (1) IN GENERAL.—Not later than 180 days
18 after the date on which the Administrator receives a
19 complete petition under subsection (b), the Adminis-
20 trator shall—

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

1 (B) determine whether the greenhouse gas
2 initiation certification indicates a significant de-
3 viation in accordance with subsection (e)(3);

4 (C) notify the project developer of the de-
5 terminations under subparagraphs (A) and (B);
6 and

7 (D) issue offset allowances for approved
8 projects.

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

12 (d) MONITORING AND QUANTIFICATION.—

13 (1) IN GENERAL.—A project developer shall
14 make use of the standardized tools and methods de-
15 scribed in this section to monitor, quantify, and dis-
16 count reductions in greenhouse gas emissions or in-
17 creases in sequestration.

18 (2) MONITORING AND QUANTIFICATION
19 PLAN.—A monitoring and quantification plan shall
20 be used to monitor, quantify, and discount reduc-
21 tions in greenhouse gas emissions or increases in se-
22 questration as described by this subsection.

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

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

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

5 (4) PLAN REQUIREMENTS.—Subject to section
6 2402, the Administrator, in conjunction with the
7 Secretary of Agriculture, shall specify the required
8 components of a monitoring and quantification plan,
9 including—

10 (A) a description of the offset project, in-
11 cluding project type;

12 (B) a determination of accounting periods;

13 (C) an assignment of reporting responsi-
14 bility;

15 (D) the contents and timing of public re-
16 ports, including summaries of the original data,
17 as well as the results of any analyses;

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

20 (F) a description of which of the moni-
21 toring and quantification tools developed under
22 subsection (f) are to be used to monitor and
23 quantify changes in greenhouse gas fluxes or
24 carbon stocks associated with a project;

1 (G) a description of which of the standard-
2 ized methods developed under subsection (g) to
3 be used to determine additionality, estimate the
4 baseline carbon, and discount for leakage;

5 (H) based on the standardized methods
6 chosen in subparagraphs (F) and (G), a deter-
7 mination of uncertainty in accordance with sub-
8 section (h);

9 (I) what site-specific data, if any, will be
10 used in monitoring, quantification, and the de-
11 termination of discounts;

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

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

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

1 (e) GREENHOUSE GAS INITIATION CERTIFI-
2 CATION.—

3 (1) IN GENERAL.—In reviewing a petition sub-
4 mitted under subsection (b), the Administrator shall
5 seek to exclude each activity that undermines the in-
6 tegrity of the offset program established under this
7 subtitle, such as the conversion or clearing of land,
8 or marked change in management regime, in antici-
9 pation of offset project initiation.

10 (2) GREENHOUSE GAS INITIATION CERTIFI-
11 CATION REQUIREMENTS.—A greenhouse gas initi-
12 ation certification developed under this subsection
13 shall include—

14 (A) the estimated greenhouse gas flux or
15 carbon stock for the offset project for each of
16 the 4 complete calendar years preceding the ef-
17 fective date of the regulations promulgated
18 under section 2402(b); and

19 (B) the estimated greenhouse gas flux or
20 carbon stock for the offset project, averaged
21 across each of the 4 calendar years preceding
22 the effective date of the regulations promul-
23 gated under section 2402(b).

24 (3) DETERMINATION OF SIGNIFICANT DEVI-
25 ATION.—Based on standards developed by the Ad-

1 administrator, in conjunction with the Secretary of Ag-
2 riculture—

3 (A) each greenhouse gas initiation certifi-
4 cation submitted pursuant to this section shall
5 be reviewed; and

6 (B) a determination shall be made as to
7 whether, as a result of activities or behavior in-
8 consistent with the purposes of this title, a sig-
9 nificant deviation exists between the average
10 annual greenhouse gas flux or carbon stock and
11 the greenhouse gas flux or carbon stock for a
12 given year.

13 (4) ADJUSTMENT FOR PROJECTS WITH SIGNIFI-
14 CANT DEVIATION.—In the case of a significant devi-
15 ation, the Administrator shall adjust the number of
16 allowances awarded in order to account for the devi-
17 ation.

18 (f) DEVELOPMENT OF MONITORING AND QUAN-
19 TIFICATION TOOLS FOR OFFSET PROJECTS.—

20 (1) IN GENERAL.—Subject to section 2402(b),
21 the Administrator, in conjunction with the Secretary
22 of Agriculture, shall develop standardized tools for
23 use in the monitoring and quantification of changes
24 in greenhouse gas fluxes or carbon stocks for each
25 offset project type listed under section 2403(b).

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

5 (A) statistically-sound field and remote
6 sensing sampling methods, procedures, tech-
7 niques, protocols, or programs;

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

10 (C) any other process or tool considered to
11 be acceptable by the Administrator, in conjunc-
12 tion with the Secretary of Agriculture.

13 (g) DEVELOPMENT OF ACCOUNTING AND DIS-
14 COUNTING METHODS.—

15 (1) IN GENERAL.—The Administrator, in con-
16 sultation with the Secretary of Agriculture, shall—

17 (A) develop standardized methods for use
18 in accounting for additionality and uncertainty,
19 estimating the baseline, and discounting for
20 leakage for each offset project type listed under
21 section 2403(b); and

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

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

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

9 (i) similarity in current management
10 practices;

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

13 (iii) similarity in geographical and bio-
14 physical characteristics;

15 (B) in the case of an emission reduction
16 project, use as a basis emissions from com-
17 parable land or facilities; and

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

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

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

1 (B) the markets relevant to the offset
2 project;

3 (C) emission intensity per unit of produc-
4 tion, both inside and outside of the offset
5 project; and

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

8 (h) UNCERTAINTY FOR AGRICULTURAL AND FOR-
9 ESTRY PROJECTS.—

10 (1) IN GENERAL.—The Administrator, in con-
11 junction with the Secretary of Agriculture, shall de-
12 velop standardized methods for use in determining
13 and discounting for uncertainty for each offset
14 project type listed under section 2403(b).

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

18 (A) the robustness and rigor of the meth-
19 ods used by a project developer to monitor and
20 quantify changes in greenhouse gas fluxes or
21 carbon stocks;

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

1 (C) an exaggerated proportional discount
2 that increases relative to uncertainty, as deter-
3 mined by the Administrator, in conjunction
4 with the Secretary of Agriculture, to encourage
5 better measurement and accounting.

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

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

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

16 (A) validation of existing methods, proto-
17 cols, procedures, techniques, factors, equations,
18 or models;

19 (B) development of new methods, proto-
20 cols, procedures, techniques, factors, equations,
21 or models;

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

24 (D) any other information identified by the
25 Administrator, in conjunction with the Sec-

1 retary of Agriculture, that is necessary to meet
2 the objectives of this subtitle.

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

6 **SEC. 2405. OFFSET VERIFICATION AND ISSUANCE OF AL-**
7 **LOWANCES FOR AGRICULTURAL AND FOR-**
8 **ESTRY PROJECTS.**

9 (a) IN GENERAL.—Offset allowances may be claimed
10 for net emission reductions or increases in sequestration
11 annually, after accounting for any necessary discounts in
12 accordance with section 2404, by submitting a verification
13 report for an offset project to the Administrator.

14 (b) OFFSET VERIFICATION.—

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

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

19 (B) shall be developed taking into consider-
20 ation—

21 (i) the information and methodology
22 contained within a monitoring and quan-
23 tification plan;

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

1 (I) quantification of net emission
2 reductions or increases in sequestra-
3 tion;

4 (II) determination of
5 additionality;

6 (III) calculation of leakage;

7 (IV) assessment of permanence;

8 (V) discounting for uncertainty;

9 and

10 (VI) the adjustment of net emis-
11 sion reductions or increases in seques-
12 tration by the discounts determined
13 under clauses (II) through (V); and

14 (iii) subject to the requirements of
15 this subtitle, any other information identi-
16 fied by the Administrator as being nec-
17 essary to achieve the purposes of this sub-
18 title.

19 (2) VERIFICATION REPORT REQUIREMENTS.—

20 The Administrator shall specify the required compo-
21 nents of a verification report, including—

22 (A) the quantity of offsets generated;

23 (B) the amount of discounts applied;

24 (C) an assessment of methods (and the ap-
25 propriateness of those methods);

1 (D) an assessment of quantitative errors or
2 omissions (and the effect of the errors or omis-
3 sions on offsets);

4 (E) any potential conflicts of interest be-
5 tween a verifier and project developer; and

6 (F) any other provision that the Adminis-
7 trator considers to be necessary to achieve the
8 purposes of this subtitle.

9 (3) VERIFIER ACCREDITATION.—

10 (A) IN GENERAL.—Not later than 18
11 months after the date of enactment of this Act,
12 the Administrator shall promulgate regulations
13 establishing a process and requirements for ac-
14 creditation by a third-party verifier that has no
15 conflicts of interest.

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

21 (c) REGISTRATION AND AWARDING OF OFFSETS.—

22 (1) IN GENERAL.—Not later than 90 days after
23 the date on which the Administrator receives a com-
24 plete petition required under section 2404(b), the
25 Administrator shall—

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

3 (B) notify the project developer of that de-
4 termination.

5 (2) AFFIRMATIVE DETERMINATION.—In the
6 case of an affirmative determination under para-
7 graph (1), the Administrator shall—

8 (A) register the offset allowances in ac-
9 cordance with this subtitle; and

10 (B) issue the offset allowances.

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

14 **SEC. 2406. TRACKING OF REVERSALS FOR SEQUESTRATION**
15 **PROJECTS.**

16 (a) REVERSAL CERTIFICATION.—

17 (1) IN GENERAL.—Subject to section 2402, the
18 Administrator shall promulgate regulations requiring
19 the submission of a reversal certification for each
20 offset project on an annual basis following the reg-
21 istration of offset allowances.

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

1 (A) whether any unmitigated reversal re-
2 lating to the offset project has occurred in the
3 year preceding the year in which the certifi-
4 cation is submitted; and

5 (B) the quantity of each unmitigated re-
6 versal.

7 (b) EFFECT ON OFFSET ALLOWANCES.—

8 (1) INVALIDITY.—The Administrator shall de-
9 clare invalid all offset allowances issued for any off-
10 set project that has undergone a complete reversal.

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

16 (c) ACCOUNTABILITY FOR REVERSALS.—Liability
17 and responsibility for compensation of a reversal of a reg-
18 istered offset allowance under subsection (a) shall lie with
19 the owner of the offset allowance, as described in section
20 2402.

21 (d) COMPENSATION FOR REVERSALS.—The unmiti-
22 gated reversal of 1 or more registered offset allowances
23 that were submitted for the purpose of compliance with
24 section 1202(a) shall require the submission of—

25 (1) an equal number of offset allowances; or

1 (2) a combination of offset allowances and
2 emission allowances equal to the unmitigated rever-
3 sal.

4 (e) **PROJECT TERMINATION.**—A project developer
5 may cease participation in the domestic offset program es-
6 tablished under this subtitle at any time, on the condition
7 that any registered allowances awarded for increases in
8 sequestration have been compensated for by the project
9 developer through the submission of an equal number of
10 any combination of offset allowances and emission allow-
11 ances.

12 **SEC. 2407. EXAMINATIONS.**

13 (a) **REGULATIONS.**—Not later than 2 years after the
14 date of enactment of this Act, the Administrator, in con-
15 junction with the Secretary of Agriculture, shall promul-
16 gate regulations governing the examination and auditing
17 of offset allowances.

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

20 (1) principles for initiating and conducting ex-
21 aminations;

22 (2) the type or scope of examinations, includ-
23 ing—

24 (A) reporting and recordkeeping; and

25 (B) site review or visitation;

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

3 (4) the establishment of an appeal process.

4 **SEC. 2408. TIMING AND THE PROVISION OF OFFSET ALLOW-**
5 **ANCES.**

6 (a) INITIATION OF OFFSET PROJECTS.—An offset
7 project that commences operation on or after the effective
8 date of regulations promulgated under section 2407(a)
9 shall be eligible to generate offset allowances under this
10 subtitle if the offset project meets the other applicable re-
11 quirements of this subtitle.

12 (b) PRE-EXISTING PROJECTS.—

13 (1) IN GENERAL.—The Administrator may
14 allow for the transition into the Registry of offset
15 projects and banked offset allowances that, as of the
16 effective date of regulations promulgated under sec-
17 tion 2407(a), are registered under or meet the
18 standards of the Climate Registry, the California
19 Action Registry, the GHG Registry, the Chicago Cli-
20 mate Exchange, the GHG CleanProjects Registry, or
21 any other Federal, State, or private reporting pro-
22 grams or registries if the Administrator determines
23 that such other offset projects and banked offset al-
24 lowances under those other programs or registries
25 satisfy the applicable requirements of this subtitle.

1 (2) EXCEPTION.—An offset allowance that is
2 expired, retired, or canceled under any other offset
3 program, registry, or market as of the effective date
4 of regulations promulgated under section 2407(a)
5 shall be ineligible for transition into the Registry.

6 **SEC. 2409. OFFSET REGISTRY.**

7 In addition to the requirements established by section
8 2404, an offset allowance registered under this subtitle
9 shall be accompanied in the Registry by—

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

12 (2) a reversal certification submitted pursuant
13 to section 2406(b); and

14 (3) subject to the requirements of this subtitle,
15 any other information identified by the Adminis-
16 trator as being necessary to achieve the purposes of
17 this subtitle.

18 **SEC. 2410. ENVIRONMENTAL CONSIDERATIONS.**

19 (a) COORDINATION TO MINIMIZE NEGATIVE EF-
20 FECTS.—In promulgating regulations under this subtitle,
21 the Administrator, in conjunction with the Secretary of
22 Agriculture, shall act (including by rejecting projects, if
23 necessary) to avoid or minimize, to the maximum extent
24 practicable, adverse effects on human health or the envi-

1 ronment resulting from the implementation of offset
2 projects under this subtitle.

3 (b) REPORT ON POSITIVE EFFECTS.—Not later than
4 2 years after the date of enactment of this Act, the Admin-
5 istrator, in conjunction with the Secretary of Agriculture,
6 shall submit to Congress a report detailing—

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

11 (2) the cost of those incentives, programs, or
12 policies.

13 (c) USE OF NATIVE PLANT SPECIES IN OFFSET
14 PROJECTS.—Not later than 18 months after the date of
15 enactment of this Act, the Administrator, in conjunction
16 with the Secretary of Agriculture, shall promulgate regula-
17 tions for the selection, use, and storage of native and non-
18 native plant materials—

19 (1) to ensure native plant materials are given
20 primary consideration, in accordance with applicable
21 Department of Agriculture guidance for use of na-
22 tive plant materials;

23 (2) to prohibit the use of Federal- or State-des-
24 igned noxious weeds; and

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

4 **SEC. 2411. PROGRAM REVIEW.**

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

10 **SEC. 2412. RETAIL CARBON OFFSETS.**

11 (a) DEFINITION OF RETAIL CARBON OFFSET.—In
12 this section, the term “retail carbon offset” means any
13 carbon credit or carbon offset that cannot be used in satis-
14 faction of any mandatory compliance obligation under a
15 regulatory system for reducing greenhouse gas emissions.

16 (b) QUALIFYING LEVELS AND REQUIREMENTS.—Not
17 later than January 1, 2009, the Administrator shall estab-
18 lish new qualifying levels and requirements for Energy
19 Star certification for retail carbon offsets, effective begin-
20 ning January 1, 2010.

1 **Subtitle E—International Emission**
2 **Allowances**

3 **SEC. 2501. USE OF INTERNATIONAL EMISSION ALLOW-**
4 **ANCES.**

5 The owner or operator of a covered facility may sat-
6 isfy up to 15 percent of the allowance submission require-
7 ment of the covered facility under section 1202(a) by sub-
8 mitting emission allowances obtained on a foreign green-
9 house gas emissions trading market, on the condition that
10 the Administrator has certified the market in accordance
11 with the regulations promulgated pursuant to section
12 2502(a).

13 **SEC. 2502. REGULATIONS.**

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

20 (1) approving the use under this subtitle of
21 emission allowances from such foreign greenhouse
22 gas emissions trading markets as the regulations
23 may establish; and

1 (2) permitting the use of international emission
2 allowances from the foreign country that issued the
3 emission allowances.

4 (b) REQUIREMENTS.—The regulations promulgated
5 under subsection (a) shall require that, in order to be ap-
6 proved for use under this subtitle—

7 (1) an emission allowance shall have been
8 issued by a foreign country pursuant to a govern-
9 mental program that imposes mandatory absolute
10 tonnage limits on greenhouse gas emissions from the
11 foreign country, or 1 or more industry sectors in
12 that country, pursuant to protocols described in sub-
13 section (a); and

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

18 **SEC. 2503. FACILITY CERTIFICATION.**

19 The owner or operator of a covered facility who sub-
20 mits an international emission allowance under this sub-
21 title shall certify that the allowance has not been retired
22 from use in the registry of the applicable foreign country.

1 **Subtitle F—Carbon Market**
2 **Efficiency Board**

3 **SEC. 2601. PURPOSES.**

4 The purposes of this subtitle are—

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

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

12 **SEC. 2602. ESTABLISHMENT OF CARBON MARKET EFFI-**
13 **CIENCY BOARD.**

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

17 (b) **PURPOSES.**—The purposes of the Board are—

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

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

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

3 (A) describing—

4 (i) the status of the emission allow-
5 ance market established under this Act;

6 (ii) the economic cost and benefits of
7 the market, regional, industrial, and con-
8 sumer responses to the market;

9 (iii) where practicable, energy invest-
10 ment responses to the market;

11 (iv) any corrective measures that
12 should be carried out to relieve excessive
13 net costs of the market;

14 (v) plans to compensate for those
15 measures to ensure that the long-term
16 emission-reduction goals of this Act are
17 achieved; and

18 (vi) any instances of actual or poten-
19 tial fraud on, or manipulation of, the mar-
20 ket that the Board has identified, and the
21 effects of such fraud or manipulation;

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

24 (C) that are prepared independently by the
25 Board.

1 (c) MEMBERSHIP.—

2 (1) COMPOSITION.—The Board shall be com-
3 posed of—

4 (A) 7 members who are citizens of the
5 United States, to be appointed by the Presi-
6 dent, by and with the advice and consent of the
7 Senate; and

8 (B) an advisor who is a scientist with ex-
9 pertise in climate change and the effects of cli-
10 mate change on the environment, to be ap-
11 pointed by the President, by and with the ad-
12 vice and consent of the Senate.

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

16 (A) ensure fair representation of the finan-
17 cial, agricultural, industrial, and commercial
18 sectors, and the geographical regions, of the
19 United States, and include a representative of
20 consumer interests;

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

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

1 (3) COMPENSATION.—

2 (A) IN GENERAL.—A member of the Board
3 shall be compensated at a rate equal to the
4 daily equivalent of the annual rate of basic pay
5 prescribed for level II of the Executive Schedule
6 under section 5313 of title 5, United States
7 Code, for each day (including travel time) dur-
8 ing which the member is engaged in the per-
9 formance of the duties of the Board.

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

18 (4) PROHIBITIONS.—

19 (A) CONFLICTS OF INTEREST.—An indi-
20 vidual employed by, or holding any official rela-
21 tionship (including any shareholder) with, any
22 entity engaged in the generation, transmission,
23 distribution, or sale of energy, an individual
24 who has any pecuniary interest in the genera-
25 tion, transmission, distribution, or sale of en-

1 ergy, or an individual who has a pecuniary in-
2 terest in the implementation of this Act, shall
3 not be appointed to the Board under this sub-
4 section.

5 (B) NO OTHER EMPLOYMENT.—A member
6 of the Board shall not hold any other employ-
7 ment during the term of service of the member.

8 (d) TERM; VACANCIES.—

9 (1) TERM.—

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

15 (i) the term of not more than 1 mem-
16 ber shall expire during any 2-year period;
17 and

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

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

24 (C) REMOVAL.—

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

4 (ii) NOTIFICATION.—Not later than
5 30 days before removing a member from
6 the Board for cause under clause (i), the
7 President shall provide to Congress an ad-
8 vance notification of the determination by
9 the President to remove the member.

10 (2) VACANCIES.—

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

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

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

17 (B) SERVICE UNTIL NEW APPOINTMENT.—

18 A member of the Board the term of whom has
19 expired or otherwise been terminated shall con-
20 tinue to serve until the date on which a replace-
21 ment is appointed under subparagraph (A)(ii),
22 if the President determines that service to be
23 appropriate.

24 (e) CHAIRPERSON AND VICE-CHAIRPERSON.—Of
25 members of the Board, the President shall appoint—

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

3 (2) 1 member to serve as Vice-Chairperson of
4 the Board for a term of 4 years.

5 (f) MEETINGS.—

6 (1) INITIAL MEETING.—The Board shall hold
7 the initial meeting of the Board as soon as prac-
8 ticable after the date on which all members have
9 been appointed to the Board under subsection
10 (c)(1).

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

13 (A) the Chairperson;

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

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

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

23 (4) OPEN MEETINGS.—The Board shall be sub-
24 ject to section 552b of title 5, United States Code

1 (commonly known as the “Government in the Sun-
2 shine Act”).

3 **SEC. 2603. DUTIES.**

4 (a) INFORMATION GATHERING.—

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

9 (2) INFORMATION.—The Board shall gather
10 such information as the Board determines to be ap-
11 propriate regarding the status of the market, includ-
12 ing information relating to—

13 (A) emission allowance allocation and
14 availability;

15 (B) the price of emission allowances;

16 (C) macro- and micro-economic effects of
17 unexpected significant increases and decreases
18 in emission allowance prices, or shifts in the
19 emission allowance market, should those in-
20 creases, decreases, or shifts occur;

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

1 (E) in the event any cost relief measures
2 described in section 2604(a) are taken, the ef-
3 fects of those measures on the market;

4 (F) maximum levels of cost relief measures
5 that are necessary to achieve avoidance of eco-
6 nomic harm and preserve achievement of the
7 purposes of this Act; and

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

10 (b) TREATMENT AS PRIMARY ACTIVITY.—

11 (1) IN GENERAL.—During the initial 2-year pe-
12 riod of operation of the Board, information gath-
13 ering under subsection (a) shall be the primary ac-
14 tivity of the Board.

15 (2) SUBSEQUENT AUTHORITY.—After the 2-
16 year period described in paragraph (1), the Board
17 shall assume authority to implement the cost-relief
18 measures described in section 2604(a).

19 (c) STUDY.—

20 (1) IN GENERAL.—During the 2-year period be-
21 ginning on the date on which the emission allowance
22 market established under this Act begins operation,
23 the Board shall conduct a study of other markets for
24 tradeable permits to emit covered greenhouse gases.

1 (2) REPORT.—Not later than 180 days after
2 the beginning of the period described in paragraph
3 (1), the Board shall submit to Congress, and publish
4 on the Internet, a report describing the status of the
5 market, specifically with respect to volatility within
6 the market and the average price of emission allow-
7 ances during that 180-day period.

8 (d) EMPLOYMENT OF COST RELIEF MEASURES.—

9 (1) IN GENERAL.—If the Board determines
10 that the emission allowance market established
11 under this Act poses a significant harm to the econ-
12 omy of the United States, the Board shall carry out
13 such cost relief measures relating to that market as
14 the Board determines to be appropriate under sec-
15 tion 2604(a).

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

23 (A) increase the quantity of emission al-
24 lowances that covered facilities may borrow

1 from the prescribed allocations of the covered
2 facilities for future years; and

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

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

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

10 (1) describing the status of the emission allow-
11 ance market established under this Act, the eco-
12 nomic effects of the market, regional, industrial, and
13 consumer responses to the market, energy invest-
14 ment responses to the market, the effects on the
15 market of any fraud on, or manipulation of, the
16 market that the Board has identified, any corrective
17 measures that should be carried out to relieve exces-
18 sive costs of the market, and plans to compensate
19 for those measures; and

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

23 **SEC. 2604. POWERS.**

24 (a) COST RELIEF MEASURES.—

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

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

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

15 (C) Lower the interest rate at which an
16 emission allowance may be borrowed as de-
17 scribed in subparagraph (A).

18 (D) Increase the quantity of emission al-
19 lowances obtained on a foreign greenhouse gas
20 emissions trading market that the owner or op-
21 erator of any covered facility may use to satisfy
22 the allowance submission requirement of the
23 covered facility under section 1202(a), on the
24 condition that the Administrator has certified

1 the market in accordance with the regulations
2 promulgated pursuant to section 2502(a).

3 (E) Increase the quantity of offset allow-
4 ances generated in accordance with subtitle D
5 that the owner or operator of any covered facil-
6 ity may use to satisfy the total allowance sub-
7 mission requirement of the covered facility
8 under section 1202(a).

9 (F) Expand the total quantity of emission
10 allowances made available to all covered facili-
11 ties at any given time by borrowing against the
12 total allowable quantity of emission allowances
13 to be provided for future years.

14 (2) SUBSEQUENT ACTIONS.—On determination
15 by the Board to carry out a cost relief measure pur-
16 suant to paragraph (1), the Board shall—

17 (A) allow the cost relief measure to be
18 used only during the applicable allocation year;

19 (B) exercise the cost relief measure incre-
20 mentally, and only as needed to avoid signifi-
21 cant economic harm during the applicable allo-
22 cation year;

23 (C) specify the terms of the relief to be
24 achieved using the cost relief measure, includ-
25 ing requirements for entity-level or national

1 market-level compensation to be achieved by a
2 specific date or within a specific time period;

3 (D) in accordance with section 2603(e),
4 submit to the President and Congress a report
5 describing the actions carried out by the Board
6 and recommendations for the terms under
7 which the cost relief measure should be author-
8 ized by Congress and carried out by Federal en-
9 tities; and

10 (E) evaluate, at the end of the applicable
11 allocation year, actions that need to be carried
12 out during subsequent years to compensate for
13 any cost relief measure carried out during the
14 applicable allocation year.

15 (3) ACTION ON EXPANSION OF BORROWING.—

16 (A) IN GENERAL.—If the Board carries
17 out a cost relief measure pursuant to paragraph
18 (1) that results in the expansion of borrowing
19 of emission allowances under this Act, and if
20 the average daily closing price of emission al-
21 lowances for the 180-day period beginning on
22 the date on which borrowing is so expanded ex-
23 ceeds the upper range of the estimate provided
24 under section 2605, the Board shall increase
25 the quantity of emission allowances available for

1 the applicable allocation year in accordance
2 with this paragraph.

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

6 (i) apply to all covered facilities;

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

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

14 (iv) remain in effect only for the ap-
15 plicable allocation year;

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

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

1 (b) ASSESSMENTS.—Not more frequently than semi-
2 annually, the Board may levy on owners and operators of
3 covered facilities an assessment sufficient to pay the esti-
4 mated expenses of the Board and the salaries of members
5 of and employees of the Board during the 180-day period
6 beginning on the date on which the assessment is levied,
7 taking into account any deficit carried forward from the
8 preceding 180-day period.

9 (c) LIMITATIONS.—Nothing in this section gives the
10 Board the authority—

11 (1) to consider or prescribe entity-level petitions
12 for relief from the costs of an emission allowance al-
13 location or trading program established under Fed-
14 eral law;

15 (2) to carry out any investigative or punitive
16 process under the jurisdiction of any Federal or
17 State court;

18 (3) to interfere with, modify, or adjust any
19 emission allowance allocation scheme established
20 under Federal law; or

21 (4) to modify the total quantity of emission al-
22 lowances issued under this Act for the period of cal-
23 endar years 2012 through 2050.

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

3 Not later than July 1, 2014, the Director of the Con-
4 gressional Budget Office, using economic and scientific
5 analyses, shall submit to Congress a report that de-
6 scribes—

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

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

13 **TITLE III—ALLOCATING AND**
14 **DISTRIBUTING ALLOWANCES**
15 **Subtitle A—Auctions**

16 **SEC. 3101. ALLOCATION FOR EARLY AUCTIONS.**

17 Not later than 180 days after the date of enactment
18 of this Act, the Administrator shall allocate 5 percent of
19 the emission allowances established for calendar year
20 2012, 3 percent of the emission allowances established for
21 calendar year 2013, and 1 percent of the emissions estab-
22 lished for calendar 2014, to the Corporation for early auc-
23 tioning in accordance with section 4301.

24 **SEC. 3102. ALLOCATION FOR ANNUAL AUCTIONS.**

25 Not later than April 1, 2011, and annually thereafter
26 through calendar year 2049, the Administrator shall allo-

1 cate to the Corporation for annual auctioning a percentage
2 of emission allowances for the following calendar year, as
3 follows:

Calendar Year	Percentage of Emission Allowance Account Allocated to the Corporation
2012	22.5
2013	25.5
2014	28.5
2015	30.5
2016	31.5
2017	32.5
2018	34.5
2019	35.5
2020	37.5
2021	40.75
2022	42
2023	44.25
2024	46.75
2025	49.5
2026	52.5
2027	56.5
2028	59.5
2029	62.5
2030	63.75
2031	70.5
2032	70.5
2033	70.5
2034	70.5

Calendar Year	Percentage of Emission Allowance Account Allocated to the Corporation
2035	70.5
2036	70.5
2037	70.5
2038	70.5
2039	70.5
2040	70.5
2041	70.5
2042	70.5
2043	70.5
2044	70.5
2045	70.5
2046	70.5
2047	70.5
2048	70.5
2049	70.5
2050	70.5

1 **Subtitle B—Early Action**

2 **SEC. 3201. ALLOCATION.**

3 Not later than 2 years after the date of enactment
4 of this Act, the Administrator shall allocate to owners or
5 operators of covered facilities and other facilities that emit
6 greenhouse gas, in recognition of actions of the owners
7 and operators taken since January 1, 1994, that resulted
8 in verified and credible reductions of greenhouse gas emis-
9 sions—

1 (1) 5 percent of the emission allowances estab-
2 lished for calendar year 2012;

3 (2) 4 percent of the emission allowances estab-
4 lished for calendar year 2013;

5 (3) 3 percent of the emission allowances estab-
6 lished for calendar year 2014;

7 (4) 2 percent of the emission allowances estab-
8 lished for calendar year 2015; and

9 (5) 1 percent of the emission allowances estab-
10 lished for calendar year 2016.

11 **SEC. 3202. DISTRIBUTION.**

12 (a) **IN GENERAL.**—Not later than 1 year after the
13 date of enactment of this Act, the Administrator shall es-
14 tablish, by regulation, procedures and standards for use
15 in distributing, to owners and operators of covered facili-
16 ties and other facilities that emit greenhouse gas, emission
17 allowances allocated under section 3201.

18 (b) **CONSIDERATION.**—The procedures and standards
19 established under subsection (a) shall provide for consider-
20 ation of verified and credible emission reductions reg-
21 istered before the date of enactment of this Act under—

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

1 costs of service without regard to whether their ac-
2 tual sales are higher or lower than the forecast of
3 sales on which the tariffed rates were based; and

4 (2) make cost-effective energy-efficiency invest-
5 ments by investor-owned natural gas or electric utili-
6 ties at least as rewarding to their shareholders, for
7 the equity capital invested, as power or energy pur-
8 chases, or investments in new energy supplies or in-
9 frastructure.

10 (b) ALLOCATION FOR BUILDING EFFICIENCY.—Not
11 later than January 1, 2012, and annually thereafter
12 through January 1, 2050, the Administrator shall allocate
13 1 percent of the Emission Allowance Account among
14 States that are in compliance with section 304(c) of the
15 Energy Conservation and Production Act (as amended by
16 section 5201).

17 (c) DISTRIBUTION.—Not later than 2 years after the
18 date of enactment of this Act, the Administrator shall es-
19 tablish procedures and standards for the distribution of
20 emission allowances to States in accordance with sub-
21 sections (a) and (b).

22 (d) USE.—Any State receiving emission allowances
23 under this section for a calendar year shall retire or use,
24 in 1 or more of the ways described in section 3303(c)(1),
25 not less than 90 percent of the emission allowances allo-

1 cated to the State (or proceeds of the sale of those allow-
2 ances) under this section for the calendar year.

3 **SEC. 3302. ALLOCATION FOR STATES WITH PROGRAMS**
4 **THAT EXCEED FEDERAL EMISSION REDUC-**
5 **TION TARGETS.**

6 (a) ALLOCATION.—Not later than April 1, 2011, and
7 annually thereafter through calendar year 2049, the Ad-
8 ministrator shall allocate 2 percent of the Emission Allow-
9 ance Account for the following calendar year among States
10 that have—

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

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

20 (b) DISTRIBUTION.—Not later than 2 years after the
21 date of enactment of this Act, the Administrator shall es-
22 tablish procedures and standards for use in distributing
23 emission allowances among States in accordance with sub-
24 section (a).

1 (c) USE.—Any State receiving emission allowances
2 under this section for a calendar year shall retire or use,
3 in 1 or more of the ways described in section 3303(c)(1),
4 not less than 90 percent of the emission allowances allo-
5 cated to the State (or proceeds of the sale of those allow-
6 ances) under this section for the calendar year.

7 **SEC. 3303. GENERAL ALLOCATION.**

8 (a) ALLOCATION.—Subject to subsection (d)(3), not
9 later than April 1, 2011, and annually thereafter through
10 calendar year 2049, the Administrator shall allocate 5 per-
11 cent of the Emission Allowance Account for the following
12 calendar year among States.

13 (b) DISTRIBUTION.—The allowances available for al-
14 location to States under subsection (a) for a calendar year
15 shall be distributed as follows:

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

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

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

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

7 (A) the population of a State, as deter-
8 mined by the most recent decennial census pre-
9 ceeding the calendar year for which the alloca-
10 tion regulations are for the allocation year;
11 bears to

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

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

18 (A) the quantity of carbon dioxide that
19 would be emitted assuming that all of the coal
20 that is mined, natural gas that is processed,
21 and petroleum that is refined within the bound-
22 aries of a State during the preceding year is
23 completely combusted and that none of the car-
24 bon dioxide emissions are captured, as deter-
25 mined by the Secretary of Energy; bears to

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

9 (c) USE.—

10 (1) IN GENERAL.—During any calendar year, a
11 State shall retire or use in 1 or more of the fol-
12 lowing ways not less than 90 percent of the allow-
13 ances allocated to the State (or proceeds of sale of
14 those emission allowances) under this section for
15 that calendar year:

16 (A) To mitigate impacts on low-income en-
17 ergy consumers.

18 (B) To promote energy efficiency (includ-
19 ing support of electricity and natural gas de-
20 mand reduction, waste minimization, and recy-
21 cling programs).

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

1 (D) To improve public transportation and
2 passenger rail service and otherwise promote re-
3 ductions in vehicle miles traveled.

4 (E) To encourage advances in energy tech-
5 nology that reduce or sequester greenhouse gas
6 emissions.

7 (F) To address local or regional impacts of
8 climate change, including the relocation of com-
9 munities displaced by the impacts of climate
10 change.

11 (G) To mitigate obstacles to investment by
12 new entrants in electricity generation markets
13 and energy-intensive manufacturing sectors.

14 (H) To address local or regional impacts of
15 climate change policy, including providing as-
16 sistance to displaced workers.

17 (I) To mitigate impacts on energy-intensive
18 industries in internationally competitive mar-
19 kets.

20 (J) To reduce hazardous fuels, and to pre-
21 vent and suppress wildland fire.

22 (K) To fund rural, municipal, and agricul-
23 tural water projects that are consistent with the
24 sustainable use of water resources.

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

5 (3) RETURN OF ALLOWANCES.—Not later than
6 330 days before the end of each allowance allocation
7 year, a State shall return to the Administrator any
8 allowances not distributed by the deadline under
9 paragraph (2).

10 (d) PROGRAM FOR TRIBAL COMMUNITIES.—

11 (1) ESTABLISHMENT.—Not later than 3 years
12 after the date of enactment of this Act, the Adminis-
13 trator, in consultation with the Secretary of the In-
14 terior, shall by regulation establish a program for
15 tribal communities—

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

20 (B) under which the Administrator shall
21 distribute 0.5 percent of the Emission Allow-
22 ance Account for each calendar among tribal
23 governments of the tribal communities de-
24 scribed in subparagraph (A).

1 (2) ALLOCATION.—Beginning in the first cal-
2 endar year that begins after promulgation of the
3 regulations referred to in paragraph (1), and annu-
4 ally thereafter until calendar year 2050, the Admin-
5 istrator shall allocate 0.5 percent of the Emission
6 Allowance Account for each calendar year to the
7 program established under paragraph (1).

8 **SEC. 3304. ALLOCATION FOR MASS TRANSIT.**

9 (a) ALLOCATION.—Not later than April 1, 2011, and
10 annually thereafter through calendar year 2049, the Ad-
11 ministrators shall allocate 1 percent of the Emission Allow-
12 ance Account for the following calendar year among
13 States.

14 (b) DISTRIBUTION.—The emission allowances avail-
15 able for allocation to States under subsection (a) for a cal-
16 endar year shall be distributed among the States based
17 on the formula established in section 104(b)(1)(A) of title
18 23, United States Code.

19 (c) USE.—During any calendar year, a State receiv-
20 ing emission allowances under this section shall—

21 (1) use the emission allowances (or proceeds of
22 sale of those emission allowances) only for—

23 (A) the operating costs of State and mu-
24 nicipal mass transit systems;

1 (B) efforts to increase mass transit service
2 and ridership in the State, including by adding
3 new mass transit systems; and

4 (C) efforts to increase the efficiency of
5 mass transit systems through the development,
6 purchase, or deployment of innovative tech-
7 nologies that reduce emissions of greenhouse
8 gases; and

9 (2) shall ensure that use of the emission allow-
10 ances (or proceeds of sale of those emission allow-
11 ances) by the State for the purposes described in
12 paragraph (1) is geographically distributed as fol-
13 lows:

14 (A) At least 60 percent in urban areas.

15 (B) At least 20 percent in areas that are
16 not urban areas.

17 (C) 20 percent as the State determines to
18 be appropriate.

19 (d) RETURN OF UNUSED EMISSION ALLOWANCES.—
20 Any State receiving emission allowances under this section
21 shall return to the Administrator any such emission allow-
22 ance that the State has failed to use in accordance with
23 subsection (c) by not later than 5 years after the date of
24 receipt of the emission allowance from the Administrator.

1 (e) USE OF RETURNED EMISSION ALLOWANCES.—
2 The Administrator shall immediately transfer to the Cor-
3 poration for auctioning under section 4302 any emission
4 allowances returned to the Administrator under subsection
5 (d).

6 **Subtitle D—Electricity Consumers**

7 **SEC. 3401. ALLOCATION.**

8 Not later than April 1, 2011, and annually thereafter
9 through calendar year 2049, the Administrator shall allo-
10 cate among load-serving entities 9 percent of the Emission
11 Allowance Account for the following calendar year.

12 **SEC. 3402. DISTRIBUTION.**

13 (a) IN GENERAL.—For each calendar year, the emis-
14 sion allowances allocated under section 3401 shall be dis-
15 tributed by the Administrator to each load-serving entity,
16 including each rural electric cooperative that serves as a
17 load-serving entity in a State that is not a participant in
18 the pilot program established under section 3903(a), based
19 on the proportion that—

20 (1) the quantity of electricity delivered by the
21 load-serving entity during the 3 calendar years pre-
22 ceding the calendar year for which the emission al-
23 lowances are distributed, adjusted upward for elec-
24 tricity not delivered as a result of consumer energy-
25 efficiency programs implemented by the load-serving

1 entity and verified by the regulatory agency of the
2 load-serving entity; bears to

3 (2) the total quantity of electricity delivered by
4 all load-serving entities during those 3 calendar
5 years.

6 (b) BASIS.—The Administrator shall base the deter-
7 mination of the quantity of electricity delivered by a load-
8 serving entity for the purpose of subsection (a) on the
9 most recent data available in annual reports filed with the
10 Energy Information Administration of the Department of
11 Energy.

12 **SEC. 3403. USE.**

13 (a) IN GENERAL.—Any load-serving entity that ac-
14 cepts emission allowances distributed under section 3402
15 shall—

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

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

21 (b) PROCEEDS.—All proceeds from the sale of emis-
22 sion allowances under subsection (a) shall be used solely—

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

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

3 (c) PROHIBITION ON REBATES.—No load-serving en-
4 tity may use any proceeds from the sale of emission allow-
5 ances under subsection (a) to provide to any consumer a
6 rebate that is based on the quantity of electricity used by
7 the consumer.

8 **SEC. 3404. REPORTING.**

9 (a) IN GENERAL.—Each load-serving entity that ac-
10 cepts emission allowances distributed under section 3402
11 shall, for each calendar year for which the load-serving
12 entity accepts emission allowances, submit to the Adminis-
13 trator a report describing—

14 (1) the date of each sale of each emission allow-
15 ance during the preceding year;

16 (2) the amount of revenue generated from the
17 sale of emission allowances during the preceding
18 year; and

19 (3) how, and to what extent, the load-serving
20 entity used the proceeds of the sale of the emission
21 allowances during the preceding year.

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

1 **Subtitle E—Natural Gas**
2 **Consumers**

3 **SEC. 3501. ALLOCATION.**

4 Not later than April 1, 2011, and annually thereafter
5 through calendar year 2049, the Administrator shall allo-
6 cate among natural gas local distribution companies 2 per-
7 cent of the Emission Allowance Account for the following
8 calendar year.

9 **SEC. 3502. DISTRIBUTION.**

10 For each calendar year, the emission allowances allo-
11 cated under section 3501 shall be distributed by the Ad-
12 ministrator to each natural gas local distribution company
13 based on the proportion that—

14 (1) the quantity of natural gas delivered by the
15 natural gas local distribution company during the 3
16 calendar years preceding the calendar year for which
17 the emission allowances are distributed, adjusted up-
18 ward for natural gas not delivered as a result of con-
19 sumer energy-efficiency programs implemented by
20 the natural gas local distribution company and
21 verified by the regulatory agency of the natural gas
22 local distribution company; bears to

23 (2) the total quantity of natural gas delivered
24 by all natural gas local distribution companies dur-
25 ing those 3 calendar years.

1 **SEC. 3503. USE.**

2 (a) IN GENERAL.—Any natural gas local distribution
3 company that accepts emission allowances distributed
4 under section 3502 shall—

5 (1) sell each emission allowance distributed to
6 the natural gas local distribution company by not
7 later than 1 year after receiving the emission allow-
8 ance; and

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

11 (b) PROCEEDS.—All proceeds from the sale of emis-
12 sion allowances under subsection (a) shall be used solely—

13 (1) to mitigate economic impacts on low- and
14 middle-income energy consumers; and

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

17 (c) PROHIBITION ON REBATES.—No natural gas
18 local distribution company may use any proceeds from the
19 sale of emission allowances under subsection (a) to provide
20 to any consumer a rebate that is based on the quantity
21 of natural gas used by the consumer.

22 **SEC. 3504. REPORTING.**

23 (a) IN GENERAL.—Each natural gas local distribu-
24 tion company that accepts emission allowances distributed
25 under section 3502 shall, for each calendar year for which
26 the natural gas local distribution company accepts emis-

1 sion allowances, submit to the Administrator a report de-
2 scribing—

3 (1) the date of each sale of each emission allow-
4 ance during the preceding year;

5 (2) the amount of revenue generated from the
6 sale of emission allowances during the preceding
7 year; and

8 (3) how, and to what extent, the natural gas
9 local distribution company used the proceeds of the
10 sale of the emission allowances during the preceding
11 year.

12 (b) AVAILABILITY OF REPORTS.—The Administrator
13 shall make available to the public all reports submitted
14 by any natural gas local distribution company under sub-
15 section (a), including by publishing those reports on the
16 Internet.

17 **Subtitle F—Bonus Allowances for**
18 **Carbon Capture and Geological**
19 **Sequestration**

20 **SEC. 3601. ALLOCATION.**

21 Not later than 3 years after the date of enactment
22 of this Act, the Administrator shall—

23 (1) establish a Bonus Allowance Account; and

1 (2) allocate 4 percent of the emission allow-
2 ances established for calendar years 2012 through
3 2030 to the Bonus Allowance Account.

4 **SEC. 3602. QUALIFYING PROJECTS.**

5 (a) DEFINITIONS.—In this section:

6 (1) COMMENCED.—The term “commenced”,
7 with respect to construction, means that an owner or
8 operator has obtained the necessary permits to un-
9 dertake a continuous program of construction and
10 has entered into a binding contractual obligation,
11 with substantial financial penalties for cancellation,
12 to undertake such a program.

13 (2) CONSTRUCTION.—The term “construction”
14 means the fabrication, erection, or installation of the
15 technology for the carbon capture and sequestration
16 project.

17 (b) ELIGIBILITY.—To be eligible to receive emission
18 allowances under this subtitle, a carbon capture and se-
19 questration project shall—

20 (1) comply with such criteria and procedures as
21 the Administrator may establish, including a re-
22 quirement, as prescribed in subsection (c), for an
23 annual emissions performance standard for carbon
24 dioxide emissions from any unit for which allowances
25 are allocated;

1 (2) sequester, in a geological formation per-
2 mitted by the Administrator for that purpose in ac-
3 cordance with regulations promulgated under part C
4 of the Safe Drinking Water Act (42 U.S.C. 300h et
5 seq.), carbon dioxide resulting from electric power
6 generation; and

7 (3) have begun operation during the period be-
8 ginning on January 1, 2008, and ending on Decem-
9 ber 31, 2035.

10 (c) EMISSION PERFORMANCE STANDARDS.—Subject
11 to subsection (d), a carbon capture and sequestration
12 project shall be eligible to receive emission allowances
13 under this subtitle only if the project achieves 1 of the
14 following emissions performance standards for limiting
15 carbon dioxide emissions from the unit on an annual aver-
16 age basis:

17 (1) For an electric generation unit that is not
18 a new entrant, an annual emissions rate of not more
19 than 1,200 pounds of carbon dioxide per megawatt-
20 hour of net electricity generation, after subtracting
21 the carbon dioxide that is captured and sequestered.

22 (2) For any new entrant electric generation
23 unit for which construction of the unit commenced
24 prior to July 1, 2018, an annual emissions rate of
25 not more than 800 pounds of carbon dioxide per

1 megawatt-hour of net electricity generation, after
2 subtracting the carbon dioxide that is captured and
3 sequestered.

4 (3) For any new entrant electric generation
5 unit for which construction of the unit commenced
6 on or after July 1, 2018, an annual emissions rate
7 of not more than 350 pounds of carbon dioxide per
8 megawatt-hour of net electricity generation, after
9 subtracting the carbon dioxide that is captured and
10 sequestered.

11 (4) For any unit at covered facility that is not
12 an electric generation unit, an annual emissions rate
13 of not more than 350 pounds of carbon dioxide per
14 megawatt-hour of net electricity generation, after
15 subtracting the carbon dioxide that is captured and
16 sequestered.

17 (d) ADJUSTMENT OF PERFORMANCE STANDARDS.—

18 (1) IN GENERAL.—The Corporation may adjust
19 the emissions performance standard for a carbon
20 capture and sequestration project under subsection
21 (c) for an electric generation unit that uses subbitu-
22 minous coal, lignite, or petroleum coke in significant
23 amounts.

24 (2) REQUIREMENT.—In any case described in
25 paragraph (1), the performance standard for the

1 project shall prescribe an annual emissions rate that
 2 requires the project to achieve an equivalent reduc-
 3 tion from uncontrolled carbon dioxide emissions lev-
 4 els from the use of subbituminous coal, lignite, or
 5 petroleum coke, as compared to the emissions that
 6 the project would have achieved if that unit had
 7 combusted only bituminous coal during the par-
 8 ticular year.

9 **SEC. 3603. DISTRIBUTION.**

10 (a) IN GENERAL.—Subject to section 3604, for each
 11 of calendar years 2012 through 2039, the Administrator
 12 shall distribute emission allowances from the Bonus Allow-
 13 ance Account to each qualifying project under this subtitle
 14 in a quantity equal to the product obtained by multi-
 15 plying—

16 (1) the bonus allowance adjustment factor, as
 17 determined under subsection (b);

18 (2) the number of metric tons of carbon dioxide
 19 emissions avoided through capture and geologic se-
 20 questration of emissions by the project; and

21 (3) the bonus allowance rate for that calendar
 22 year, as provided in the following table:

Year	Bonus Allowance Rate
2012	4.5
2013	4.5
2014	4.5
2015	4.5
2016	4.5

Year	Bonus Allowance Rate
2017	4.5
2018	4.2
2019	3.9
2020	3.6
2021	3.3
2022	3.0
2023	2.7
2024	2.4
2025	2.1
2026	1.8
2027	1.5
2028	1.3
2029	1.1
2030	0.9
2031	0.7
2032	0.5
2033	0.5
2034	0.5
2035	0.5
2036	0.5
2037	0.5
2038	0.5
2039	0.5

1 (b) **BONUS ALLOWANCE ADJUSTMENT RATIO.**—The
2 Administrator shall determine the bonus allowance adjust-
3 ment factor by dividing a carbon dioxide emissions rate
4 of 350 pounds per megawatt-hour by the annual carbon
5 dioxide emissions rate, on a pounds per megawatt-hour
6 basis, that a qualifying project at the electric generation
7 unit achieved during a particular year, except that—

8 (1) the factor shall be equal to 1 in the case of
9 a project that qualifies under section 3602(b)(1)
10 during the first 4 years that emissions allowances
11 are distributed to the project; and

12 (2) the factor shall not exceed 1 for any quali-
13 fying project.

1 **SEC. 3604. 10-YEAR LIMIT.**

2 A qualifying project may receive annual emission al-
3 lowances under this subsection only for—

4 (1) the first 10 years of operation; or

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

8 **SEC. 3605. EXHAUSTION OF BONUS ALLOWANCE ACCOUNT.**

9 If, at the beginning of a calendar year, the Adminis-
10 trator determines that the number of emission allowances
11 remaining in the Bonus Allowance Account will be insuffi-
12 cient to allow the distribution, in that calendar year, of
13 the number of allowances that otherwise would be distrib-
14 uted under section 3603 for the calendar year, the Admin-
15 istrator shall, for the calendar year—

16 (1) distribute the remaining bonus allowances
17 only to qualifying projects that were already quali-
18 fying projects during the preceding calendar year;

19 (2) distribute the remaining bonus allowances
20 to those qualifying projects on a pro rata basis; and

21 (3) discontinue the program established under
22 this subtitle as of the date on which the Bonus Al-
23 lowance Account is projected to be fully used based
24 on projects already in operation.

1 **Subtitle G—Domestic Agriculture**
2 **and Forestry**

3 **SEC. 3701. ALLOCATION.**

4 Not later than April 1, 2011, and annually thereafter
5 through calendar year 2049, the Administrator shall allo-
6 cate to the Secretary of Agriculture 5 percent of the Emis-
7 sion Allowance Account for the following calendar year for
8 use in—

9 (1) achieving real, verifiable, additional, perma-
10 nent, and enforceable reductions in greenhouse gas
11 emissions from the agriculture and forestry sectors
12 of the United States economy; and

13 (2) achieving real, verifiable, additional, perma-
14 nent, and enforceable increases in greenhouse gas
15 sequestration from those sectors.

16 **SEC. 3702. AGRICULTURAL AND FORESTRY GREENHOUSE**
17 **GAS MANAGEMENT RESEARCH.**

18 (a) **REPORT.**—Not later than 1 year after the date
19 of enactment of this Act, the Secretary of Agriculture, in
20 consultation with scientific and agricultural and forestry
21 experts, shall prepare and submit to Congress a report
22 that describes the status of research on agricultural and
23 forestry greenhouse gas management, including a descrip-
24 tion of—

1 (1) research on soil carbon sequestration and
2 other agricultural and forestry greenhouse gas man-
3 agement that has been carried out;

4 (2) any additional research that is necessary;

5 (3) the proposed priority for additional re-
6 search;

7 (4) the most appropriate approaches for con-
8 ducting the additional research; and

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

12 (b) STANDARDIZED SYSTEM OF SOIL CARBON MEAS-
13 UREMENT AND CERTIFICATION FOR THE AGRICULTURAL
14 AND FORESTRY SECTORS.—

15 (1) IN GENERAL.—As soon as practicable after
16 the date of enactment of this Act, the Secretary of
17 Agriculture shall establish a standardized system of
18 carbon measurement and certification for the agri-
19 cultural and forestry sectors.

20 (2) ADMINISTRATION.—In establishing the sys-
21 tem, the Secretary of Agriculture shall—

22 (A) create a standardized system of meas-
23 urements for agricultural and forestry green-
24 house gases; and

1 (B) delineate the most appropriate system
2 of certification of credit by public or private en-
3 tities.

4 (c) RESEARCH.—After the date of submission of the
5 report described in paragraph (1), the President and the
6 Secretary of Agriculture (in collaboration with the member
7 institutions of higher education of the Consortium for Ag-
8 ricultural Soil Mitigation of Greenhouse Gases, institu-
9 tions of higher education, and research entities) shall ini-
10 tiate a program to conduct any additional research that
11 is necessary.

12 **SEC. 3703. DISTRIBUTION.**

13 (a) IN GENERAL.—Taking into account the report
14 prepared under section 3702(a), the Secretary of Agri-
15 culture shall establish, by regulation, a program under
16 which agricultural and forestry allowances may be distrib-
17 uted to entities that carry out projects on agricultural and
18 forest land that achieve real, verifiable, additional, perma-
19 nent, and enforceable greenhouse gas emission mitigation
20 benefits.

21 (b) NITROUS OXIDE AND METHANE.—The Secretary
22 of Agriculture shall ensure that, during any 5-year period,
23 the average annual percentage of the Emission Allowance
24 Account that is distributed to entities under the program
25 established under subsection (a) specifically for achieving

1 real, verifiable, additional, permanent, and enforceable re-
2 ductions in nitrous oxide emissions through soil manage-
3 ment or achieving real, verifiable, additional, permanent,
4 and enforceable reductions in methane emissions through
5 enteric fermentation and manure management shall be 0.5
6 percent.

7 **Subtitle H—International Forest** 8 **Protection**

9 **SEC. 3801. FINDINGS.**

10 Congress finds that—

11 (1) land-use change and forest sector emissions
12 account for approximately 20 percent of global
13 greenhouse gas emissions;

14 (2) land conversion and deforestation are 2 of
15 the largest sources of greenhouse gas emissions in
16 the developing world, amounting to roughly 40 per-
17 cent of the total greenhouse gas emissions of the de-
18 veloping world;

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

22 (4) encouraging reduced deforestation and
23 other forest carbon activities in other countries
24 can—

1 (A) provide critical leverage to encourage
2 voluntary developing country participation in
3 emission limitation regimes;

4 (B) facilitate greater overall reductions in
5 greenhouse gas emissions than would otherwise
6 be practicable; and

7 (C) substantially benefit biodiversity, con-
8 servation, and indigenous and other forest-de-
9 pendent people in developing countries.

10 **SEC. 3802. DEFINITION OF FOREST CARBON ACTIVITIES.**

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

13 (1) activities directed at reducing greenhouse
14 gas emissions from deforestation and forest degrada-
15 tion in countries other than the United States; and

16 (2) activities directed at increasing sequestra-
17 tion of carbon through restoration of forests, and de-
18 graded land in countries other than the United
19 States that has not been forested prior to restora-
20 tion, afforestation, and improved forest manage-
21 ment, that meet the eligibility requirements promul-
22 gated under section 3804(a).

23 **SEC. 3803. ALLOCATION.**

24 Not later than April 1, 2011, and annually thereafter
25 through calendar year 2049, the Administrator shall allo-

1 cate and distribute 2.5 percent of the Emission Allowance
2 Account for the following calendar year for use in carrying
3 out forest carbon activities in countries other than the
4 United States.

5 **SEC. 3804. DEFINITION AND ELIGIBILITY REQUIREMENTS.**

6 (a) ELIGIBILITY REQUIREMENTS FOR FOREST CAR-
7 BON ACTIVITIES.—Not later than 2 years after the date
8 of enactment of this Act, the Administrator, in consulta-
9 tion with the Secretary of the Interior, the Secretary of
10 State, and the Secretary of Agriculture, shall promulgate
11 eligibility requirements for forest carbon activities directed
12 at reducing emissions from deforestation and forest deg-
13 radation, and at sequestration of carbon through restora-
14 tion of forests and degraded land, afforestation, and im-
15 proved forest management in countries other than the
16 United States, including requirements that those activities
17 be—

18 (1) carried out and managed in accordance with
19 widely-accepted environmentally sustainable forestry
20 practices; and

21 (2) designed—

22 (A) to promote native species and restora-
23 tion of native forests, where practicable; and

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

1 (b) QUALITY CRITERIA FOR FOREST CARBON ALLO-
2 CATIONS.—Not later than 2 years after the date of enact-
3 ment of this Act, the Administrator, in consultation with
4 the Secretary of the Interior, the Secretary of State, and
5 the Secretary of Agriculture, shall promulgate regulations
6 establishing the requirements for eligibility to receive al-
7 lowances under this section, including requirements that
8 ensure that the emission reductions or sequestrations are
9 real, permanent, additional, verifiable and enforceable,
10 with reliable measuring and monitoring and appropriate
11 accounting for leakage.

12 **SEC. 3805. INTERNATIONAL FOREST CARBON ACTIVITIES.**

13 (a) IN GENERAL.—The Administrator, in consulta-
14 tion with the Secretary of State, shall identify and periodi-
15 cally update a list of countries that have—

16 (1) demonstrated capacity to participate in
17 international forest carbon activities, including—

18 (A) sufficient historical data on changes in
19 national forest carbon stocks;

20 (B) technical capacity to monitor and
21 measure forest carbon fluxes with an acceptable
22 level of uncertainty; and

23 (C) institutional capacity to reduce emis-
24 sions from deforestation and degradation;

1 (2) capped greenhouse gas emissions or other-
2 wise established a national emission reference sce-
3 nario based on historical data; and

4 (3) commenced an emission reduction program
5 for the forest sector.

6 (b) ADDITIONALITY.—

7 (1) REDUCTION IN DEFORESTATION AND FOR-
8 EST DEGRADATION.—A verified reduction in green-
9 house gas emissions from deforestation and forest
10 degradation under a cap or from a nationwide emis-
11 sions reference scenario described in subsection (a)
12 shall be—

13 (A) eligible for distribution of emission al-
14 lowances under this section; and

15 (B) considered to satisfy the additionality
16 criterion.

17 (2) PERIODIC REVIEW OF NATIONAL LEVEL RE-
18 DUCTIONS IN DEFORESTATION AND DEGRADA-
19 TION.—The Administrator, in consultation with the
20 Secretary of State, shall identify and periodically up-
21 date a list of countries described in subsection (a)
22 that have—

23 (A) achieved national-level reductions of
24 deforestation and degradation below a historical
25 reference scenario, taking into consideration the

1 average annual deforestation and degradation
2 rates of the country and of all countries during
3 a period of at least 5 years; and

4 (B) demonstrated those reductions using
5 remote sensing technology that meets inter-
6 national standards.

7 (3) OTHER FOREST CARBON ACTIVITIES.—A
8 forest carbon activity, other than a reduction in de-
9 forestation or forest degradation, shall be eligible for
10 distribution of emission allowances under this sec-
11 tion, subject to the quality criteria for forest carbon
12 activities identified in this Act or in regulations pro-
13 mulgated under this Act.

14 (c) RECOGNITION OF FOREST CARBON ACTIVI-
15 TIES.—With respect to countries other than countries de-
16 scribed in subsection (a), the Administrator—

17 (1) shall recognize forest carbon activities, sub-
18 ject to the quality criteria for forest carbon activities
19 identified in this Act and regulations promulgated
20 under this Act; and

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

1 **SEC. 3806. REVIEWS AND DISCOUNT.**

2 (a) **REVIEWS.**—Not later than 3 years after the date
3 of enactment of this Act, and 5 years thereafter, the Ad-
4 ministrator shall conduct a review of the program under
5 this subtitle.

6 (b) **DISCOUNT.**—If, after the date that is 10 years
7 after the date of enactment of this Act, the Administrator
8 determines that foreign countries that, in the aggregate,
9 generate greenhouse gas emissions accounting for more
10 than 0.5 percent of global greenhouse gas emissions have
11 not capped those emissions, established emissions ref-
12 erence scenarios based on historical data, or otherwise re-
13 duced total forest emissions, the Administrator may apply
14 a discount to distributions of emission allowances to those
15 countries under this section.

16 **Subtitle I—Transition Assistance**

17 **SEC. 3901. GENERAL ALLOCATION AND DISTRIBUTION.**

18 (a) **GENERAL ALLOCATION.**—Not later than April 1,
19 2011, and annually thereafter through January 1, 2029,
20 the Administrator shall allocate percentages of the Emis-
21 sion Allowance Account for the following calendar year to
22 owners and operators of industrial covered facilities as fol-
23 lows:

Calendar Year	Fossil fuel-fired electric power generating facilities	Rural electric cooperatives	Owners and operators of energy intensive manufacturing facilities	Facilities that produce or import petroleum-based fuel	HFC producers and importers
2012	19	1	10	2	2
2013	19	1	10	2	2
2014	19	1	10	2	2
2015	19	1	10	2	2
2016	19	1	10	2	2
2017	19	1	10	2	2
2018	18	1	9	2	2
2019	17	1	9	2	2
2020	16	1	8	2	2
2021	14	1	7	2	2
2022	13	1	7	1.75	1.75
2023	12	1	6	1.75	1.75
2024	11	1	5	1.5	1.25
2025	10	1	4	1	1
2026	8	1	3	1	1
2027	6	1	2	0.5	0.5
2028	4	1	1	0.5	0.5
2029	2	1	0.5	0.25	0.25
2030	1	1	0.25	0.25	0.25

1 (b) GENERAL DISTRIBUTION.—Not later than 1 year
2 after the date of enactment of this Act, the Administrator
3 shall establish a system for distributing to covered facili-
4 ties identified under subsection (a) the emission allow-
5 ances allocated under that subsection.

1 (c) FACILITIES THAT SHUT DOWN.—The system es-
2 tablished pursuant to subsection (b) shall ensure, notwith-
3 standing any other provision of this subtitle, that—

4 (1) emission allowances are not distributed to
5 an owner or operator for any covered facility that
6 has been permanently shut down at the time of the
7 distribution;

8 (2) the owner or operator of any covered facility
9 that permanently shuts down in a calendar year
10 shall promptly return to the Administrator any emis-
11 sion allowances that the Administrator has distrib-
12 uted for that covered facility for any subsequent cal-
13 endar years; and

14 (3) that, if an energy intensive manufacturing
15 facility receives a distribution of emission allowances
16 under this subtitle for a calendar year and subse-
17 quently permanently shuts down during that cal-
18 endar year, the owner or operator of the facility
19 shall promptly return to the Administrator a number
20 of emission allowances equal to the number that the
21 Administrator determines is the portion that the
22 owner or operator will no longer need to submit for
23 that facility under section 1202(a).

1 **SEC. 3902. DISTRIBUTING EMISSION ALLOWANCES TO OWN-**
2 **ERS AND OPERATORS OF FOSSIL FUEL-FIRED**
3 **ELECTRIC POWER GENERATING COVERED**
4 **FACILITIES.**

5 (a) NEW ENTRANTS.—

6 (1) IN GENERAL.—As part of the system estab-
7 lished under section 3901(b), the Administrator
8 shall, for each calendar year, set aside, from the
9 quantity of emission allowances represented by the
10 percentages described in the table contained in sec-
11 tion 3901(a) for owners and operators of fossil fuel-
12 fired electric power generating covered facilities, a
13 quantity of emission allowances for distribution to
14 owners and operators of new entrant fossil fuel-fired
15 electric power generating covered facilities (including
16 such new entrant covered facilities owned or oper-
17 ated by rural electric cooperatives in any State that
18 is not a participant in the pilot program established
19 under section 3903(a)).

20 (2) CALCULATION OF ALLOWANCES.—The
21 quantity of emission allowances distributed by the
22 Administrator for a calendar year to a new entrant
23 fossil fuel-fired electric power generating facility
24 under paragraph (1) shall be equal to the product
25 obtained by multiplying—

1 (A) the average greenhouse gas emission
2 rate of all fossil fuel-fired electric power gener-
3 ating facilities that commenced operations dur-
4 ing the 5 years preceding the date of enactment
5 of this Act; and

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

11 (b) INCUMBENTS.—

12 (1) IN GENERAL.—As part of the system estab-
13 lished under section 3901(b), the Administrator
14 shall, for each calendar year, distribute to fossil fuel-
15 fired electric power generating covered facilities (in-
16 cluding such covered facilities owned or operated by
17 rural electric cooperatives in any State that is not a
18 participant in the pilot program established under
19 section 3903(a)) that were operating during the cal-
20 endar year preceding the year in which this Act was
21 enacted the emission allowances represented by the
22 percentages described in the table contained in sec-
23 tion 3901(a) for owners and operators of fossil fuel-
24 fired electric power generating covered facilities that

1 remain after the distribution of emission allowances
2 under subsection (a).

3 (2) CALCULATION OF ALLOWANCES.—The
4 quantity of emission allowances distributed to a fos-
5 sil fuel-fired electric power generating covered facil-
6 ity under paragraph (1) shall be equal to the prod-
7 uct obtained by multiplying—

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

11 (B) the quotient obtained by dividing—

12 (i) the annual average quantity of car-
13 bon dioxide equivalents emitted by the fa-
14 cility during the 3 calendar years pre-
15 ceding the date of enactment of this Act;
16 by

17 (ii) the annual average of the aggre-
18 gate quantity of carbon dioxide equivalents
19 emitted by all fossil fuel-fired electric
20 power generating covered facilities during
21 those 3 calendar years.

22 **SEC. 3903. DISTRIBUTING ADDITIONAL EMISSION ALLOW-**
23 **ANCES TO RURAL ELECTRIC COOPERATIVES.**

24 (a) ESTABLISHMENT OF PILOT PROGRAM.—

1 (1) IN GENERAL.—As part of the system estab-
2 lished under section 3901(b), the Administrator
3 shall establish a pilot program for distributing to
4 rural electric cooperatives in the States described in
5 paragraph (2), for each of calendar years 2012
6 through 2029, 15 percent of the total number of
7 emission allowances allocated for the calendar year
8 to rural electric cooperatives under section 3901(a).

9 (2) DESCRIPTION OF STATES.—The States re-
10 ferred to in subsection (a) are—

11 (A) 1 State east of the Mississippi River in
12 which 13 rural electric cooperatives sold to con-
13 sumers in that State electricity in a quantity of
14 9,000,000 to 10,000,000 MWh, according to
15 Energy Information Administration data for
16 calendar year 2005; and

17 (B) 1 State west of the Mississippi River
18 in which 30 rural electric cooperatives sold to
19 consumers in that State electricity in a quantity
20 of 3,000,000 to 4,000,000 MWh, according to
21 Energy Information Administration data for
22 calendar year 2005.

23 (b) DISTRIBUTION TO OTHER STATES.—As part of
24 the system established under section 3901(b), the Admin-
25 istrator shall establish a system for distributing to rural

1 electric cooperatives in all States other than the 2 States
2 described in subsection (a)(2), for each of calendar years
3 2012 through 2029, 85 percent of the total number of
4 emission allowances allocated for the calendar year to
5 rural electric cooperatives under section 3901(a), in pro-
6 portion to the sales of each rural electric cooperative, as
7 reported by the Energy Information Administration.

8 (c) LIMITATION.—No rural electric cooperative that
9 receives emission allowances under subsection (a) shall re-
10 ceive any emission allowance under subsection (b), section
11 3902, or section 3402.

12 (d) REPORT.—Not later than January 1, 2015, and
13 every 3 years thereafter, the Administrator shall submit
14 to Congress a report describing the success of the pilot
15 program established under subsection (a), including a de-
16 scription of—

17 (1) the benefits realized by ratepayers of the
18 rural electric cooperatives that receive allowances
19 under the pilot program; and

20 (2) the use by those rural electric cooperatives
21 of advanced, low greenhouse gas-emitting electric
22 generation technologies, if any.

1 **SEC. 3904. DISTRIBUTING EMISSION ALLOWANCES TO OWN-**
2 **ERS AND OPERATORS OF ENERGY INTENSIVE**
3 **MANUFACTURING FACILITIES.**

4 (a) DEFINITIONS.—In this section:

5 (1) CURRENTLY OPERATING FACILITY.—The
6 term “currently operating facility” means an eligible
7 manufacturing facility that had significant oper-
8 ations during the calendar year preceding the cal-
9 endar year for which emission allowances are being
10 distributed under this section.

11 (2) ELIGIBLE MANUFACTURING FACILITY.—

12 (A) IN GENERAL.—The term “eligible
13 manufacturing facility” means a manufacturing
14 facility located in the United States that prin-
15 cipally manufactures iron, steel, aluminum,
16 pulp, paper, cement, chemicals, or such other
17 products as the Administrator may determine,
18 by rule, are likely to be significantly disadvan-
19 taged in competitive international markets as a
20 result of indirect costs of the program estab-
21 lished under this Act.

22 (B) EXCLUSION.—The term “eligible man-
23 ufacturing facility” does not include a facility
24 eligible to receive emission allowances under
25 section 3902, 3903, or 3905.

1 (3) INDIRECT CARBON DIOXIDE EMISSIONS.—

2 The term “indirect carbon dioxide emissions” means
3 the product obtained by multiplying (as determined
4 by the Administrator)—

5 (A) the quantity of electricity consumption
6 at an eligible manufacturing facility; and

7 (B) the rate of carbon dioxide emission per
8 kilowatt-hour output for the region in which the
9 manufacturer is located.

10 (4) NEW ENTRANT MANUFACTURING FACIL-

11 ITY.—The term “new entrant manufacturing facil-
12 ity”, with respect to a calendar year, means an eligi-
13 ble manufacturing facility that began operation dur-
14 ing or after the calendar year for which emission al-
15 lowances are being distributed under this section.

16 (b) TOTAL ALLOCATION FOR CURRENTLY OPER-

17 ATING FACILITIES.—As part of the system established
18 under section 3901(b), the Administrator shall, for each
19 calendar year, distribute 96 percent of the total quantity
20 of emission allowances available for allocation to carbon-
21 intensive manufacturing under section 3901(a) to cur-
22 rently operating facilities.

23 (c) TOTAL ALLOCATION FOR CURRENTLY OPER-

24 ATING FACILITIES IN EACH CATEGORY OF MANUFAC-
25 TURING FACILITIES.—The quantity of emission allow-

1 ances distributed by the Administrator for a calendar year
2 to facilities in each category of currently operating facili-
3 ties shall be equal to the product obtained by multi-
4 plying—

5 (1) the total quantity of emission allowances
6 available for allocation under subsection (b); and

7 (2) the ratio that (during the calendar year pre-
8 ceding the calendar year for which emission allow-
9 ances are being distributed under this section)—

10 (A) the sum of the direct and indirect car-
11 bon dioxide emissions by currently operating fa-
12 cilities in the category; bears to

13 (B) the sum of the direct and indirect car-
14 bon dioxide emissions by all currently operating
15 facilities.

16 (d) INDIVIDUAL ALLOCATIONS TO CURRENTLY OP-
17 ERATING FACILITIES.—The quantity of emission allow-
18 ances distributed by the Administrator for a calendar year
19 to a currently operating facility shall be a quantity equal
20 to the product obtained by multiplying—

21 (1) the total quantity of emission allowances
22 available for allocation to currently-operating facili-
23 ties in the appropriate category, as determined
24 under subsection (c); and

1 (2) the ratio that (during the 3 calendar years
2 preceding the year for which the allocation rule is
3 promulgated for the allocation period)—

4 (A) the average number of production em-
5 ployees employed at the facility; bears to

6 (B) the average number of production em-
7 ployees employed at all existing eligible manu-
8 facturing facilities in the appropriate category.

9 (e) NEW ENTRANT MANUFACTURING FACILITIES.—

10 (1) IN GENERAL.—As part of the system estab-
11 lished under section 3901(b), the Administrator
12 shall, for each calendar year, distribute 4 percent of
13 the total quantity of emission allowances available
14 for allocation to carbon intensive manufacturing
15 under section 3901(a) to new entrant manufacturing
16 facilities.

17 (2) INDIVIDUAL ALLOCATIONS.—The quantity
18 of emission allowances distributed by the Adminis-
19 trator for a calendar year to a new entrant manufac-
20 turing facility shall be proportional to the product
21 obtained by multiplying—

22 (A) the average number of production em-
23 ployees employed at the new entrant manufac-
24 turing facility during the prior calendar year;
25 and

1 (B) the rate (in emission allowances per
2 production employee) at which emission allow-
3 ances were allocated to currently operating fa-
4 cilities in the appropriate category for the cal-
5 endar year, as determined under subsection (d).

6 **SEC. 3905. DISTRIBUTING EMISSION ALLOWANCES TO OWN-**
7 **ERS AND OPERATORS OF FACILITIES AND**
8 **OTHER ENTITIES THAT PRODUCE OR IMPORT**
9 **PETROLEUM-BASED FUEL.**

10 (a) NEW ENTRANTS.—

11 (1) IN GENERAL.—As part of the system estab-
12 lished under section 3901(b), the Administrator
13 shall, for each calendar year, set aside, from the
14 quantity of emission allowances represented by the
15 percentages described in the table contained in sec-
16 tion 3901(a) for owners and operators of facilities or
17 entities that produce or import petroleum-based fuel,
18 a quantity of emission allowances for distribution to
19 owners and operators of new entrant facilities or en-
20 tities that produce or import petroleum-based fuel.

21 (2) CALCULATION OF ALLOWANCES.—The
22 quantity of emission allowances distributed by the
23 Administrator for a calendar year to a new entrant
24 facility or entity that produces or imports petroleum-

1 based fuel under paragraph (1) shall be equal to the
2 product obtained by multiplying—

3 (A) the average annual number of emission
4 allowances that all facilities or entities that
5 produce or import petroleum-based fuel and
6 that commenced operations during the 5 years
7 preceding the date of enactment of this Act
8 would have been required to submit under sec-
9 tion 1202(a); and

10 (B) the number of emission allowances
11 that the facility or entity is required to submit
12 during the calendar year, adjusted downward
13 on a pro rata basis for each new facility in the
14 event that insufficient allowances are available
15 under section 3901(a) for a calendar year.

16 (b) INCUMBENTS.—

17 (1) IN GENERAL.—As part of the system estab-
18 lished under section 3901(b), the Administrator
19 shall, for each calendar year, distribute to facilities
20 or entities that produce or import petroleum-based
21 fuel that were operating during the calendar year
22 preceding the year in which this Act was enacted the
23 emission allowances represented by the percentages
24 described in the table contained in section 3901(a)
25 for owners and operators of facilities or entities that

1 produce or import petroleum-based fuel that remain
2 after the distribution of emission allowances under
3 subsection (a).

4 (2) CALCULATION OF ALLOWANCES.—The
5 quantity of emission allowances distributed to a fa-
6 cility or entity that produces or imports petroleum-
7 based fuel under paragraph (1) shall be equal to the
8 product obtained by multiplying—

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

12 (B) the quotient obtained by dividing—

13 (i) the annual average quantity of
14 emission allowances that the facility or en-
15 tity would have been required to submit
16 under section 1202(a) during the 3 cal-
17 endar years preceding the date of enact-
18 ment of this Act; by

19 (ii) the annual average of the aggre-
20 gate quantity of emission allowances that
21 all facilities or entities that produce or im-
22 port petroleum-based fuel would have been
23 required to submit during those 3 calendar
24 years.

1 **SEC. 3906. DISTRIBUTING EMISSION ALLOWANCES TO**
2 **HYDROFLUOROCARBON PRODUCERS AND IM-**
3 **PORTERS.**

4 (a) IN GENERAL.—The emission allowances allocated
5 to hydrofluorocarbon producers and hydrofluorocarbon im-
6 porters under section 3901(a) shall be distributed to the
7 individual hydrofluorocarbon producers and
8 hydrofluorocarbon importers in accordance with section
9 10005.

10 (b) EFFECT.—The distributions under subsection (a)
11 shall not, in any way, limit or otherwise alter the prohibi-
12 tions set forth in subsection 10007(b).

13 **Subtitle J—Reducing Methane**
14 **Emissions From Landfills and**
15 **Coal Mines**

16 **SEC. 3907. ALLOCATION.**

17 Not later than April 1, 2011, and annually thereafter
18 through 2049, the Administrator shall allocate 0.5 percent
19 of the Emission Allowance Account for the following cal-
20 endar year to a program for achieving real, verifiable, ad-
21 ditional, permanent, and enforceable reductions in emis-
22 sions of methane from landfills and coal mines.

23 **SEC. 3908. DISTRIBUTION.**

24 Not later than 1 year after the date of enactment
25 of this Act, the Administrator shall establish a program

1 that includes a system for distributing to individual enti-
2 ties the emission allowances allocated under section 3906.

3 **TITLE IV—AUCTIONS AND USES**
4 **OF AUCTION PROCEEDS**
5 **Subtitle A—Funds**

6 **SEC. 4101. ESTABLISHMENT.**

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

9 (1) The Energy Assistance Fund.

10 (2) The Climate Change Worker Training
11 Fund.

12 (3) The Adaptation Fund.

13 (4) The Climate Change and National Security
14 Fund.

15 (5) The Bureau of Land Management Emer-
16 gency Firefighting Fund.

17 (6) The Forest Service Emergency Firefighting
18 Fund.

19 **SEC. 4102. AMOUNTS IN FUNDS.**

20 Each Fund established by section 4101 shall consist
21 of such amounts as are deposited into the respective Fund
22 under subtitle C.

1 **Subtitle B—Climate Change Credit**
2 **Corporation**

3 **SEC. 4201. ESTABLISHMENT.**

4 (a) IN GENERAL.—There is established, as a non-
5 profit corporation without stock, a corporation to be
6 known as the “Climate Change Credit Corporation”.

7 (b) TREATMENT.—The Corporation shall not be con-
8 sidered to be an agency or establishment of the Federal
9 Government.

10 **SEC. 4202. APPLICABLE LAWS.**

11 The Corporation shall be subject to this title and, to
12 the extent consistent with this title, the District of Colum-
13 bia Business Corporation Act (D.C. Code section 29–301
14 et seq.).

15 **SEC. 4203. BOARD OF DIRECTORS.**

16 (a) IN GENERAL.—The Corporation shall have a
17 board of directors composed of 5 individuals who are citi-
18 zens of the United States, of whom 1 shall be elected an-
19 nually by the board to serve as Chairperson.

20 (b) POLITICAL AFFILIATION.—Not more than 3
21 members of the board serving at any time may be affili-
22 ated with the same political party.

23 (c) APPOINTMENT AND TERM.—A member of the
24 board shall be appointed by the President, by and with

1 the advice and consent of the Senate, for a term of 5
2 years.

3 (d) QUORUM.—Three members of the board shall
4 constitute a quorum for a meeting of the board of direc-
5 tors.

6 (e) PROHIBITIONS.—

7 (1) CONFLICTS OF INTEREST.—An individual
8 employed by, or holding any official relationship (in-
9 cluding any shareholder) with, any entity engaged in
10 the generation, transmission, distribution, or sale of
11 energy, an individual who has any pecuniary interest
12 in the generation, transmission, distribution, or sale
13 of energy, or an individual who has a pecuniary in-
14 terest in the implementation of this Act, shall not be
15 appointed to the Corporation under this subtitle.

16 (2) NO OTHER EMPLOYMENT.—A member of
17 the Corporation shall not hold any other employment
18 during the term of service of the member.

19 (f) VACANCIES.—

20 (1) IN GENERAL.—A vacancy on the Corpora-
21 tion—

22 (A) shall not affect the powers of the Cor-
23 poration; and

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

1 (2) SERVICE UNTIL NEW APPOINTMENT.—A
2 member of the Corporation the term of whom has
3 expired or otherwise been terminated shall continue
4 to serve until the date on which a replacement is ap-
5 pointed if the President determines that service to
6 be appropriate.

7 (g) REMOVAL.—

8 (1) IN GENERAL.—A member may be removed
9 from the Corporation on determination of the Presi-
10 dent for cause.

11 (2) NOTIFICATION.—Not later than 30 days be-
12 fore removing a member from the Corporation for
13 cause under paragraph (1), the President shall pro-
14 vide to Congress an advance notification of the de-
15 termination by the President to remove the member.

16 **SEC. 4204. REVIEW AND AUDIT BY COMPTROLLER GEN-**
17 **ERAL.**

18 Not later than January 1, 2013, and annually there-
19 after, the Comptroller General of the United States shall
20 conduct a review and audit of each expenditure made pur-
21 suant to this title to determine the efficacy of the pro-
22 grams, expenditures, and projects funded under this title.

1 **Subtitle C—Auctions**

2 **SEC. 4301. EARLY AUCTIONS.**

3 (a) INITIATION OF AUCTIONING.—Not later than 1
4 year after the date of enactment of this Act, the Corpora-
5 tion shall begin auctioning the emission allowances allo-
6 cated to the Corporation under section 3101.

7 (b) COMPLETION OF AUCTIONING.—Not later than
8 December 31, 2010, the Corporation shall complete auc-
9 tioning of all allowances allocated to the Corporation
10 under section 3101.

11 (c) PROCEEDS FROM EARLY AUCTIONING.—The
12 Corporation shall use to carry out programs established
13 under subtitle D all proceeds of early auctioning conducted
14 by the Corporation under this section.

15 **SEC. 4302. ANNUAL AUCTIONS.**

16 (a) IN GENERAL.—Not later than 330 days before
17 the beginning of a calendar year identified in the table
18 contained in section 3102, the Corporation shall auction
19 all of the allowances allocated to the Corporation for that
20 year by the Administrator under section 3102.

21 (b) PROCEEDS FROM ANNUAL AUCTIONING.—

22 (1) BUREAU OF LAND MANAGEMENT EMER-
23 GENCY FIREFIGHTING FUND.—For each of calendar
24 years 2012 through 2050, the Corporation shall de-
25 posit into the Bureau of Land Management Emer-

1 agency Firefighting Fund established by section
2 4101(5) proceeds, from annual auctions that the
3 Corporation conducts for the calendar year under
4 this section, that are sufficient to ensure that the
5 amount in the Fund equals \$300,000,000.

6 (2) FOREST SERVICE EMERGENCY FIRE-
7 FIGHTING FUND.—For each of calendar years 2012
8 through 2050, the Corporation shall deposit into the
9 Forest Service Emergency Firefighting Fund estab-
10 lished by section 4101(6) proceeds, from annual auc-
11 tions that the Corporation conducts for the calendar
12 year under this section, that are sufficient to ensure
13 that the amount in the Fund equals \$800,000,000.

14 (3) USE OF REMAINING PROCEEDS.—

15 (A) IN GENERAL.—For each of calendar
16 years 2012 through 2050, the Corporation shall
17 use the proceeds of the annual auctions con-
18 ducted by the Corporation for the calendar year
19 under this section in accordance with this para-
20 graph.

21 (B) ENERGY TECHNOLOGY DEPLOY-
22 MENT.—For each of calendar years 2012
23 through 2050, the Corporation shall use to
24 carry out the programs established under sub-
25 title D 52 percent of the proceeds of the annual

1 auctions conducted by the Corporation for the
2 calendar year under this section.

3 (C) ENERGY INDEPENDENCE ACCELERA-
4 TION FUND.—In any of calendar years 2012
5 through 2050 during which there exists in the
6 Treasury of the United States an energy trans-
7 formation acceleration fund administered by the
8 Director of the Advanced Research Projects
9 Agency within the Department of Energy, of
10 the proceeds of the annual auctions conducted
11 by the Corporation for the calendar year under
12 this section, the Corporation shall deposit 2
13 percent of the proceeds into that fund.

14 (D) ENERGY CONSUMERS.—For each of
15 calendar years 2012 through 2050, the Cor-
16 poration shall deposit into the Energy Assist-
17 ance Fund established by section 4101(1) 18
18 percent of the proceeds of the annual auctions
19 conducted by the Corporation for the calendar
20 year under this section.

21 (E) CLIMATE CHANGE WORKER TRAINING
22 PROGRAM.—For each of calendar years 2012
23 through 2050, the Corporation shall deposit
24 into the Climate Change Worker Training Fund
25 established by section 4101(2) 5 percent of the

1 proceeds of the annual auctions conducted by
2 the Corporation for the calendar year under
3 this section.

4 (F) ADAPTATION PROGRAM FOR NATURAL
5 RESOURCES IN UNITED STATES AND TERRI-
6 TORIES.—For each of calendar years 2012
7 through 2050, the Corporation shall deposit
8 into the Adaptation Fund established by section
9 4101(3) 18 percent of the proceeds of the an-
10 nual auctions conducted by the Corporation for
11 the calendar year under this section.

12 (G) CLIMATE CHANGE AND NATIONAL SE-
13 CURITY PROGRAM.—For each of calendar years
14 2012 through 2050, the Corporation shall de-
15 posit into the Climate Change and National Se-
16 curity Fund established by section 4101(4) 5
17 percent of the proceeds of the annual auctions
18 conducted by the Corporation for the calendar
19 year under this section.

20 **Subtitle D—Energy Technology**
21 **Deployment**

22 **SEC. 4401. GENERAL ALLOCATIONS.**

23 For each calendar year, the Corporation shall use the
24 amounts described in sections 4301(c) and 4302(b)(3)(B)

1 to carry out the programs established under this subtitle,
2 as follows:

3 (1) 32 percent of the funds shall be used to
4 carry out the zero- or low-carbon energy technologies
5 program under section 4402.

6 (2) 25 percent shall be used to carry out the
7 advanced coal and sequestration technologies pro-
8 gram under section 4403.

9 (3) 6 percent shall be used to carry out the fuel
10 from cellulosic biomass program under section 4404.

11 (4) 12 percent shall be used to carry out the
12 advanced technology vehicles manufacturing incen-
13 tive program under section 4405.

14 (5) 25 percent shall be used to carry out the
15 sustainable energy program under section 4406.

16 **SEC. 4402. ZERO- OR LOW-CARBON ENERGY TECHNOLOGIES**

17 **DEPLOYMENT.**

18 (a) **DEFINITIONS.**—In this section:

19 (1) **ENERGY SAVINGS.**—The term “energy sav-
20 ings” means megawatt-hours of electricity or million
21 British thermal units of natural gas saved by a
22 product, in comparison to projected energy consump-
23 tion under an energy-efficiency standard applicable
24 to the product.

1 (2) HIGH-EFFICIENCY CONSUMER PRODUCT.—

2 The term “high-efficiency consumer product” means
3 a covered product to which an energy conservation
4 standard applies under section 325 of the Energy
5 Policy and Conservation Act (42 U.S.C. 6295), if
6 the energy efficiency of the product exceeds the en-
7 ergy efficiency required under the standard.

8 (3) ZERO- OR LOW-CARBON GENERATION.—The
9 term “zero- or low-carbon generation” means gen-
10 eration of electricity by an electric generation unit
11 that—

12 (A) emits no carbon dioxide into the at-
13 mosphere, or is fossil-fuel fired and emits into
14 the atmosphere not more than 250 pounds of
15 carbon dioxide per megawatt-hour (after adjust-
16 ment for any carbon dioxide from the unit that
17 is geologically sequestered); and

18 (B) was placed into commercial service
19 after the date of enactment of this Act.

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

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

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

3 (c) REQUIREMENTS.—

4 (1) IN GENERAL.—The Corporation shall make
5 awards under this section to domestic producers of
6 new zero- or low-carbon generation and to domestic
7 manufacturers of high-efficiency consumer prod-
8 ucts—

9 (A) in the case of producers of new zero-
10 or low-carbon generation, based on the bid of
11 each producer in terms of dollars per megawatt-
12 hour of electricity generated; and

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

18 (2) ACCEPTANCE OF BIDS.—

19 (A) IN GENERAL.—In making awards
20 under this subsection, the Corporation shall—

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

24 (ii) award financial incentives to the
25 producers and manufacturers that submit

1 the lowest bids that meet the requirements
2 established by the Corporation.

3 (B) FACTORS FOR CONVERSION.—

4 (i) IN GENERAL.—For the purpose of
5 assessing bids under subparagraph (A), the
6 Corporation shall specify a factor for con-
7 verting megawatt-hours of electricity and
8 million British thermal units of natural
9 gas to common units.

10 (ii) REQUIREMENT.—The conversion
11 factor shall be based on the relative green-
12 house gas emission benefits of electricity
13 and natural gas conservation.

14 (d) FORMS OF AWARDS.—

15 (1) ZERO- AND LOW-CARBON GENERATORS.—

16 An award for zero- or low-carbon generation under
17 this subsection shall be in the form of a contract to
18 provide a production payment for each year during
19 the first 10 years of commercial service of the gen-
20 eration unit in an amount equal to the product ob-
21 tained by multiplying—

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

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

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

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

11 (B) the energy savings during the pro-
12 jected useful life of the high-efficiency consumer
13 product, not to exceed 10 years, as determined
14 by the Corporation.

15 **SEC. 4403. ADVANCED COAL AND SEQUESTRATION TECH-**
16 **NOLOGIES PROGRAM.**

17 (a) ADVANCED COAL TECHNOLOGIES.—

18 (1) DEFINITION OF ADVANCED COAL GENERA-
19 TION TECHNOLOGY.—In this subsection, the term
20 “advanced coal generation technology” means ad-
21 vanced a coal-fueled power plant technology that—

22 (A) achieves a minimum efficiency of 30
23 percent with respect to higher heating value of
24 the feedstock, after all parasitic requirements
25 for carbon dioxide capture and compression to

1 2,000 pounds per square inch absolute have
2 been subtracted;

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

7 (C) has an emission rate of not more than
8 250 pounds of carbon dioxide per megawatt-
9 hour of net electricity generation, after sub-
10 tracting the carbon dioxide that is captured and
11 sequestered.

12 (2) DEMONSTRATION PROJECTS.—The Cor-
13 poration shall use not less than $\frac{1}{4}$ of the amounts
14 made available to carry out this section for each fis-
15 cal year to support demonstration projects using ad-
16 vanced coal generation technology, including retrofit
17 technology that could be deployed on existing coal
18 generation facilities.

19 (3) DEPLOYMENT INCENTIVES.—

20 (A) IN GENERAL.—The Corporation shall
21 use not less than $\frac{1}{4}$ of the amounts made avail-
22 able to carry out this subsection for each fiscal
23 year to provide Federal financial incentives to
24 facilitate the deployment of not more than 20

1 gigawatts of advanced coal generation tech-
2 nologies.

3 (B) ADMINISTRATION.—In providing in-
4 centives under this paragraph, the Corporation
5 shall—

6 (i) provide appropriate incentives for
7 regulated investor-owned utilities, munic-
8 ipal utilities, electric cooperatives, and
9 independent power producers, as deter-
10 mined by the Secretary of Energy; and

11 (ii) ensure that a range of the domes-
12 tic coal types is employed in the facilities
13 that receive incentives under this para-
14 graph.

15 (C) FUNDING REQUIREMENTS.—

16 (i) SEQUESTRATION ACTIVITIES.—The
17 Corporation shall provide incentives only to
18 projects that will capture and sequester at
19 least 85 percent of the carbon dioxide pro-
20 duced by the project facilities.

21 (ii) STORAGE AGREEMENT RE-
22 QUIRED.—The Corporation shall require a
23 binding storage agreement for the carbon
24 dioxide captured in a project under this
25 subsection, in a geological storage project

1 permitted by the Administrator under reg-
2 ulations promulgated pursuant to section
3 1421(d) of the Safe Drinking Water Act
4 (42 U.S.C. 300h(d)).

5 (iii) PROJECTS USING CERTAIN
6 COALS.—In providing incentives under this
7 paragraph, the Corporation shall set aside
8 not less than 25 percent of any amounts
9 made available to carry out this subsection
10 for projects using coal with an energy con-
11 tent of not more than 10,000 British ther-
12 mal units per pound.

13 (4) DISTRIBUTION OF FUNDS.—A project that
14 receives an award under this subsection may elect 1
15 of the following Federal financial incentives:

16 (A) A loan guarantee.

17 (B) A cost-sharing grant to cover the in-
18 cremental cost of installing and operating car-
19 bon capture and storage equipment (for which
20 utilization costs may be covered for the first 10
21 years of operation).

22 (C) Production payments of not more than
23 1.5 cents per kilowatt-hour of electric output
24 during the first 10 years of commercial service
25 of the project.

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

4 (b) SEQUESTRATION.—

5 (1) IN GENERAL.—The Corporation shall use
6 not less than $\frac{1}{2}$ of the amounts made available to
7 carry out this subsection for each fiscal year for
8 large-scale geological carbon storage demonstration
9 projects that store carbon dioxide captured from fa-
10 cilities for the generation of electricity using coal
11 gasification or other advanced coal combustion proc-
12 esses, including facilities that receive assistance
13 under subsection (a).

14 (2) PROJECT CAPITAL AND OPERATING
15 COSTS.—The Corporation shall provide assistance
16 under this subsection to reimburse the project owner
17 for a percentage of the incremental project capital
18 and operating costs of the project that are attrib-
19 utable to carbon capture and sequestration, as the
20 Secretary determines to be appropriate.

21 **SEC. 4404. FUEL FROM CELLULOSIC BIOMASS.**

22 (a) IN GENERAL.—The Corporation shall provide de-
23 ployment incentives under this section to encourage a vari-
24 ety of projects to domestically produce transportation fuels

1 from cellulosic biomass, relying on different feedstocks in
2 different regions of the United States.

3 (b) PROJECT ELIGIBILITY.—Incentives under this
4 section shall be provided on a competitive basis to projects
5 that domestically produce fuels that—

6 (1) meet United States fuel and emission speci-
7 fications;

8 (2) help diversify domestic transportation en-
9 ergy supplies; and

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

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

14 (1) loan guarantees for the construction of pro-
15 duction facilities and supporting infrastructure; or

16 (2) production payments through a reverse auc-
17 tion in accordance with subsection (d).

18 (d) REVERSE AUCTION.—

19 (1) IN GENERAL.—In providing incentives
20 under this section, the Corporation shall—

21 (A) prescribe rules under which producers
22 of fuel from cellulosic biomass may bid for pro-
23 duction payments under subsection (c)(2); and

1 (B) solicit bids from producers of different
2 classes of transportation fuel, as the Corpora-
3 tion determines to be appropriate.

4 (2) REQUIREMENT.—The rules under section
5 4402 shall require that incentives shall be provided
6 to the producers that submit the lowest bid (in
7 terms of cents per gallon gasoline equivalent) for
8 each class of transportation fuel from which the Cor-
9 poration solicits a bid.

10 **SEC. 4405. ADVANCED TECHNOLOGY VEHICLES MANUFAC-**
11 **TURING INCENTIVE PROGRAM.**

12 (a) DEFINITIONS.—In this section:

13 (1) ADVANCED TECHNOLOGY VEHICLE.—The
14 term “advanced technology vehicle” means an elec-
15 tric or plug-in hybrid electric vehicle, or an advanced
16 diesel light duty motor vehicle, that meets—

17 (A) the Tier II Bin 5 emission standard
18 established in rules prescribed by the Adminis-
19 trator under section 202(i) of the Clean Air Act
20 (42 U.S.C. 7521(i)), or a lower-numbered Bin
21 emission standard;

22 (B) any new emission standard for fine
23 particulate matter prescribed by the Adminis-
24 trator under that Act; and

1 (C) a standard of at least 35 miles per gal-
2 lon combined fuel economy, calculated on an en-
3 ergy-equivalent basis.

4 (2) COMBINED FUEL ECONOMY.—The term
5 “combined fuel economy” means—

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

10 (B) in the case of an electric drive vehicle
11 with the ability to recharge from an off-board
12 source, the reported mileage, as determined in
13 a manner consistent with the Society of Auto-
14 motive Engineers recommended practice for
15 that configuration, or a similar practice rec-
16 ommended by the Secretary of Energy, using a
17 petroleum equivalence factor for the off-board
18 electricity (as defined by the Secretary of En-
19 ergy).

20 (3) ENGINEERING INTEGRATION COSTS.—The
21 term “engineering integration costs” includes the
22 cost of engineering tasks performed in the United
23 States relating to—

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

4 (B) designing new tooling and equipment
5 for production facilities that produce in the
6 United States qualifying components or ad-
7 vanced technology vehicles.

8 (4) QUALIFYING COMPONENT.—The term
9 “qualifying component” means a component that the
10 Secretary of Energy determines to be—

11 (A) specially designed for advanced tech-
12 nology vehicles;

13 (B) installed for the purpose of meeting
14 the performance requirements of advanced tech-
15 nology vehicles as specified in subparagraphs
16 (A), (B), and (C) of paragraph (1); and

17 (C) manufactured in the United States.

18 (b) MANUFACTURER FACILITY CONVERSION
19 AWARDS.—The Corporation shall provide facility conver-
20 sion funding awards under this subsection to automobile
21 manufacturers and component suppliers to pay up to 30
22 percent of the cost of—

23 (1) reequipping or expanding an existing manu-
24 facturing facility to produce—

1 (A) qualifying advanced technology vehi-
2 cles; or

3 (B) qualifying components; and

4 (2) engineering integration of qualifying vehi-
5 cles and qualifying components.

6 (c) PERIOD OF AVAILABILITY.—An award under sub-
7 section (b) shall apply to—

8 (1) facilities and equipment placed in service
9 after the date of enactment of this Act and before
10 January 1, 2020; and

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

13 **SEC. 4406. SUSTAINABLE ENERGY PROGRAM.**

14 (a) DEFINITION OF SUSTAINABLE ENERGY TECH-
15 NOLOGY.—In this section, the term “sustainable energy
16 technology” means a technology to harness a renewable
17 energy source (as defined in section 609(a) of the Public
18 Utility Regulatory Policies Act of 1978 (7 U.S.C.
19 918c(a)), including in distributed energy systems.

20 (b) DEMONSTRATION PROJECTS.—The Corporation
21 shall use not less than 25 percent of the amounts made
22 available to carry out this section for each fiscal year to
23 support demonstration projects in the United States using
24 sustainable energy technology, including in distributed en-
25 ergy systems.

1 (c) DEPLOYMENT INCENTIVES.—

2 (1) IN GENERAL.—The Corporation shall use
3 not less than 25 percent of the amounts made avail-
4 able to carry out this section for each fiscal year to
5 provide Federal financial incentives to facilitate the
6 deployment in the United States of sustainable en-
7 ergy technology, including in distributed energy sys-
8 tems.

9 (2) ADMINISTRATION.—In providing incentives
10 under this subsection, the Corporation shall provide
11 appropriate incentives for regulated investor-owned
12 utilities, municipal utilities, electric cooperatives,
13 independent power producers, and consumers, as de-
14 termined by the Secretary of Energy.

15 (d) DISTRIBUTION OF FUNDS.—A project that re-
16 ceives an award under this subsection may elect 1 of the
17 following Federal financial incentives:

18 (1) A loan guarantee.

19 (2) A cost-sharing grant to cover the incre-
20 mental cost of installing and operating equipment
21 (for which utilization costs may be covered for the
22 first 10 years of operation).

23 (3) Production payments of not more than 1.5
24 cents per kilowatt-hour of electric output during the
25 first 10 years of commercial service of the project.

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

4 **Subtitle E—Energy Consumers**

5 **SEC. 4501. PROPORTIONS OF FUNDING AVAILABILITY.**

6 All funds deposited into the Energy Assistance Fund
7 established by section 4101(1) shall be made available,
8 without further appropriation or fiscal year limitation, to
9 the following programs in the following proportions:

10 (1) 50 percent of the funds to the low-income
11 home energy assistance program established under
12 the Low Income Home Energy Assistance Act of
13 1981 (42 U.S.C. 8621 et seq.).

14 (2) 25 percent of the funds to the Weatheriza-
15 tion Assistance Program for Low-Income Persons
16 established under part A of title IV of the Energy
17 Conservation and Production Act (42 U.S.C. 6861
18 et seq.).

19 (3) 25 percent of the funds to the rural energy
20 assistance program described in section 4502.

21 **SEC. 4502. RURAL ENERGY ASSISTANCE PROGRAM.**

22 The Secretary of Energy shall carry out a program
23 to use the funds made available under section 4501(3) to
24 provide financial assistance to promote the availability of
25 reasonably-priced distributed electricity in off-grid rural

1 regions in which electricity prices exceed 150 percent of
2 the national average, as determined by the Secretary of
3 Energy.

4 **Subtitle F—Climate Change**
5 **Worker Training Program**

6 **SEC. 4601. FUNDING.**

7 All funds deposited into the Climate Change Worker
8 Training Fund established by section 4101(2) shall be
9 made available, without further appropriation or fiscal
10 year limitation, to carry out the programs established
11 under this subtitle.

12 **SEC. 4602. PURPOSES.**

13 The purposes of this subtitle are—

14 (1) to create a sustainable, comprehensive pub-
15 lic program that provides quality training that is
16 linked to jobs that are created through low-carbon
17 energy, sustainable energy, and energy efficiency ini-
18 tiatives;

19 (2) to satisfy industry demand for a skilled
20 workforce, support economic growth, boost the glob-
21 al competitiveness of the United States in expanding
22 low-carbon energy, sustainable energy, and energy
23 efficiency industries, and provide economic self-suffi-
24 ciency and family-sustaining jobs for United States
25 workers, including low-wage workers, through qual-

1 ity training and placement in job opportunities in
2 those industries; and

3 (3) to provide funds for Federal and State in-
4 dustry-wide research, labor market information and
5 labor exchange programs, and the development of
6 Federal- and State-administered training programs.

7 **SEC. 4603. ESTABLISHMENT.**

8 Not later than 180 days after the date of enactment
9 of this Act, the Secretary of Labor (referred to in this
10 subtitle as the “Secretary”), in consultation with the Ad-
11 ministrators and the Secretary of Energy, shall establish
12 a climate change worker training program that achieves
13 the purposes of this subtitle.

14 **SEC. 4604. ACTIVITIES.**

15 (a) NATIONAL RESEARCH PROGRAM.—Under the
16 program established under section 4603, the Secretary,
17 acting through the Bureau of Labor Statistics, shall pro-
18 vide assistance to support national research to develop
19 labor market data and to track future workforce trends
20 resulting from energy-related initiatives carried out under
21 this section, including—

22 (1) linking research and development in low-
23 carbon energy, sustainable energy, and energy effi-
24 ciency technology with the development of standards
25 and curricula for current and future jobs;

1 (2) the tracking and documentation of academic
2 and occupational competencies and future skill needs
3 with respect to low-carbon energy, sustainable en-
4 ergy, and energy efficiency technology;

5 (3) tracking and documentation of occupational
6 information and workforce training data with re-
7 spect to low-carbon energy, sustainable energy, and
8 energy efficiency technology;

9 (4) assessing new employment and work prac-
10 tices, including career ladder and upgrade training
11 and high-performance work systems; and

12 (5) collaborating with State agencies, industry,
13 organized labor, and community and nonprofit orga-
14 nizations to disseminate successful innovations for
15 labor market services and worker training with re-
16 spect to low-carbon energy, sustainable energy, and
17 energy efficiency technology.

18 (b) NATIONAL ENERGY TRAINING PARTNERSHIP

19 GRANTS.—

20 (1) GRANTS.—

21 (A) IN GENERAL.—Under the program es-
22 tablished under section 4603, the Secretary
23 shall award national energy training partner-
24 ships grants on a competitive basis to eligible
25 entities to enable the entities—

1 (i) to carry out national training that
2 leads to economic self-sufficiency; and

3 (ii) to develop a low-carbon energy,
4 sustainable energy, and energy efficiency
5 industries workforce.

6 (B) DIVERSITY.—Grants shall be awarded
7 under this paragraph so as to ensure geo-
8 graphic diversity, with—

9 (i) at least 2 grants awarded to enti-
10 ties located in each of the 4 Petroleum Ad-
11 ministration for Defense Districts with no
12 subdistricts; and

13 (ii) at least 1 grant awarded to an en-
14 tity located in each of the subdistricts of
15 the Petroleum Administration for Defense
16 District with subdistricts.

17 (2) ELIGIBILITY.—To be eligible to receive a
18 grant under paragraph (1), an entity shall be a non-
19 profit partnership that—

20 (A) includes the equal participation of in-
21 dustry, including public or private employers,
22 and labor organizations, including joint labor-
23 management training programs, and may in-
24 clude community-based organizations, edu-
25 cational institutions, small businesses, coopera-

1 tives, State and local veterans agencies, and
2 veterans service organizations; and

3 (B) demonstrates—

4 (i) experience in implementing and op-
5 erating worker skills training and edu-
6 cation programs;

7 (ii) the ability to identify and involve
8 in training programs carried out using the
9 grant, target populations of workers that
10 are or will be engaged in activities relating
11 to low-carbon energy, sustainable energy,
12 and energy efficiency industries; and

13 (iii) the ability to help workers achieve
14 economic self-sufficiency.

15 (3) ACTIVITIES.—Activities to be carried out
16 using a grant provided under this subsection may in-
17 clude—

18 (A) the provision of occupational skills
19 training, including curriculum development, on-
20 the-job training, and classroom training;

21 (B) the provision of safety and health
22 training;

23 (C) the provision of basic skills, literacy,
24 general equivalency degree, English as a second
25 language, and job readiness training;

1 (D) individual referral and tuition assist-
2 ance for a community college training program;

3 (E) the provision of customized training in
4 conjunction with an existing registered appren-
5 ticeship program or labor-management partner-
6 ship;

7 (F) the provision of career ladder and up-
8 grade training; and

9 (G) the implementation of transitional jobs
10 strategies.

11 (c) STATE LABOR MARKET RESEARCH, INFORMA-
12 TION, AND LABOR EXCHANGE RESEARCH PROGRAM.—

13 (1) IN GENERAL.—Under the program estab-
14 lished under section 4603, the Secretary shall award
15 competitive grants to States to enable the States to
16 administer labor market and labor exchange infor-
17 mational programs that include the implementation
18 of the activities described in paragraph (2).

19 (2) ACTIVITIES.—A State shall use amounts
20 awarded under this subsection to provide funding to
21 the State agency that administers the Wagner-
22 Peyser Act (29 U.S.C. 49 et seq.) and State unem-
23 ployment compensation programs to carry out the
24 following activities using State agency merit staff:

1 (A) The identification of job openings in
2 the low-carbon energy, sustainable energy, and
3 energy efficiency sector.

4 (B) The administration of skill and apti-
5 tude testing and assessment for workers.

6 (C) The counseling, case management, and
7 referral of qualified job seekers to openings and
8 training programs, including low-carbon energy,
9 sustainable energy, and energy efficiency train-
10 ing programs.

11 (d) STATE ENERGY TRAINING PARTNERSHIP PRO-
12 GRAM.—

13 (1) IN GENERAL.—Under the program estab-
14 lished under section 4603, the Secretary shall award
15 competitive grants to States to enable the States to
16 administer low-carbon energy, sustainable energy,
17 and energy efficiency workforce development pro-
18 grams that include the implementation of the activi-
19 ties described in paragraph (2).

20 (2) ACTIVITIES.—

21 (A) IN GENERAL.—A State shall use
22 amounts awarded under the subsection to
23 award competitive grants to eligible State en-
24 ergy sector partnerships to enable the partner-
25 ships to coordinate with existing apprenticeship

1 and labor management training programs and
2 implement training programs that lead to the
3 economic self-sufficiency of trainees.

4 (B) ELIGIBILITY.—To be eligible to receive
5 a grant under this subsection, a State energy
6 sector partnership shall—

7 (i) consist of nonprofit organizations
8 that include equal participation from in-
9 dustry, including public or private non-
10 profit employers, and labor organizations,
11 including joint labor-management training
12 programs, and may include representatives
13 from local governments, worker investment
14 agency one-stop career centers, community
15 based organizations, community colleges,
16 other post-secondary institutions, small
17 businesses, cooperatives, State and local
18 veterans agencies, and veterans service or-
19 ganizations;

20 (ii) demonstrate experience in imple-
21 menting and operating worker skills train-
22 ing and education programs; and

23 (iii) demonstrate the ability to identify
24 and involve in training programs, target
25 populations of workers that are or will be

1 engaged in activities relating to low-carbon
2 energy, sustainable energy, and energy ef-
3 ficiency industries.

4 (C) PRIORITY.—In awarding grants under
5 this subsection, the Secretary shall give priority
6 to States that demonstrate linkages of activities
7 under the grant with—

8 (i) meeting national energy policies
9 associated with low-carbon energy, sustain-
10 able energy, and energy efficiency; and

11 (ii) meeting State energy policies as-
12 sociated with low-carbon energy, sustain-
13 able energy, and energy efficiency.

14 (D) COORDINATION.—An entity that re-
15 ceives a grant under this subsection shall—

16 (i) coordinate activities carried out
17 under the grant with existing apprentice-
18 ship and labor management training pro-
19 grams; and

20 (ii) implement training programs that
21 lead to the economic self-sufficiency of
22 trainees, including providing—

23 (I) outreach and recruitment
24 services, in coordination with the ap-
25 propriate State agency;

1 (II) occupational skills training,
2 including curriculum development, on-
3 the-job training, and classroom train-
4 ing;

5 (III) safety and health training;

6 (IV) basic skills, literacy, general
7 equivalency degree, English as a sec-
8 ond language, and job readiness train-
9 ing;

10 (V) individual referral and tuition
11 assistance for a community college
12 training program;

13 (VI) customized training in con-
14 junction with an existing registered
15 apprenticeship program or labor-man-
16 agement partnership;

17 (VII) career ladder and upgrade
18 training; and

19 (VIII) services under transitional
20 jobs strategies.

21 **SEC. 4605. WORKER PROTECTIONS AND NONDISCRIMINA-**
22 **TION REQUIREMENTS.**

23 (a) APPLICABILITY OF WIA.—Sections 181 and 188
24 of the Workforce Investment Act of 1998 (29 U.S.C.

1 2931, 2938) shall apply to all programs carried out using
2 assistance under this subtitle.

3 (b) CONSULTATION WITH LABOR ORGANIZATIONS.—

4 If a labor organization represents a substantial number
5 of workers that are engaged in similar work or training
6 in an area that is the same as the area that is proposed
7 to be funded under this subtitle, the labor organization
8 shall be provided an opportunity to be consulted and to
9 submit comments in regard to such a proposal.

10 **SEC. 4606. WORKFORCE TRAINING AND SAFETY.**

11 (a) UNIVERSITY PROGRAMS.—In order to enhance
12 the educational opportunities and safety of a future gen-
13 eration of scientists, engineers, health physicists, and en-
14 ergy workforce employees, 25 percent of the funds depos-
15 ited into the Climate Change Worker Training Fund shall
16 be used for the University Programs within the Depart-
17 ment of Energy, to help United States university and col-
18 leges stay at the forefront of science education and re-
19 search and assist universities in the operation of advanced
20 energy research facilities and in the performance of other
21 educational activities.

22 (b) EMPLOYEE ORGANIZATIONS.—The Secretary
23 shall provide technical assistance and funds for training
24 directly to nonprofit employee organizations, voluntary
25 emergency response organizations, and joint labor-man-

1 agement organizations that demonstrate experience in im-
2 plementing and operating worker health and safety train-
3 ing and education programs.

4 (c) WORKFORCE TRAINING.—

5 (1) IN GENERAL.—The Secretary of Labor, in
6 cooperation with the Secretary of Energy, shall pro-
7 mulgate regulations—

8 (A) to implement a program to provide
9 workforce training to meet the high demand for
10 workers skilled in zero- and low-emitting carbon
11 energy technologies and provide for related
12 safety issues;

13 (B) to implement a fully validated elec-
14 trical craft certification program, career and
15 technology awareness at the primary and sec-
16 ondary education level, preapprenticeship career
17 technical education for all zero- and low-emit-
18 ting carbon energy technologies related indus-
19 trial skilled crafts, community college and skill
20 center training for zero- and low-emitting car-
21 bon energy technology technicians, development
22 of construction management personnel for zero-
23 and low-emitting carbon energy technology con-
24 struction projects and regional grants for inte-
25 grated zero- and low-emitting carbon energy

1 technology workforce development programs;
2 and

3 (C) to ensure the safety of workers in such
4 careers.

5 (2) CONSULTATION.—In carrying out this sub-
6 section, the Secretary of Labor shall consult with
7 relevant Federal agencies, representatives of the
8 zero- and low-emitting carbon energy technologies
9 industries, and organized labor, concerning skills
10 and such safety measures that are needed in those
11 industries.

12 (d) QUANTIFICATION.—For purposes of dispersing
13 funds under this section, qualifying zero- and low-emitting
14 carbon energy means any technology that has a rated ca-
15 pacity of at least 750 megawatts of power.

16 **Subtitle G—Adaptation Program**
17 **for Natural Resources in United**
18 **States and Territories**

19 **SEC. 4701. DEFINITIONS.**

20 In this subtitle:

21 (1) ECOLOGICAL PROCESS.—

22 (A) IN GENERAL.—The term “ecological
23 process” means a biological, chemical, or phys-
24 ical interaction between the biotic and abiotic
25 components of an ecosystem.

1 (B) INCLUSIONS.—The term “ecological
2 process” includes—

3 (i) nutrient cycling;

4 (ii) pollination;

5 (iii) predator-prey relationships;

6 (iv) soil formation;

7 (v) gene flow;

8 (vi) larval dispersal and settlement;

9 (vii) hydrological cycling;

10 (viii) decomposition; and

11 (ix) disturbance regimes, such as fire
12 and flooding.

13 (2) FISH AND WILDLIFE.—The term “fish and
14 wildlife” means—

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

17 (B) any fauna in a captive breeding pro-
18 gram the object of which is to reintroduce indi-
19 viduals of a depleted indigenous species into
20 previously occupied range.

21 (3) HABITAT.—The term “habitat” means the
22 physical, chemical, and biological properties that are
23 used by wildlife (including aquatic and terrestrial
24 plant communities) for growth, reproduction, and

1 survival, food, water, cover, and space, on a tract of
2 land, in a body of water, or in an area or region.

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

7 (5) PLANT.—The term “plant” means any spe-
8 cies of wild flora.

9 (6) SECRETARY.—The term “Secretary” means
10 the Secretary of the Interior.

11 (7) STATE.—The term “State” means—

12 (A) a State;

13 (B) the District of Columbia;

14 (C) the Commonwealth of Puerto Rico;

15 and

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

18 **SEC. 4702. ADAPTATION FUND.**

19 (a) AVAILABILITY OF AMOUNTS.—All amounts de-
20 posited in the Adaptation Fund established by section
21 4101(3) shall be made available, without further appro-
22 priation or fiscal year limitation, to carry out activities (in-
23 cluding research and education activities) that assist fish
24 and wildlife, fish and wildlife habitat, plants, and associ-
25 ated ecological processes in becoming more resilient,

1 adapting to, and surviving the impacts of climate change
2 and ocean acidification (referred to in this section as “ad-
3 aptation activities”) pursuant to this section.

4 (b) DEPARTMENT OF INTERIOR.—Of the amounts
5 made available annually to carry out this subsection—

6 (1) 35 percent shall be allocated to the Sec-
7 retary, and subsequently made available to States in-
8 cluding through the Wildlife Conservation and Res-
9 toration Account established under section 3(a)(2) of
10 the Pittman-Robertson Wildlife Restoration Act (16
11 U.S.C. 669b(a)(2)), to carry out adaptation activi-
12 ties in accordance with comprehensive State adapta-
13 tion strategies, as described in subsection (j);

14 (2) 5 percent shall be allocated to the Secretary
15 for adaptation activities carried out under coopera-
16 tive grant programs, including—

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

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

24 (C) the multinational species conservation
25 fund established under the heading “MULTI-

1 NATIONAL SPECIES CONSERVATION FUND” of
2 title I of the Department of the Interior and
3 Related Agencies Appropriations Act, 1999 (16
4 U.S.C. 4246);

5 (D) the Neotropical Migratory Bird Con-
6 servation Fund established by section 9(a) of
7 the Neotropical Migratory Bird Conservation
8 Act (16 U.S.C. 6108(a));

9 (E) the Coastal Program of the United
10 States Fish and Wildlife Service;

11 (F) the National Fish Habitat Action
12 Plan;

13 (G) the Partners for Fish and Wildlife
14 Program;

15 (H) the Landowner Incentive Program;

16 (I) the Wildlife Without Borders Program
17 of the United States Fish and Wildlife Service;
18 and

19 (J) the Park Flight Migratory Bird Pro-
20 gram of the National Park Service; and

21 (3) 1 percent shall be allocated to the Secretary
22 and subsequently made available to Indian tribes to
23 carry out adaptation activities through the tribal
24 wildlife grants program of the United States Fish
25 and Wildlife Service.

1 (c) LAND AND WATER CONSERVATION FUND.—

2 (1) DEPOSITS.—

3 (A) IN GENERAL.—Except as provided in
4 paragraph (2), of the amounts made available
5 for each fiscal year to carry out this subsection,
6 10 percent shall be deposited into the Land and
7 Water Conservation Fund established under
8 section 2 of the Land and Water Conservation
9 Fund Act of 1965 (16 U.S.C. 4601–5).

10 (B) Deposits to the Land and Water Con-
11 servation Fund under this subsection shall—

12 (i) be supplemental to authorizations
13 provided under section 3 of the Land and
14 Water Conservation Fund Act of 1965 (16
15 U.S.C. 4601–6); and

16 (ii) remain available for non-adapta-
17 tion needs.

18 (2) EXCEPTION.—For any fiscal year in which
19 a deposit into the Land and Water Conservation
20 Fund under paragraph (1) would result in an
21 amount greater than \$900,000,000—

22 (A) \$900,000,000 shall be deposited into
23 the Land and Water Conservation Fund; and

1 (B) the remaining funds shall be distrib-
2 uted on a pro rata basis as otherwise provided
3 in this section.

4 (3) ALLOCATIONS.—Of the amounts deposited
5 under this subsection into the Land and Water Con-
6 servation Fund—

7 (A) $\frac{1}{6}$ shall be allocated to the Secretary
8 and made available to carry out section 6 of the
9 Land and Water Conservation Fund Act of
10 1965 (16 U.S.C. 4601–8) to States, on a com-
11 petitive basis—

12 (i) in accordance with comprehensive
13 wildlife conservation strategies and Indian
14 tribes, to carry out adaptation activities
15 through the acquisition of land and inter-
16 ests in land;

17 (ii) notwithstanding section 5 of that
18 Act (16 U.S.C. 4601–7); and

19 (iii) in addition to grants provided
20 pursuant to—

21 (I) annual appropriations Acts;

22 (II) the Energy Policy Act of
23 2005 (42 U.S.C. 15801 et seq.); or

24 (III) any other authorization for
25 nonadaptation needs;

1 (B) $\frac{1}{3}$ shall be allocated to the Secretary
2 to carry out adaptation activities through the
3 acquisition of lands and interests in land under
4 section 7 of the Land and Water Conservation
5 Fund Act of 1965 (16 U.S.C. 4601–9);

6 (C) $\frac{1}{6}$ shall be allocated to the Secretary
7 of Agriculture and made available to the States
8 to carry out adaptation activities through the
9 acquisition of land and interests in land under
10 section 7 of the Forest Legacy Program under
11 the Cooperative Forestry Assistance Act of
12 1978 (16 U.S.C. 2103c); and

13 (D) $\frac{1}{3}$ shall be allocated to the Secretary
14 of Agriculture to carry out adaptation activities
15 through the acquisition of land and interests in
16 land under section 7 of the Land and Water
17 Conservation Fund Act of 1965 (16 U.S.C.
18 4601–9).

19 (4) EXPENDITURE OF FUNDS.—In allocating
20 funds under subsection (c), the Secretary and the
21 Secretary of Agriculture shall take into consideration
22 factors including—

23 (A) the availability of non-Federal con-
24 tributions from State, local, or private sources;

1 (B) opportunities to protect wildlife cor-
2 ridors or otherwise to link or consolidate frag-
3 mented habitats;

4 (C) opportunities to reduce the risk of cat-
5 astrophic wildfires, extreme flooding, or other
6 climate-related events that are harmful to fish
7 and wildlife and people;

8 (D) the potential for conservation of spe-
9 cies or habitat types at serious risk due to cli-
10 mate change, ocean acidification, and other
11 stressors; and

12 (E) the potential to provide enhanced ac-
13 cess to land and water for fishing, hunting, and
14 other public recreational uses.

15 (d) FOREST SERVICE.—Of the amounts made avail-
16 able annually to carry out this section, 5 percent shall be
17 allocated to the Secretary of Agriculture for use in funding
18 adaptation activities carried out on national forests and
19 national grasslands under the jurisdiction of the Forest
20 Service, or pursuant to the cooperative Wings Across the
21 Americas Program.

22 (e) ENVIRONMENTAL PROTECTION AGENCY.—Of the
23 amounts made available annually to carry out this section,
24 5 percent shall be allocated to the Administrator for use
25 in adaptation activities restoring and protecting—

1 (1) large-scale freshwater aquatic ecosystems,
2 such as the Everglades, the Great Lakes, Flathead
3 Lake, the Missouri River, the Mississippi River, the
4 Colorado River, the Sacramento-San Joaquin Rivers,
5 the Ohio River, the Columbia-Snake River System,
6 the Apalachicola, Chattahoochee and Flint River
7 System, the Connecticut River, and the Yellowstone
8 River;

9 (2) large-scale estuarine ecosystems, such as
10 Chesapeake Bay, Long Island Sound, Puget Sound,
11 the Mississippi River Delta , San Francisco Bay
12 Delta, Narragansett Bay, and Albemarle-Pamlico
13 Sound; and

14 (3) freshwater and estuarine ecosystems, water-
15 sheds, and basins identified as priorities by the Ad-
16 ministrator, working in cooperation with other Fed-
17 eral agencies, States, local governments, scientists,
18 and other conservation partners.

19 (f) CORPS OF ENGINEERS.—Of the amounts made
20 available annually to carry out this section, 10 percent
21 shall be allocated to the Secretary of the Army for use
22 by the Corps of Engineers to carry out adaptation activi-
23 ties restoring—

1 (1) large-scale freshwater aquatic ecosystems,
2 such as the ecosystems described in subsection
3 (e)(1);

4 (2) large-scale estuarine ecosystems, such as
5 the ecosystems described in subsection (e)(2);

6 (3) freshwater and estuarine ecosystems, water-
7 sheds, and basins identified as priorities by the
8 Corps of Engineers, working in cooperation with
9 other Federal agencies, States, local governments,
10 scientists, and other conservation partners; and

11 (4) habitats or ecosystems under programs such
12 as the Estuary Restoration Act of 2000 (33 U.S.C.
13 2901 et seq.), project modifications for improvement
14 of the environment, and aquatic restoration under
15 section 206 of the Water Resources Development
16 Act of 1996 (33 U.S.C. 2330).

17 (g) DEPARTMENT OF COMMERCE.—Of the amounts
18 made available annually to carry out this section, 10 per-
19 cent shall be allocated to the Secretary of Commerce for
20 use in funding adaptation activities to protect, maintain,
21 and restore coastal, estuarine, and marine resources, habi-
22 tats, and ecosystems, including such activities carried out
23 under—

24 (1) the coastal and estuarine land conservation
25 program;

1 (2) the community-based restoration program;

2 (3) the Coastal Zone Management Act of 1972

3 (16 U.S.C. 1451 et seq.), consistent with subsection

4 (j);

5 (4) the Open Rivers Initiative;

6 (5) the Magnuson Fishery Conservation and

7 Management Act (16 U.S.C. 1801 et seq.);

8 (6) the Marine Mammal Protection Act of 1972

9 (16 U.S.C. 1361 et seq.);

10 (7) the Endangered Species Act of 1973 (16

11 U.S.C. 1531 et seq.);

12 (8) the Marine Protection, Research, and Sanc-

13 tuaries Act of 1972 (33 U.S.C. 1401 et seq.); and

14 (9) the Coral Reef Conservation Act of 2000

15 (16 U.S.C. 6401 et seq.).

16 (h) COST SHARING.—Notwithstanding any other pro-

17 vision of law, a State or Indian tribe that receives a grant

18 under paragraph (1) or (4) of subsection (b) shall provide

19 10 percent of the costs of each activity carried out using

20 amounts under the grant.

21 (i) NATIONAL STRATEGY.—

22 (1) IN GENERAL.—Effective beginning on the

23 date that is 3 years after the date of enactment of

24 this Act, funds made available to the Federal agen-

25 cies under this section shall be used only for activi-

1 ties that are consistent with the national strategy
2 described in paragraph (3).

3 (2) INITIAL PERIOD.—Until the earlier of the
4 date that is 3 years after the date of enactment of
5 this Act or the date on which the President estab-
6 lishes the national strategy described in paragraph
7 (3), Federal agencies and programs shall be eligible
8 to receive funding under this section for adaptation
9 activities conducted pursuant to a workplan estab-
10 lished by the President.

11 (3) NATIONAL STRATEGY.—

12 (A) IN GENERAL.—Not later than
13 _____, the President
14 shall develop and implement a national strategy
15 for assisting fish and wildlife, fish and wildlife
16 habitat, plants, and associated ecological proc-
17 esses in becoming more resilient and adapting
18 to the impacts of climate change and ocean
19 acidification.

20 (B) ADMINISTRATION.—In establishing the
21 national strategy, the President shall—

22 (i) base the national strategy on the
23 best available science, as provided by the
24 Advisory Board;

1 (ii) develop the national strategy in
2 cooperation with State fish and wildlife
3 agencies, State coastal agencies, United
4 States territories, and Indian tribes;

5 (iii) coordinate with the Secretary of
6 the Interior, the Secretary of Commerce,
7 the Secretary of Agriculture, the Secretary
8 of Defense, the Administrator of the Envi-
9 ronmental Protection Agency, and other
10 agencies as appropriate;

11 (iv) consult with local governments,
12 conservation organizations, scientists, and
13 other interested stakeholders; and

14 (v) provide public notice and oppor-
15 tunity for comment.

16 (C) CONTENTS.—The President shall in-
17 clude in the national strategy, at a minimum,
18 prioritized goals and measures and a schedule
19 for implementation—

20 (i) to identify and monitor fish and
21 wildlife, fish and wildlife habitat, plants,
22 and associated ecological processes that are
23 particularly likely to be adversely affected
24 by climate change and ocean acidification

1 and have the greatest need for conserva-
2 tion;

3 (ii) to identify and monitor coastal,
4 estuarine, marine, terrestrial, and fresh-
5 water habitats that are at the greatest risk
6 of being damaged by climate change and
7 ocean acidification;

8 (iii) to assist species in adapting to
9 the impacts of climate change and ocean
10 acidification;

11 (iv) to protect, acquire, maintain, and
12 restore fish and wildlife habitat to build re-
13 siliance to climate change and ocean acidi-
14 fication;

15 (v) to provide habitat linkages and
16 corridors to facilitate fish, wildlife, and
17 plant movement in response to climate
18 change and ocean acidification;

19 (vi) to restore and protect ecological
20 processes that sustain fish, wildlife, and
21 plant populations that are vulnerable to cli-
22 mate change and ocean acidification;

23 (vii) to protect, maintain, and restore
24 coastal, marine, and aquatic ecosystems so
25 that the ecosystems are more resilient and

1 better able to withstand the additional
2 stresses associated with climate change, in-
3 cluding relative sea level rise, and ocean
4 acidification;

5 (viii) to protect ocean and coastal spe-
6 cies from the impact of climate change and
7 ocean acidification;

8 (ix) to incorporate adaptation strate-
9 gies and activities to address relative sea
10 level rise into coastal zone planning;

11 (x) to protect, maintain, and restore
12 ocean and coastal habitats to build healthy
13 and resilient ecosystems, including the pur-
14 chase of coastal and island land; and

15 (xi) to incorporate consideration of cli-
16 mate change and ocean acidification, and
17 to integrate adaptation strategies and ac-
18 tivities for fish and wildlife, fish and wild-
19 life habitat, plants, and associated ecologi-
20 cal processes, in the planning and manage-
21 ment of Federal land and water adminis-
22 tered by the Federal agencies that receive
23 funding under this section.

24 (D) COORDINATION WITH OTHER
25 PLANS.—In developing the national strategy,

1 the President shall, to the maximum extent
2 practicable—

3 (i) take into consideration research
4 and information contained in—

5 (I) State comprehensive wildlife
6 conservation plans;

7 (II) the North American water-
8 fowl management plan;

9 (III) the national fish habitat ac-
10 tion plan;

11 (IV) coastal zone management
12 plans;

13 (V) the reports of the Pew
14 Oceans Commission and the United
15 States Commission on Ocean Policy;
16 and

17 (VI) other relevant plans; and

18 (ii) coordinate and integrate the goals
19 and measures identified in the national
20 strategy with the goals and measures iden-
21 tified in those plans.

22 (E) REVISIONS.—Not later than 5 years
23 after the date on which the strategy is devel-
24 oped, and not less frequently than every 5 years
25 thereafter, the President shall review and up-

1 date the national strategy using the procedures
2 described in this paragraph.

3 (j) STATE COMPREHENSIVE ADAPTATION STRATE-
4 GIES.—

5 (1) IN GENERAL.—Effective beginning on the
6 date that is 3 years after the date of enactment of
7 this Act, funds made available to States under this
8 subtitle shall be used only for activities that are con-
9 sistent with a State strategy that has been approved
10 by the Secretary of the Interior or the Secretary of
11 Commerce, as appropriate.

12 (2) INITIAL PERIOD.—Until the earlier of the
13 date that is 3 years after the date of enactment of
14 this Act or the date on which a State receives ap-
15 proval for an applicable strategy, a State shall be eli-
16 gible to receive funding under this section for adap-
17 tation activities conducted pursuant to the com-
18 prehensive wildlife strategy of the State and, where
19 appropriate, other fish, wildlife and conservation
20 strategies, consistent with national strategy under
21 subsection (i) and in accordance with a workplan de-
22 veloped in coordination with the Secretary of the In-
23 terior or the Secretary of Commerce, as appropriate.

24 (3) REQUIREMENTS.—A State strategy shall—

1 (A) describe the impacts of climate change
2 and ocean acidification on the diversity and
3 health of the fish, wildlife and plant popu-
4 lations, habitats, and associated ecological proc-
5 esses;

6 (B) describe and prioritize proposed con-
7 servation actions to assist fish, wildlife, and
8 plant populations in adapting to those impacts;

9 (C) establish programs for monitoring the
10 impacts of climate change on fish, wildlife, and
11 plant populations, habitats, and associated eco-
12 logical processes;

13 (D) include strategies, specific conservation
14 actions, and a timeframe for implementing con-
15 servation actions for fish, wildlife, and plant
16 populations, habitats, and associated ecological
17 processes;

18 (E) establish methods for assessing the ef-
19 fectiveness of conservation actions taken to as-
20 sist fish, wildlife, and plant populations, habi-
21 tats, and associated ecological processes in
22 adapting to those impacts and for updating
23 those actions to respond appropriately to new
24 information or changing conditions;

1 (F) involve the participation of the State
2 fish and wildlife agency, the State agency re-
3 sponsible for administration of Land and Water
4 Conservation Fund grants, the State Forest
5 Legacy program coordinator, and the State
6 coastal agency;

7 (G) provide for solicitation and consider-
8 ation of public and independent scientific input;

9 (H) take into consideration research and
10 information contained in, and coordinate with
11 and integrate the goals and measures identified
12 in, as appropriate, other fish, wildlife, and habi-
13 tat conservation strategies, including—

14 (i) the national fish habitat action
15 plan;

16 (ii) plans under the North American
17 Wetlands Conservation Act (16 U.S.C.
18 4401 et seq.);

19 (iii) the Federal, State, and local part-
20 nership known as “Partners in Flight”;

21 (iv) federally approved coastal zone
22 management plans under the Coastal Zone
23 Management Act of 1972 (16 U.S.C. 1451
24 et seq.);

1 (v) federally approved regional fishery
2 management plans and habitat conserva-
3 tion activities under the Magnuson Fishery
4 Conservation and Management Act (16
5 U.S.C. 1801 et seq.);

6 (vi) the national coral reef action
7 plan;

8 (vii) recovery plans for threatened
9 species and endangered species under sec-
10 tion 4(f) of the Endangered Species Act of
11 1973 (16 U.S.C. 1533(f));

12 (viii) habitat conservation plans under
13 section 10 of that Act (16 U.S.C. 1539);

14 (ix) other Federal and State plans for
15 imperiled species;

16 (x) the United States shorebird con-
17 servation plan;

18 (xi) the North American waterbird
19 conservation plan; and

20 (xii) other State-based strategies that
21 comprehensively implement adaptation ac-
22 tivities to remediate the effects of climate
23 change and ocean acidification on fish,
24 wildlife, and habitats;

1 (I) be incorporated into revision of the
2 comprehensive wildlife conservation strategy of
3 a State—

4 (i) that has been submitted to the
5 United States Fish and Wildlife Service;
6 and

7 (ii)(I) that has been approved by the
8 Service; or

9 (II) on which a decision on approval is
10 pending; and

11 (J) be incorporated into an approved coast-
12 al zone management plan.

13 (4) UPDATING.—Each State strategy described
14 in paragraph (3) shall be updated at least every 5
15 years.

16 **Subtitle H—International Climate**
17 **Change Adaptation and Na-**
18 **tional Security Program**

19 **SEC. 4801. FINDINGS.**

20 Congress finds that—

21 (1) global climate change represents a poten-
22 tially significant threat multiplier for instability
23 around the world as changing precipitation patterns
24 may exacerbate competition and conflict over agri-
25 cultural, vegetative, and water resources and dis-

1 place people, thus increasing hunger and poverty
2 and causing increased pressure on least developed
3 countries;

4 (2) the strategic, social, political, and economic
5 consequences of global climate change could have
6 disproportionate impacts on least developed coun-
7 tries, which have fewer resources and thus, often
8 fewer emissions;

9 (3) the strategic, social, political, and economic
10 consequences of global climate change are likely to
11 have a greater adverse effect on less developed coun-
12 tries;

13 (4) the consequences of global climate change
14 could pose a danger to the security interest and eco-
15 nomic interest of the United States; and

16 (5) it is in the national security interest of the
17 United States to recognize, plan for, and mitigate
18 the international strategic, social, political, and eco-
19 nomic effects of a changing climate.

20 **SEC. 4802. PURPOSES.**

21 The purposes of this subtitle are—

22 (1) to protect the national security of the
23 United States where such interest can be advanced
24 by minimizing, averting, or increasing resilience to
25 potentially destabilizing climate change impacts;

1 (2) to support the development of national and
2 regional climate change adaptation plans in least de-
3 veloped countries;

4 (3) to support the deployment of technologies
5 that would help least developed countries reduce
6 their greenhouse gas emissions and respond to de-
7 stabilizing impacts of climate change;

8 (4) to provide assistance to least-developed
9 countries and small island developing states with na-
10 tional or regional climate change adaptation plans in
11 the planning, financing, and execution of adaptation
12 projects;

13 (5) to support investments and capital to re-
14 duce vulnerability related to climate change and its
15 impacts, including but not limited to drought, fam-
16 ine, floods, sea level rise, shifts in agricultural zones
17 or seasons, shifts in range that affect economic live-
18 lihoods, and refugees and internally displaced per-
19 sons;

20 (6) to support climate change adaptation re-
21 search in or for least developed countries; and

22 (7) to encourage the identification and adoption
23 of appropriate low-carbon and efficient energy tech-
24 nologies in least-developed countries.

1 **SEC. 4803. ESTABLISHMENT.**

2 (a) ESTABLISHMENT OF PROGRAM.—The Secretary
3 of State, working with the Administrator of the U.S.
4 Agency for International Development (referred to in this
5 subtitle as the “Agency”) and the Administrator, shall es-
6 tablish an International Climate Change Adaptation and
7 National Security Program within the Agency.

8 (b) RESPONSIBILITIES OF PROGRAM.—The Program
9 shall—

10 (1) submit annual reports to the President, the
11 Committees on Environment and Public Works and
12 Foreign Relations of the Senate, and the Commit-
13 tees on Energy and Commerce and Foreign Rela-
14 tions of the House of Representatives, and any other
15 relevant committees on national security, the econ-
16 omy and foreign policy, that describe—

17 (A) the extent to which other countries are
18 committing to reducing greenhouse gas emis-
19 sions through mandatory programs;

20 (B) the extent to which global climate
21 change, through its potential negative impacts
22 on sensitive populations and natural resources
23 in least developed countries, may threaten,
24 cause, or exacerbate political instability or
25 international conflict in those regions; and

1 (C) the ramifications of any potentially de-
2 stabilizing impacts climate change may have on
3 the economic and national security of the
4 United States, including—

5 (i) the creation of refugees; and

6 (ii) international or internal armed
7 conflicts over water, food, land, or other
8 resources;

9 (2) include in each annual report submitted
10 under paragraph (1) a description of how funds
11 made available under section 4804 were spent to en-
12 hance the national security of the United States and
13 assist in avoiding the politically destabilizing impacts
14 of climate change in volatile regions of the world,
15 particularly least developed countries; and

16 (3) identify and recommend the countries in
17 which assistance can have the greatest and most
18 sustainable benefit to reducing vulnerability to cli-
19 mate change, primarily in the form of deploying ad-
20 aptation and greenhouse gas reduction technologies.

21 **SEC. 4804. FUNDING.**

22 (a) CARRYING OUT RECOMMENDATIONS.—All funds
23 deposited into the Climate Change and National Security
24 Fund established by section 4101(4) shall be made avail-
25 able, without further appropriation or fiscal year limita-

1 tion, to carry out the program established under this sub-
2 title.

3 (b) DISTRIBUTION OF FUNDS.—The Administrator
4 of the Agency shall distribute to the International Climate
5 Change Adaptation and National Security Program the
6 funds for the purposes described in section 4802.

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

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

12 **Subtitle I—Emergency Firefighting** 13 **Programs**

14 **SEC. 4901. FINDINGS.**

15 Congress finds that—

16 (1) since 1980, wildfires in the United States
17 have burned almost twice as many acres per year on
18 average than the average burned acreage during the
19 period beginning on January 1, 1920, and ending on
20 December 31, 1979;

21 (2) the wildfire season in the western United
22 States has increased by an average of 78 days dur-
23 ing the 30-year period preceding the date of enact-
24 ment of this Act;

1 (3) researchers predict that the area subject to
2 wildfire damage will increase during the 21st cen-
3 tury by up to 118 percent as a result of climate
4 change;

5 (4) of the annual budget of the Forest Service,
6 the Forest Service used for wildfire suppression ac-
7 tivities—

8 (A) 13 percent in 1991; and

9 (B) 45 percent in 2007; and

10 (5) 1 percent of the largest escaped fires—

11 (A) burn 95 percent of all burned acres;

12 and

13 (B) consume 85 percent of all wildfire
14 fighting costs.

15 **SEC. 4902. BUREAU OF LAND MANAGEMENT EMERGENCY**
16 **FIREFIGHTING PROGRAM.**

17 (a) USE OF FUNDS.—The amounts deposited into the
18 Bureau of Land Management Emergency Firefighting
19 Fund established by section 4101(5) shall be made avail-
20 able, without further appropriation or fiscal year limita-
21 tion, to pay for wildland fire suppression activities the
22 costs of which are in excess of amounts annually appro-
23 priated to the Secretary of the Interior for normal, non-
24 emergency wildland fire suppression activities.

25 (b) ACCOUNTING AND REPORTING.—

1 (1) IN GENERAL.—Not later than 3 years after
2 the date of enactment of this Act, the Secretary of
3 the Interior shall establish an accounting and report-
4 ing system, in accordance and compatible with Na-
5 tional Fire Plan reporting procedures, for the activi-
6 ties carried out under this section.

7 (2) REQUIREMENT.—The system established
8 under paragraph (1) shall require that the Secretary
9 of the Interior shall submit to the Committee on
10 Natural Resources of the House of Representatives
11 and the Committee on Energy and Natural Re-
12 sources of the Senate—

13 (A) a monthly report describing each ex-
14 penditure made from the Bureau of Land Man-
15 agement Emergency Firefighting Fund during
16 the preceding month; and

17 (B) a report at the end of each fiscal year
18 describing the expenditures made from the Bu-
19 reau of Land Management Emergency Fire-
20 fighting Fund during the preceding fiscal year.

21 **SEC. 4903. FOREST SERVICE EMERGENCY FIREFIGHTING**
22 **PROGRAM.**

23 (a) USE OF FUNDS.—The amounts deposited into the
24 Forest Service Emergency Firefighting Fund established
25 by section 4101(6) shall be made available, without fur-

1 ther appropriation or fiscal year limitation, to pay for
2 wildland fire suppression activities the costs of which are
3 in excess of amounts annually appropriated to the Sec-
4 retary of Agriculture for normal, nonemergency wildland
5 fire suppression activities.

6 (b) ACCOUNTING AND REPORTING.—

7 (1) IN GENERAL.—Not later than 3 years after
8 the date of enactment of this Act, the Secretary of
9 Agriculture shall establish an accounting and report-
10 ing system, in accordance and compatible with Na-
11 tional Fire Plan reporting procedures, for the activi-
12 ties carried out under this section.

13 (2) REQUIREMENT.—The system established
14 under paragraph (1) shall require that the Secretary
15 of Agriculture shall submit to the Committee on
16 Natural Resources of the House of Representatives
17 and the Committee on Energy and Natural Re-
18 sources of the Senate—

19 (A) a monthly report describing each ex-
20 penditure made from the Forest Service Emer-
21 gency Firefighting Fund during the preceding
22 month; and

23 (B) a report at the end of each fiscal year
24 describing the expenditures made from the For-

1 est Service Emergency Firefighting Fund dur-
2 ing the preceding fiscal year.

3 **TITLE V—ENERGY EFFICIENCY**

4 **Subtitle A—Appliance Efficiency**

5 **SEC. 5101. RESIDENTIAL BOILERS.**

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

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

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

13 (3) in subparagraph (B)—

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

16 (B) by redesignating clauses (i) through
17 (iii) as subparagraphs (A) through (C), respec-
18 tively, and indenting appropriately;

19 (4) by redesignating paragraph (3) as para-
20 graph (4); and

21 (5) by inserting after paragraph (2) the fol-
22 lowing:

23 “(3) BOILERS.—

24 “(A) IN GENERAL.—Subject to subpara-
25 graphs (B) and (C), boilers manufactured on or

1 after September 1, 2012, shall meet the fol-
 2 lowing 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

3 “(B) AUTOMATIC MEANS FOR ADJUSTING
 4 WATER TEMPERATURE.—

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

15 “(ii) CERTAIN BOILERS.—For a boiler
 16 that fires at 1 input rate, the requirements
 17 of this subparagraph may be satisfied by
 18 providing an automatic means that allows

1 the burner or heating element to fire only
2 when the means has determined that the
3 inferred heat load cannot be met by the re-
4 sidual heat of the water in the system.

5 “(iii) NO INFERRED HEAT LOAD.—
6 When there is no inferred heat load with
7 respect to a hot water boiler, the automatic
8 means described in clauses (i) and (ii)
9 shall limit the temperature of the water in
10 the boiler to not more than 140 degrees
11 Fahrenheit.

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

16 “(C) EXCEPTION.—A boiler that is manu-
17 factured to operate without any need for elec-
18 tricity, any electric connection, any electric
19 gauges, electric pumps, electric wires, or electric
20 devices of any sort, shall not be required to
21 meet the requirements of this subsection.”.

22 **SEC. 5102. REGIONAL VARIATIONS IN HEATING OR COOL-**
23 **ING STANDARDS.**

24 (a) IN GENERAL.—Section 327 of the Energy Policy
25 and Conservation Act (42 U.S.C. 6297) is amended—

1 (1) by redesignating subsections (e), (f), and
2 (g) as subsections (f), (g), and (h), respectively; and

3 (2) by inserting after subsection (d) the fol-
4 lowing:

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

7 “(1) STANDARDS.—

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

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

16 “(i) a national minimum standard;
17 and

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

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

1 “(D) ECONOMIC JUSTIFIABILITY STUDY.—

2 “(i) IN GENERAL.—As a preliminary
3 step in determining the economic justifi-
4 ability of establishing a regional standard
5 under subparagraph (B)(ii), the Secretary
6 shall conduct a study involving stake-
7 holders, including—

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

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

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

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

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

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

22 “(I) shall determine the potential
23 benefits and consequences of pre-
24 scribing regional standards for heat-
25 ing and cooling products; and

1 “(II) may, if favorable to the
2 standards, constitute the evidence of
3 economic justifiability required under
4 this Act.

5 “(E) REGIONAL BOUNDARIES.—Regional
6 boundaries used in establishing regional stand-
7 ards under subparagraph (B)(ii) shall—

8 “(i) conform to State borders; and

9 “(ii) include only contiguous States
10 (other than Alaska and Hawaii), except
11 that on the request of a State, the Sec-
12 retary may divide the State to include a
13 part of the State in each of 2 regions.

14 “(2) NONCOMPLYING PRODUCTS.—If the Sec-
15 retary establishes standards for a region, it shall be
16 unlawful under section 332 to offer for sale at retail,
17 sell at retail, or install within the region products
18 that do not comply with the applicable standards.

19 “(3) DISTRIBUTION IN COMMERCE.—

20 “(A) IN GENERAL.—Except as provided in
21 subparagraph (B), no product manufactured in
22 a manner that complies with a regional stand-
23 ard established under paragraph (1) shall be
24 distributed in commerce without a prominent
25 label affixed to the product that includes—

1 “(i) at the top of the label, in print of
2 not less than 14-point type, the following
3 statement: ‘It is a violation of Federal law
4 for this product to be installed in any
5 State outside the region shaded on the
6 map printed on this label.’;

7 “(ii) below the notice described in
8 clause (i), an image of a map of the United
9 States with clearly defined State bound-
10 aries and names, and with all States in
11 which the product meets or exceeds the
12 standard established pursuant to para-
13 graph (1) shaded in a color or a manner
14 as to be easily visible without obscuring the
15 State boundaries and names; and

16 “(iii) below the image of the map re-
17 quired under clause (ii), the following
18 statement: ‘It is a violation of Federal law
19 for this label to be removed, except by the
20 owner and legal resident of any single-fam-
21 ily home in which this product is in-
22 stalled.’.

23 “(B) ENERGY-EFFICIENCY RATING.—A
24 product manufactured that meets or exceeds all
25 regional standards established under this para-

1 graph shall bear a prominent label affixed to
2 the product that includes at the top of the label,
3 in print of not less than 14-point type, the fol-
4 lowing statement: ‘This product has achieved an
5 energy-efficiency rating under Federal law al-
6 lowing its installation in any State.’.

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

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

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

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

19 (1) in subsection (b)—

20 (A) in paragraph (2), by striking “sub-
21 section (e)” and inserting “subsection (f)”; and

22 (B) in paragraph (3)—

23 (i) by striking “subsection (f)(1)” and
24 inserting “subsection (g)(1)”; and

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

5 **Subtitle B—Building Efficiency**

6 **SEC. 5201. UPDATING STATE BUILDING ENERGY EFFI-** 7 **CIENCY CODES.**

8 Section 304 of the Energy Conservation and Produc-
9 tion Act (42 U.S.C. 6833) is amended to read as follows:

10 **“SEC. 304. UPDATING STATE BUILDING ENERGY EFFI-** 11 **CIENCY CODES.**

12 “(a) UPDATES.—

13 “(1) IN GENERAL.—The Secretary shall sup-
14 port updating the national model building energy
15 codes and standards not later than 3 years after the
16 date of enactment of the Lieberman-Warner Climate
17 Security Act of 2007, and not less frequently every
18 3 years thereafter, to achieve overall energy savings,
19 as compared to the IECC (2006) for residential
20 buildings and ASHRAE Standard 90.1 (2004) for
21 commercial buildings, of at least—

22 “(A) 30 percent, with respect to each edi-
23 tion of a model code or standard published dur-
24 ing the period beginning on January 1, 2010,
25 and ending on December 31, 2019;

1 “(B) 50 percent, with respect to each edi-
2 tion of a model code or standard published on
3 or after January 1, 2020; and

4 “(C) targets for intermediate and subse-
5 quent years, to be established by the Secretary
6 not less than 3 years before the beginning on
7 each target year, in coordination with IECC
8 and ASHRAE Standard 90.1 cycles, at the
9 maximum level of energy efficiency that is tech-
10 nologically feasible and lifecycle cost-effective.

11 “(2) REVISIONS TO IECC AND ASHRAE.—

12 “(A) IN GENERAL.—If the IECC or
13 ASHRAE Standard 90.1 regarding building en-
14 ergy use is revised, not later than 1 year after
15 the date of the revision, the Secretary shall de-
16 termine whether the revision will—

17 “(i) improve energy efficiency in
18 buildings; and

19 “(ii) meet the energy savings goals de-
20 scribed in paragraph (1).

21 “(B) MODIFICATIONS.—

22 “(i) IN GENERAL.—If the Secretary
23 makes a determination under subpara-
24 graph (A)(ii) that a code or standard does
25 not meet the energy savings goals estab-

1 lished under paragraph (1) or if a national
2 model code or standard is not updated for
3 more than 3 years, not later than 1 year
4 after the determination or the expiration of
5 the 3-year period, the Secretary shall es-
6 tablish a modified code or standard that
7 meets the energy savings goals.

8 “(ii) REQUIREMENTS.—

9 “(I) ENERGY SAVINGS.—A modi-
10 fication to a code or standard under
11 clause (i) shall—

12 “(aa) achieve the maximum
13 level of energy savings that is
14 technically feasible and lifecycle
15 cost-effective;

16 “(bb) be achieved through
17 an amendment or supplement to
18 the most recent revision of the
19 IECC or ASHRAE Standard
20 90.1 and taking into consider-
21 ation other appropriate model
22 codes and standards; and

23 “(cc) incorporate available
24 appliances, technologies, and con-
25 struction practices.

1 “(II) TREATMENT AS BASE-
2 LINE.—A modification to a code or
3 standard under clause (i) shall serve
4 as the baseline for the next applicable
5 determination of the Secretary under
6 subparagraph (A)(i).

7 “(C) PUBLIC PARTICIPATION.—The Sec-
8 retary shall—

9 “(i) publish in the Federal Register a
10 notice relating to each goal, determination,
11 and modification under this paragraph;
12 and

13 “(ii) provide an opportunity for public
14 comment regarding the goals, determina-
15 tions, and modifications.

16 “(b) STATE CERTIFICATION OF BUILDING ENERGY
17 CODE UPDATES.—

18 “(1) GENERAL CERTIFICATION.—

19 “(A) IN GENERAL.—Not later than 2 years
20 after the date of enactment of the Lieberman-
21 Warner Climate Security Act of 2007, each
22 State shall certify to the Secretary that the
23 State has reviewed and updated the provisions
24 of the residential and commercial building codes
25 of the State regarding energy efficiency.

1 “(B) ENERGY SAVINGS.—A certification
2 under subparagraph (A) shall include a dem-
3 onstration that the applicable provisions of the
4 State code meet or exceed, as applicable—

5 “(i)(I) the IECC (2006) for residen-
6 tial buildings; or

7 “(II) the ASHRAE Standard 90.1
8 (2004) for commercial buildings; or

9 “(ii) the quantity of energy savings
10 represented by the provisions referred to in
11 clause (i).

12 “(2) REVISION OF CODES AND STANDARDS.—

13 “(A) IN GENERAL.—If the Secretary
14 makes an affirmative determination under sub-
15 section (a)(2)(A)(i) or establishes a modified
16 code or standard under subsection (a)(2)(B),
17 not later than 2 years after the determination
18 or proposal, each State shall certify that the
19 State has reviewed and updated the provisions
20 of the residential and commercial building codes
21 of the State regarding energy efficiency.

22 “(B) ENERGY SAVINGS.—A certification
23 under subparagraph (A) shall include a dem-
24 onstration that the applicable provisions of the
25 State code meet or exceed—

1 “(i) the modified code or standard; or

2 “(ii) the quantity of energy savings
3 represented by the modified code or stand-
4 ard.

5 “(C) FAILURE TO DETERMINE.—If the
6 Secretary fails to make a determination under
7 subsection (a)(2)(A)(i) by the date specified in
8 subsection (a)(2), or if the Secretary makes a
9 negative determination, not later than 2 years
10 after the specified date or the date of the deter-
11 mination, each State shall certify that the State
12 has—

13 “(i) reviewed the revised code or
14 standard; and

15 “(ii) updated the provisions of the res-
16 idential and commercial building codes of
17 the State as necessary to meet or exceed,
18 as applicable—

19 “(I) any provisions of a national
20 code or standard determined to im-
21 prove energy efficiency in buildings; or

22 “(II) energy savings achieved by
23 those provisions through other means.

24 “(c) ACHIEVEMENT OF COMPLIANCE BY STATES.—

1 “(1) IN GENERAL.—Not later than 3 years
2 after the date on which a State makes a certification
3 under subsection (b), the State shall certify to the
4 Secretary that the State has achieved compliance
5 with the building energy code that is the subject of
6 the certification.

7 “(2) RATE OF COMPLIANCE.—The certification
8 shall include documentation of the rate of compli-
9 ance based on independent inspections of a random
10 sample of the new and renovated buildings covered
11 by the State code during the preceding calendar
12 year.

13 “(3) COMPLIANCE.—A State shall be considered
14 to achieve compliance for purposes of paragraph (1)
15 if—

16 “(A) at least 90 percent of new and ren-
17 ovated buildings covered by the State code dur-
18 ing the preceding calendar year substantially
19 meet all the requirements of the code; or

20 “(B) the estimated excess energy use of
21 new and renovated buildings that did not meet
22 the requirements of the State code during the
23 preceding calendar year, as compared to a base-
24 line of comparable buildings that meet the re-
25 quirements of the code, is not more than 10

1 percent of the estimated energy use of all new
2 and renovated buildings covered by the State
3 code during the preceding calendar year.

4 “(d) FAILURE TO CERTIFY.—

5 “(1) EXTENSION OF DEADLINES.—The Sec-
6 retary shall extend a deadline for certification by a
7 State under subsection (b) or (c) for not more than
8 1 additional year, if the State demonstrates to the
9 satisfaction of the Secretary that the State has
10 made—

11 “(A) a good faith effort to comply with the
12 certification requirement; and

13 “(B) significant progress with respect to
14 the compliance.

15 “(2) NONCOMPLIANCE BY STATE.—

16 “(A) IN GENERAL.—A State that fails to
17 submit a certification required under subsection
18 (b) or (c), and to which an extension is not pro-
19 vided under paragraph (1), shall be considered
20 to be out of compliance with this section.

21 “(B) EFFECT ON LOCAL GOVERNMENTS.—

22 A local government of a State that is out of
23 compliance with this section may be considered
24 to be in compliance with this section if the local

1 government meets each applicable certification
2 requirement of this section.

3 “(e) TECHNICAL ASSISTANCE.—

4 “(1) IN GENERAL.—The Secretary shall provide
5 technical assistance (including building energy anal-
6 ysis and design tools, building demonstrations, and
7 design assistance and training) to ensure that na-
8 tional model building energy codes and standards
9 meet the goals described in subsection (a)(1).

10 “(2) ASSISTANCE TO STATES.—The Secretary
11 shall provide technical assistance to States—

12 “(A) to implement this section, including
13 procedures for States to demonstrate that the
14 codes of the States achieve equivalent or great-
15 er energy savings than the national model codes
16 and standards;

17 “(B) to improve and implement State resi-
18 dential and commercial building energy effi-
19 ciency codes; and

20 “(C) to otherwise promote the design and
21 construction of energy-efficient buildings.

22 “(f) INCENTIVE FUNDING.—

23 “(1) IN GENERAL.—The Secretary shall provide
24 incentive funding to States—

25 “(A) to implement this section; and

1 “(B) to improve and implement State resi-
2 dential and commercial building energy effi-
3 ciency codes, including increasing and verifying
4 compliance with the codes.

5 “(2) AMOUNT.—In determining whether, and in
6 what amount, to provide incentive funding under
7 this subsection, the Secretary shall take into consid-
8 eration actions proposed by the State—

9 “(A) to implement this section;

10 “(B) to implement and improve residential
11 and commercial building energy efficiency
12 codes; and

13 “(C) to promote building energy efficiency
14 through use of the codes.

15 “(3) ADDITIONAL FUNDING.—The Secretary
16 shall provide additional funding under this sub-
17 section for implementation of a plan to demonstrate
18 a rate of compliance with applicable residential and
19 commercial building energy efficiency codes at a rate
20 of not less than 90 percent, based on energy per-
21 formance—

22 “(A) to a State that has adopted and is
23 implementing, on a statewide basis—

24 “(i) a residential building energy effi-
25 ciency code that meets or exceeds the re-

1 requirements of the IECC (2006) (or a suc-
2 cessor code that is the subject of an af-
3 firmative determination by the Secretary
4 under subsection (a)(2)(A)(i)); and

5 “(ii) a commercial building energy ef-
6 ficiency code that meets or exceeds the re-
7 quirements of the ASHRAE Standard 90.1
8 (2004) (or a successor standard that is the
9 subject of an affirmative determination by
10 the Secretary under subsection
11 (a)(2)(A)(i)); or

12 “(B) in the case of a State in which no
13 statewide energy code exists for residential
14 buildings or commercial buildings, or in which
15 the State code fails to comply with subpara-
16 graph (A), to a local government that has
17 adopted and is implementing residential and
18 commercial building energy efficiency codes, as
19 described in subparagraph (A).

20 “(4) TRAINING.—Of the amounts made avail-
21 able to carry out this subsection, the Secretary may
22 use not more than \$500,000 for each State to train
23 State and local officials to implement State or local
24 energy codes in accordance with a plan described in
25 paragraph (3).”.

1 **SEC. 5202. CONFORMING AMENDMENT.**

2 Section 303 of the Energy Conservation and Produc-
3 tion Act (42 U.S.C. 6832) is amended by adding at the
4 end the following new paragraph:

5 “(17) IECC.—The term ‘IECC’ means the
6 International Energy Conservation Code.”.

7 **TITLE VI—GLOBAL EFFORT TO**
8 **REDUCE GREENHOUSE GAS**
9 **EMISSIONS**

10 **SEC. 6001. DEFINITIONS.**

11 In this title:

12 (1) **BASELINE EMISSION LEVEL.**—The term
13 “baseline emission level” means, as determined by
14 the Administrator, the total average annual green-
15 house gas emissions attributed to a category of cov-
16 ered goods of a foreign country during the period be-
17 ginning on January 1, 2012, and ending on Decem-
18 ber 31, 2014, based on—

19 (A) relevant data available for that period;
20 and

21 (B) to the extent necessary with respect to
22 a specific category of covered goods, economic
23 and engineering models and best available infor-
24 mation on technology performance levels for the
25 manufacture of that category of covered goods.

1 (2) COMPARABLE ACTION.—The term “com-
2 parable action” means any greenhouse gas regu-
3 latory programs, requirements, and other measures
4 adopted by a foreign country that, in combination,
5 are comparable in effect to actions carried out by
6 the United States to limit greenhouse gas emissions
7 pursuant to this Act, as determined by the Presi-
8 dent, taking into consideration the level of economic
9 development of the foreign country.

10 (3) COMPLIANCE YEAR.—The term “compliance
11 year” means each calendar year for which the re-
12 quirements of this title apply to a category of cov-
13 ered goods of a covered foreign country that is im-
14 ported into the United States.

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

19 (5) COVERED GOOD.—The term “covered good”
20 means a good that (as identified by the Adminis-
21 trator by rule)—

22 (A) is a primary product;

23 (B) generates, in the course of the manu-
24 facture of the good, a substantial quantity of

1 direct greenhouse gas emissions and indirect
2 greenhouse gas emissions; and

3 (C) is closely related to a good the cost of
4 production of which in the United States is af-
5 fected by a requirement of this Act.

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

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

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

21 (9) INTERNATIONAL RESERVE ALLOWANCE.—
22 The term “international reserve allowance” means
23 an allowance (denominated in units of metric tons of
24 carbon dioxide equivalent) that is—

1 (A) purchased from a special reserve of al-
2 lowances pursuant to section 6006(a)(2); and

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

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

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

9 (B) any other manufactured product
10 that—

11 (i) is sold in bulk for purposes of fur-
12 ther manufacture; and

13 (ii) generates, in the course of the
14 manufacture of the product, direct green-
15 house gas emissions and indirect green-
16 house gas emissions that are comparable
17 (on an emissions-per-dollar basis) to emis-
18 sions generated in the manufacture of
19 products by covered facilities in the indus-
20 trial sector.

21 **SEC. 6002. PURPOSES.**

22 The purposes of this title are—

23 (1) to promote a strong global effort to signifi-
24 cantly reduce greenhouse gas emissions;

1 (2) to ensure, to the maximum extent prac-
2 ticable, that greenhouse gas emissions occurring out-
3 side the United States do not undermine the objec-
4 tives of the United States in addressing global cli-
5 mate change; and

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

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

10 (B) measures carried out by the United
11 States that comply with applicable international
12 agreements.

13 **SEC. 6003. INTERNATIONAL NEGOTIATIONS.**

14 (a) **FINDING.**—Congress finds that the purposes de-
15 scribed in section 6002 can be most effectively addressed
16 and achieved through agreements negotiated between the
17 United States and foreign countries.

18 (b) **NEGOTIATING OBJECTIVE.**—

19 (1) **STATEMENT OF POLICY.**—It is the policy of
20 the United States to work proactively under the
21 United Nations Framework Convention on Climate
22 Change and, in other appropriate forums, to estab-
23 lish binding agreements committing all major green-
24 house gas-emitting nations to contribute equitably to
25 the reduction of global greenhouse gas emissions.

1 (2) INTENT OF CONGRESS REGARDING OBJEC-
2 TIVE.—To the extent that the agreements described
3 in subsection (a) involve measures that will affect
4 international trade in any good or service, it is the
5 intent of Congress that the negotiating objective of
6 the United States shall be to focus multilateral and
7 bilateral international agreements on the reduction
8 of greenhouse gas emissions to advance achievement
9 of the purposes described in section 6002.

10 **SEC. 6004. INTERAGENCY REVIEW.**

11 (a) INTERAGENCY GROUP.—

12 (1) ESTABLISHMENT.—The President shall es-
13 tablish an interagency group to carry out this sec-
14 tion.

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

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

20 (b) DETERMINATIONS.—

21 (1) IN GENERAL.—Subject to paragraph (2),
22 the interagency group established under subsection
23 (a)(1) shall determine whether, and the extent to
24 which, each foreign country has taken comparable

1 action to limit the greenhouse gas emissions of the
2 foreign country.

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

7 (c) REPORT TO PRESIDENT.—Not later than Janu-
8 ary 1, 2018, and annually thereafter, the interagency
9 group shall submit to the President a report describing
10 the determinations of the interagency group under sub-
11 section (b).

12 **SEC. 6005. PRESIDENTIAL DETERMINATIONS.**

13 (a) IN GENERAL.—Not later than January 1, 2019,
14 and annually thereafter, the President shall determine
15 whether each foreign country that is subject to interagency
16 review under section 6004(b) has taken comparable action
17 to limit the greenhouse gas emissions of the foreign coun-
18 try, taking into consideration—

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

21 (2) applicable reports submitted under section
22 6004(e).

23 (b) REPORTS.—The President shall—

1 market price of allowances established under
2 section 1201 for the compliance year.

3 (B) MAXIMUM PRICE.—The price for an
4 international reserve allowance under subpara-
5 graph (A) shall not exceed the clearing price for
6 current compliance year allowances established
7 at the most recent auction of allowances by the
8 Corporation.

9 (4) SERIAL NUMBER.—The Administrator shall
10 assign a unique serial number to each international
11 reserve allowance issued under this subsection.

12 (5) TRADING SYSTEM.—The Administrator may
13 establish, by rule, a system for the sale, exchange,
14 purchase, transfer, and banking of international re-
15 serve allowances.

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

20 (7) PROCEEDS.—All proceeds from the sale of
21 international reserve allowances under this sub-
22 section shall be allocated to a program that the Ad-
23 ministrator, in coordination with the Secretary of
24 State, shall establish to mitigate the negative im-

1 pacts of global climate change on disadvantaged
2 communities in other countries.

3 (b) FOREIGN COUNTRY LISTS.—

4 (1) IN GENERAL.—Not later than January 1,
5 2020, and annually thereafter, the President shall
6 develop and publish in the Federal Register 2 lists
7 of foreign countries, in accordance with this sub-
8 section.

9 (2) EXCLUDED LIST.—

10 (A) IN GENERAL.—The President shall
11 identify and publish in a list, to be known as
12 the “excluded list”—

13 (i) each foreign country determined by
14 the President under section 6005(a) to
15 have taken action comparable to that taken
16 by the United States to limit the green-
17 house gas emissions of the foreign country;
18 and

19 (ii) each foreign country the share of
20 total global greenhouse gas emissions of
21 which is below the de minimis percentage
22 described in subparagraph (B).

23 (B) DE MINIMIS PERCENTAGE.—The de
24 minimis percentage referred to in subparagraph
25 (A) is a percentage of total global greenhouse

1 gas emissions of not more than 0.5, as deter-
2 mined by the President, for the most recent cal-
3 endar year for which emissions and other rel-
4 evant data is available, taking into consider-
5 ation, as necessary, the annual average defor-
6 estation rate during a representative period for
7 a foreign country that is a developing country.

8 (3) COVERED LIST.—

9 (A) IN GENERAL.—The President shall
10 identify and publish in a list, to be known as
11 the “covered list”, each foreign country the cov-
12 ered goods of which are subject to the require-
13 ments of this section.

14 (B) REQUIREMENT.—The covered list shall
15 include each foreign country that is not in-
16 cluded on the excluded list under paragraph
17 (2).

18 (c) WRITTEN DECLARATIONS.—

19 (1) IN GENERAL.—Effective beginning January
20 1, 2020, a United States importer of any covered
21 good shall, as a condition of importation or with-
22 drawal for consumption from a warehouse of the
23 covered good, submit to the Administrator and the
24 appropriate office of the U.S. Customs and Border

1 Protection a written declaration with respect to each
2 such importation or withdrawal.

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

5 (A) the applicable covered good is accom-
6 panied by a sufficient number of international
7 reserve allowances, as determined under sub-
8 section (d); or

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

12 (3) INCLUSION.—A written declaration de-
13 scribed in paragraph (2)(A) shall include the unique
14 serial number of each emission allowance associated
15 with the importation of the applicable covered good.

16 (4) FAILURE TO DECLARE.—

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

23 (B) EXCEPTION FOR CERTAIN IMPORTS.—
24 Subparagraph (A) shall not apply to a covered

1 good of a foreign country if the President deter-
2 mines that—

3 (i) the foreign country has taken com-
4 parable action to limit the greenhouse gas
5 emissions of the foreign country, in accord-
6 ance with section 6005;

7 (ii) the United Nations has identified
8 the foreign country as among the least-de-
9 veloped of developing countries; or

10 (iii) the foreign country is on the ex-
11 cluded list under subsection (b)(2).

12 (5) CORRECTED DECLARATION.—

13 (A) IN GENERAL.—If, after making a dec-
14 laration required under this subsection, an im-
15 porter has reason to believe that the declaration
16 contains information that is not correct, the im-
17 porter shall provide a corrected declaration by
18 not later than 30 days after the date of dis-
19 covery of the error, in accordance with subpara-
20 graph (B).

21 (B) METHOD.—A corrected declaration
22 under subparagraph (A) shall be in the form of
23 a letter or other written statement to the Ad-
24 ministrator and the office of the U.S. Customs

1 and Border Protection to which the original
2 declaration was submitted.

3 (d) QUANTITY OF ALLOWANCES REQUIRED.—

4 (1) METHODOLOGY.—

5 (A) IN GENERAL.—The Administrator
6 shall establish, by rule, a method for calculating
7 the required number of international reserve al-
8 lowances that a United States importer must
9 submit, together with a written declaration
10 under subsection (c), for each category of cov-
11 ered goods of each covered foreign country.

12 (B) FORMULA.—The Administrator shall
13 develop a general formula for calculating the
14 international reserve allowance requirement
15 that applies, on a per unit basis, to each cov-
16 ered good of a covered foreign country that is
17 imported during each compliance year.

18 (2) INITIAL COMPLIANCE YEAR.—

19 (A) IN GENERAL.—Subject to subpara-
20 graph (B), the methodology under paragraph
21 (1) shall establish an international reserve al-
22 lowance requirement (per unit imported into the
23 United States) for the initial compliance year
24 for each category of covered goods of each cov-

1 ered foreign country that is equal to the
2 quotient obtained by dividing—

3 (i) the excess, if any, of the total
4 emissions from the covered foreign country
5 that are attributable to the category of
6 covered goods produced during the most
7 recent year for which data are available,
8 over the baseline emission level of the cov-
9 ered foreign country for that category; and

10 (ii) the total quantity of the covered
11 good produced in the covered foreign coun-
12 try during the most recent calendar year.

13 (B) ADJUSTMENTS.—The Administrator
14 shall adjust the requirement under subpara-
15 graph (A)—

16 (i) in accordance with the ratio that—

17 (I) the quantity of allowances
18 that were allocated at no cost to enti-
19 ties within the industry sector manu-
20 facturing the covered goods for the
21 compliance year during which the cov-
22 ered goods were imported into the
23 United States; bears to

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

1 (ii) to take into account the level of
2 economic development of the covered for-
3 eign country in which the covered goods
4 were produced.

5 (3) SUBSEQUENT COMPLIANCE YEARS.—For
6 each subsequent compliance year, the Administrator
7 shall revise, as appropriate, the international reserve
8 allowance requirement applicable to each category of
9 imported covered goods of each covered foreign
10 country to reflect changes in the factors described in
11 paragraph (2)(B).

12 (4) PUBLICATION.—Not later than 90 days be-
13 fore the beginning of each compliance year, the Ad-
14 ministrator shall publish in the Federal Register a
15 schedule describing the required number of inter-
16 national reserve allowances for each category of im-
17 ported covered goods of each covered foreign coun-
18 try, as calculated under this subsection.

19 (e) FOREIGN ALLOWANCES AND CREDITS.—

20 (1) FOREIGN ALLOWANCES.—

21 (A) IN GENERAL.—A United States im-
22 porter may submit, in lieu of an international
23 reserve allowance issued under this section, a
24 foreign allowance or similar compliance instru-
25 ment distributed by a foreign country pursuant

1 to a cap and trade program that represents a
2 comparable action.

3 (B) COMMENSURATE CAP AND TRADE PRO-
4 GRAM.—For purposes of subparagraph (A), a
5 cap and trade program that represents a com-
6 parable action shall include any greenhouse gas
7 regulatory program adopted by a covered for-
8 eign country to limit the greenhouse gas emis-
9 sions of the covered foreign country, if the
10 President certifies that the program—

11 (i)(I) places a quantitative limitation
12 on the total quantity of greenhouse gas
13 emissions of the covered foreign country
14 (expressed in terms of tons emitted per
15 calendar year); and

16 (II) achieves that limitation through
17 an allowance trading system;

18 (ii) satisfies such criteria as the Presi-
19 dent may establish for requirements relat-
20 ing to the enforceability of the cap and
21 trade program, including requirements for
22 monitoring, reporting, verification proce-
23 dures, and allowance tracking; and

24 (iii) is a comparable action.

25 (2) FOREIGN CREDITS.—

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

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

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

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

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

7 (i) **FINAL REGULATIONS.**—Not later than January 1,
8 2019, the Administrator shall promulgate such regulations
9 as the Administrator determines to be necessary to carry
10 out this section.

11 **SEC. 6007. ADJUSTMENT OF INTERNATIONAL RESERVE AL-**
12 **LOWANCE REQUIREMENTS.**

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

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

24 (1) adjust the requirement; or

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

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

9 **TITLE VII—REVIEWS AND**
10 **RECOMMENDATIONS**

11 **SEC. 7001. NATIONAL ACADEMY OF SCIENCES REVIEWS.**

12 (a) IN GENERAL.—Not later than 1 year after the
13 date of enactment of this Act, the Administrator shall
14 offer to enter into a contract with the National Academy
15 of Sciences under which the Academy shall, not later than
16 January 1, 2012, and every 3 years thereafter, submit to
17 Congress and the Administrator a report that includes an
18 analysis of—

19 (1) the latest scientific information and data
20 relevant to global climate change;

21 (2) the performance of this Act and other poli-
22 cies in reducing greenhouse gas emissions and miti-
23 gating the adverse impacts of global climate change;

24 (3) the performance of this Act in ensuring that
25 the Land and Water Conservation Fund established

1 under section 2 of the Land and Water Conservation
2 Fund Act of 1965 (16 U.S.C. 4601–5) receives funds
3 that are sufficient to carry out the purposes of that
4 Fund; and

5 (4) the performance of this Act in ensuring that
6 the Bureau of Land Management and the Forest
7 Service receive funds that are sufficient to enable
8 those agencies to suppress wildland fire effectively
9 and thereby minimize wildfire damage.

10 (b) LATEST SCIENTIFIC INFORMATION.—The anal-
11 ysis required under subsection (a)(1) shall—

12 (1) address existing reports, including the most
13 recent assessment report of the Intergovernmental
14 Panel on Climate Change; and

15 (2) include a description of—

16 (A) trends in and projections for total
17 United States greenhouse gas emissions;

18 (B) trends in and projections for total
19 worldwide greenhouse gas emissions;

20 (C) current and projected future atmos-
21 pheric concentrations of greenhouse gases;

22 (D) current and projected future global av-
23 erage temperature, including an analysis of
24 whether an increase of global average tempera-
25 ture in excess of 3.6 degrees Fahrenheit (2 de-

1 grees Celsius) above the preindustrial average
2 has occurred or is more likely than not to occur
3 in the foreseeable future as a result of anthro-
4 pogenic climate change;

5 (E) current and projected future adverse
6 impacts of global climate change on human
7 populations, wildlife, and natural resources; and

8 (F) trends in and projections for the
9 health of the oceans and ocean ecosystems, in-
10 cluding predicted changes in ocean acidity, tem-
11 peratures, the extent of coral reefs, and other
12 indicators of ocean ecosystem health, resulting
13 from anthropogenic carbon dioxide and climate
14 change.

15 (c) PERFORMANCE OF THIS ACT AND EXISTING
16 TECHNOLOGIES.—The analysis required under subsection
17 (a)(2) shall include a description of—

18 (1) the extent to which this Act, in concert with
19 other policies, will prevent a dangerous increase in
20 global average temperature;

21 (2) the extent to which this Act, in concert with
22 other policies, will prevent dangerous atmospheric
23 concentrations of greenhouse gases;

1 (3) the current and future projected deployment
2 of technologies and practices that reduce or limit
3 greenhouse gas emissions, including—

4 (A) technologies for capture and disposal
5 of greenhouse gases;

6 (B) efficiency improvement technologies;

7 (C) zero-greenhouse gas emitting energy
8 technologies, including solar, wind and geo-
9 thermal technologies; and

10 (D) above- and below-ground biological se-
11 questration technologies;

12 (4) the extent to which this Act and other poli-
13 cies are accelerating the development and commer-
14 cial deployment of technologies and practices that
15 reduce and limit greenhouse gas emissions;

16 (5) the extent to which the allocations and dis-
17 tributions of emission allowances and auction pro-
18 ceeds under this Act are advancing the purposes of
19 this Act, and whether any of those allocations and
20 distributions should be modified, including by in-
21 creasing the percentage of annual Emission Allow-
22 ance Account being auctioned, to better carry out
23 the purposes of this Act;

24 (6) whether the motor vehicle fuel and motor
25 vehicle and nonroad regulations within the scope of

1 Executive Order 13432 (72 Fed. Reg. 27717; relat-
2 ing to cooperation among agencies in protecting the
3 environment with respect to greenhouse gas emis-
4 sions from motor vehicles, nonroad vehicles, and
5 nonroad engines) have been finalized and imple-
6 mented by Federal agencies and departments;

7 (7) whether any other transportation-related
8 programs, including fuel economy standard reform,
9 greenhouse gas vehicle emissions standards, renew-
10 able fuel volume mandates, low-carbon fuel stand-
11 ards, and activities to reduce vehicle miles traveled
12 have been finalized and implemented by any Federal
13 agencies or departments;

14 (8) whether any regulation or program de-
15 scribed in paragraph (12) or (13) is expected to
16 achieve, as compared to the baseline greenhouse gas
17 emissions consistent with the reference case con-
18 tained in the report of the Energy Information Ad-
19 ministration entitled “Annual Energy Outlook
20 2006”, at a minimum—

21 (A) at least a 6.2-percent reduction in cu-
22 mulative greenhouse gas emissions from the
23 light-duty motor vehicle sector, including light-
24 duty vehicles and light-duty trucks, during the

1 period beginning on January 1, 2010, and end-
2 ing on December 31, 2020; or

3 (B) a cumulative reduction of approxi-
4 mately 1,140,000 metric tons of carbon dioxide
5 equivalent, measured on a full fuel cycle basis;

6 (9) whether additional measures, including an
7 increase in the earned income tax credit, a reduction
8 in payroll taxes, or the implementation of electronic
9 benefit transfers by State health and human services
10 agencies to reach low-income individuals who are not
11 required to file Federal income tax returns, are
12 needed to help low- and moderate-income individuals
13 respond to changes in the cost of energy-related
14 goods and services;

15 (10) the feasibility of expanding the definition
16 of the term “covered facility” under this Act;

17 (11) the feasibility of expanding the scope of
18 the compliance obligation established under section
19 1202(a);

20 (12) the feasibility of reducing the number of
21 emission allowances comprising the Emission Allow-
22 ance Account for 1 or more calendar years under
23 this Act; and

1 (13) the feasibility of establishing policies for
2 reducing greenhouse gas emissions over and above
3 those policies established by this Act.

4 **SEC. 7002. ENVIRONMENTAL PROTECTION AGENCY RE-**
5 **VIEW.**

6 Not later than January 1, 2012, the Administrator
7 shall submit to Congress a report indicating—

8 (1) the latest scientific information and data
9 relevant to the health effects of mercury emissions
10 from coal-fired electric power generating facilities;

11 (2) the state of the technology designed to re-
12 duce mercury emissions from coal combustion, in-
13 cluding the efficacy of the technology with respect to
14 each coal type; and

15 (3) the extent to which the implementation of
16 this Act is assisting in bringing concentrations of
17 particulate matter and ozone into line with National
18 Ambient Air Quality Standards.

19 **SEC. 7003. ENVIRONMENTAL PROTECTION AGENCY REC-**
20 **COMMENDATIONS.**

21 (a) REVIEW.—Not later than January 1, 2013, and
22 every 3 years thereafter, the Administrator shall submit
23 to Congress recommendations for action in response to the
24 most recent report submitted by the National Academy of

1 Sciences under section 7001 and the report submitted by
2 the Administrator under section 7002.

3 (b) CATEGORIES OF ACTION.—The categories of ac-
4 tion eligible for inclusion in the recommendations sub-
5 mitted under subsection (a) include proposed legislation
6 recommending—

7 (1) expansion of the definition of the term “cov-
8 ered facility” under this Act;

9 (2) expansion of the scope of the compliance ob-
10 ligation established under section 1202;

11 (3) adjustment of the number of emission allow-
12 ances comprising the Emission Allowance Account
13 for 1 or more calendar years under this Act;

14 (4) establishment of policies for reducing green-
15 house gas emissions over and above those policies es-
16 tablished under this Act; and

17 (5) establishment of policies for reducing na-
18 tionwide emissions into the atmosphere of sulfur di-
19 oxide, nitrogen oxides, and mercury in excess of the
20 reductions resulting from the implementation of this
21 Act.

22 (c) CONSISTENCY WITH REVIEWS.—The Adminis-
23 trator shall include with each submission of recommenda-
24 tions under subsection (a) an explanation of any inconsis-
25 tencies between the recommendations and the reviews sub-

1 mitted by the National Academy of Sciences under section
2 7001 and the report submitted by the Administrator
3 under section 7002.

4 (d) SAVINGS CLAUSE.—Nothing in this title limits,
5 procedurally affects, or otherwise restricts the authority
6 of the Administrator, a State, or any person to use au-
7 thorities under this Act or any other law to adopt or en-
8 force any rule.

9 **SEC. 7004. PRESIDENTIAL RECOMMENDATIONS.**

10 (a) ESTABLISHMENT OF THE INTERAGENCY CLI-
11 MATE CHANGE TASK FORCE.—Not later than January 1,
12 2019, the President shall establish an Interagency Climate
13 Change Task Force.

14 (b) COMPOSITION.—The members of the Interagency
15 Climate Change Task Force shall be—

16 (1) the Administrator;

17 (2) the Secretary of Energy;

18 (3) the Secretary of the Treasury;

19 (4) the Secretary of Commerce; and

20 (5) such other Cabinet Secretaries as the Presi-
21 dent may name to the membership of the Task
22 Force.

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

25 (d) REPORT TO PRESIDENT.—

1 (1) IN GENERAL.—Not later than April 1,
2 2019, the Task Force shall make public and submit
3 to the President a consensus report making rec-
4 ommendations, including specific legislation for the
5 President to recommend to Congress.

6 (2) BASIS.—The report shall be based on the
7 third set of recommendations submitted by the Ad-
8 ministrator to Congress under section 7003.

9 (3) INCLUSIONS.—The Task Force shall include
10 with the consensus report an explanation of any in-
11 consistencies between the consensus report and the
12 third set of recommendations submitted by the Ad-
13 ministrator to Congress under section 7003.

14 (e) PRESIDENTIAL RECOMMENDATION TO CON-
15 GRESS.—Not later than July 1, 2020, the President shall
16 submit to Congress the text of a proposed Act based on
17 the consensus report submitted to the President under
18 subsection (d).

19 **SEC. 7005. ADAPTATION ASSESSMENTS AND PLAN.**

20 (a) REGIONAL ESTIMATES.—

21 (1) ESTIMATES.—

22 (A) IN GENERAL.—The Administrator, in
23 consultation with the officials described in para-
24 graph (2) and relevant State agencies, shall
25 conduct 6 regional infrastructure cost assess-

1 ments in various regions of the United States,
2 and a national cost assessment, to provide esti-
3 mates of the range of costs that should be an-
4 ticipated for adaptation to the impacts of cli-
5 mate change.

6 (B) VARIOUS PROBABILITIES.—The Ad-
7 ministrators shall develop the estimates under
8 subparagraph (A) for low, medium, and high
9 probabilities of climate change and the potential
10 impacts of climate change.

11 (2) DESCRIPTION OF OFFICIALS.—The officials
12 referred to in paragraph (1) are—

13 (A) the Secretary of Agriculture;

14 (B) the Secretary of Commerce;

15 (C) the Secretary of Defense;

16 (D) the Secretary of Energy;

17 (E) the Secretary of Health and Human
18 Services;

19 (F) the Secretary of Homeland Security;

20 (G) the Secretary of Housing and Urban
21 Development;

22 (H) the Secretary of the Interior;

23 (I) the Secretary of Transportation;

24 (J) the Director of United States Geologi-
25 cal Survey; and

1 (K) the heads of such other Federal agen-
2 cies and departments as the Administrator de-
3 termines to be necessary.

4 (3) SUBMISSION TO CONGRESS.—Not later than
5 1 year after the date of enactment of this Act, the
6 Administrator shall submit to Congress a report de-
7 scribing the results of the assessments conducted
8 under this subsection.

9 (b) ADAPTATION PLAN.—

10 (1) IN GENERAL.—Not later than 180 days
11 after the date of enactment of this Act, the Adminis-
12 trator shall submit to Congress a climate change ad-
13 aptation plan for the United States, based on—

14 (A) assessments performed by the United
15 Nations Intergovernmental Panel on Climate
16 Change in accordance with the Global Change
17 Research Act of 1990 (15 U.S.C. 2921 et seq.);
18 and

19 (B) any other scientific, peer-reviewed re-
20 gional assessments.

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

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

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

6 (C) requirements for coordination among
7 the Federal Government, industry, and commu-
8 nities;

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

12 (E) an assessment of climate change tech-
13 nology needs; and

14 (F) regional and national cost assessments
15 for the range of costs that should be anticipated
16 for adapting to the impacts of climate change.

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

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

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

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

1 (ii) developing countries;

2 (B)(i) an identification of appropriate cli-
3 mate change adaptation measures and pro-
4 grams for developing countries and low-income
5 populations;

6 (ii) an assessment of the impact of the
7 measures and programs on low-income popu-
8 lations; and

9 (C) an estimate of the costs of developing
10 and implementing those climate change adapta-
11 tion and mitigation programs.

12 (2) REPORT.—Not later than 1 year after the
13 date of enactment of this Act, the Administrator
14 shall submit to Congress a report describing the re-
15 sults of the research conducted under paragraph (1).

16 **TITLE VIII—FRAMEWORK FOR**
17 **GEOLOGICAL SEQUESTRA-**
18 **TION OF CARBON DIOXIDE**

19 **SEC. 8001. NATIONAL DRINKING WATER REGULATIONS.**

20 (a) IN GENERAL.—Section 1421 of the Safe Drink-
21 ing Water Act (42 U.S.C. 300h) is amended—

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

24 (2) by redesignating subsection (d) as sub-
25 section (e); and

1 (3) by inserting after subsection (c) the fol-
2 lowing:

3 “(d) CARBON DIOXIDE.—

4 “(1) REGULATIONS.—Not later than 1 year
5 after the date of enactment of the Lieberman-War-
6 ner Climate Security Act of 2007, the Administrator
7 shall promulgate regulations for permitting commer-
8 cial-scale underground injection of carbon dioxide for
9 purposes of geological sequestration to address cli-
10 mate change, including provisions—

11 “(A) for monitoring and controlling the
12 long-term storage of carbon dioxide and avoid-
13 ing, to the maximum extent practicable, any re-
14 lease of carbon dioxide into the atmosphere,
15 and for ensuring protection of underground
16 sources of drinking water, human health, and
17 the environment; and

18 “(B) relating to long-term liability associ-
19 ated with commercial-scale geological sequestra-
20 tion.

21 “(2) SUBSEQUENT REPORTS.—Not later than 5
22 years after the date on which regulations are pro-
23 mulgated pursuant to paragraph (1), and not less
24 frequently than once every 5 years thereafter, the
25 Administrator shall submit to Congress a report that

1 contains an evaluation of the effectiveness of the
2 regulations, based on current knowledge and experi-
3 ence, with particular emphasis on any new informa-
4 tion on potential impacts of commercial-scale geo-
5 logical sequestration on drinking water, human
6 health, and the environment.

7 “(3) REVISION.—If the Administrator deter-
8 mines, based on a report under paragraph (2), that
9 regulations promulgated pursuant to paragraph (1)
10 require revision, the Administrator shall promulgate
11 revised regulations not later than 1 year after the
12 date on which the applicable report is submitted to
13 Congress under paragraph (2).”.

14 (b) CONFORMING AMENDMENT.—Section 1447(a)(4)
15 of the Safe Drinking Water Act (42 U.S.C. 300j–6(a)(4))
16 is amended by striking “section 1421(d)(2)” and inserting
17 “section 1421(e)(2)”.

18 **SEC. 8002. ASSESSMENT OF GEOLOGICAL STORAGE CAPAC-**
19 **ITY FOR CARBON DIOXIDE.**

20 (a) DEFINITIONS.—In this section:

21 (1) ASSESSMENT.—The term “assessment”
22 means the national assessment of capacity for car-
23 bon dioxide completed under subsection (f).

24 (2) CAPACITY.—The term “capacity” means the
25 portion of a storage formation that can retain car-

1 bon dioxide in accordance with the requirements (in-
2 cluding physical, geological, and economic require-
3 ments) established under the methodology developed
4 under subsection (b).

5 (3) ENGINEERED HAZARD.—The term “engi-
6 neered hazard” includes the location and completion
7 history of any well that could affect a storage forma-
8 tion or capacity.

9 (4) RISK.—The term “risk” includes any risk
10 posed by a geomechanical, geochemical,
11 hydrogeological, structural, or engineered hazard.

12 (5) SECRETARY.—The term “Secretary” means
13 the Secretary of the Interior, acting through the Di-
14 rector of the United States Geological Survey.

15 (6) STORAGE FORMATION.—The term “storage
16 formation” means a deep saline formation,
17 unmineable coal seam, oil or gas reservoir, or other
18 geological formation that is capable of accommo-
19 dating a volume of industrial carbon dioxide.

20 (b) METHODOLOGY.—Not later than 1 year after the
21 date of enactment of this Act, the Secretary shall develop
22 a methodology for conducting an assessment under sub-
23 section (f), taking into consideration—

24 (1) the geographical extent of all potential stor-
25 age formations in all States;

1 (2) the capacity of the potential storage forma-
2 tions;

3 (3) the injectivity of the potential storage forma-
4 tions;

5 (4) an estimate of potential volumes of oil and
6 gas recoverable by injection and storage of industrial
7 carbon dioxide in potential storage formations;

8 (5) the risk associated with the potential stor-
9 age formations; and

10 (6) the work performed to develop the Carbon
11 Sequestration Atlas of the United States and Can-
12 ada completed by the Department of Energy in April
13 2006.

14 (c) COORDINATION.—

15 (1) FEDERAL COORDINATION.—

16 (A) CONSULTATION.—The Secretary shall
17 consult with the Secretary of Energy and the
18 Administrator regarding data sharing and the
19 format, development of methodology, and con-
20 tent of the assessment to ensure the maximum
21 usefulness and success of the assessment.

22 (B) COOPERATION.—The Secretary of En-
23 ergy and the Administrator shall cooperate with
24 the Secretary to ensure, to the maximum extent

1 practicable, the usefulness and success of the
2 assessment.

3 (2) STATE COORDINATION.—The Secretary
4 shall consult with State geological surveys and other
5 relevant entities to ensure, to the maximum extent
6 practicable, the usefulness and success of the assess-
7 ment.

8 (d) EXTERNAL REVIEW AND PUBLICATION.—On
9 completion of the methodology under subsection (b), the
10 Secretary shall—

11 (1) publish the methodology and solicit com-
12 ments from the public and the heads of affected
13 Federal and State agencies;

14 (2) establish a panel of individuals with exper-
15 tise in the matters described in paragraphs (1)
16 through (5) of subsection (b) composed, as appro-
17 priate, of representatives of Federal agencies, insti-
18 tutions of higher education, nongovernmental organi-
19 zations, State organizations, industry, and inter-
20 national geosciences organizations to review the
21 methodology and comments received under para-
22 graph (1); and

23 (3) on completion of the review under para-
24 graph (2), publish in the Federal Register the re-
25 vised final methodology.

1 (e) PERIODIC UPDATES.—The methodology devel-
2 oped under this section shall be updated periodically (in-
3 cluding not less frequently than once every 5 years) to in-
4 corporate new data as the data becomes available.

5 (f) NATIONAL ASSESSMENT.—

6 (1) IN GENERAL.—Not later than 2 years after
7 the date of publication of the methodology under
8 subsection (d)(3), the Secretary, in consultation with
9 the Secretary of Energy and State geological sur-
10 veys, shall complete a national assessment of the ca-
11 pacity for carbon dioxide storage in accordance with
12 the methodology.

13 (2) GEOLOGICAL VERIFICATION.—As part of
14 the assessment, the Secretary shall carry out a char-
15 acterization program to supplement the geological
16 data relevant to determining storage capacity in car-
17 bon dioxide in geological storage formations, includ-
18 ing—

19 (A) well log data;

20 (B) core data; and

21 (C) fluid sample data.

22 (3) PARTNERSHIP WITH OTHER DRILLING PRO-
23 GRAMS.—As part of the drilling characterization
24 under paragraph (2), the Secretary shall enter into
25 partnerships, as appropriate, with other entities to

1 collect and integrate data from other drilling pro-
2 grams relevant to the storage of carbon dioxide in
3 geologic formations.

4 (4) INCORPORATION INTO NATCARB.—

5 (A) IN GENERAL.—On completion of the
6 assessment, the Secretary shall incorporate the
7 results of the assessment using, to the max-
8 imum extent practicable—

9 (i) the NatCarb database; or

10 (ii) a new database developed by the
11 Secretary, as the Secretary determines to
12 be necessary.

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

16 (i) for capacity and risk;

17 (ii) across the United States;

18 (iii) within each State;

19 (iv) by formation; and

20 (v) within each basin.

21 (5) REPORT.—Not later than 180 days after
22 the date on which the assessment is completed, the
23 Secretary shall submit to the Committee on Energy
24 and Natural Resources of the Senate and the Com-
25 mittee on Science and Technology of the House of

1 Representatives a report describing the results of the
2 assessment.

3 (6) PERIODIC UPDATES.—The assessment shall
4 be updated periodically (including not less frequently
5 than once every 5 years) as necessary to support
6 public and private sector decisionmaking, as deter-
7 mined by the Secretary.

8 **SEC. 8003. STUDY OF THE FEASIBILITY RELATING TO CON-**
9 **STRUCTION OF PIPELINES AND GEOLOGICAL**
10 **CARBON DIOXIDE SEQUESTRATION ACTIVI-**
11 **TIES.**

12 (a) IN GENERAL.—The Secretary of Energy, in co-
13 ordination with the Administrator, the Federal Energy
14 Regulatory Commission, the Secretary of Transportation,
15 and the Secretary of the Interior, shall conduct a study
16 to assess the feasibility of the construction of—

17 (1) pipelines to be used for the transportation
18 of carbon dioxide for the purpose of sequestration or
19 enhanced oil recovery; and

20 (2) geological carbon dioxide sequestration fa-
21 cilities.

22 (b) SCOPE.—The study shall consider—

23 (1) any barrier or potential barrier in existence
24 as of the date of enactment of this Act, including

1 any technical, siting, financing, or regulatory bar-
2 rier, relating to—

3 (A) the construction of pipelines to be used
4 for the transportation of carbon dioxide for the
5 purpose of sequestration or enhanced oil recov-
6 ery; or

7 (B) the geological sequestration of carbon
8 dioxide;

9 (2) any market risk (including throughput risk)
10 relating to—

11 (A) the construction of pipelines to be used
12 for the transportation of carbon dioxide for the
13 purpose of sequestration or enhanced oil recov-
14 ery; or

15 (B) the geological sequestration of carbon
16 dioxide;

17 (3) any regulatory, financing, or siting option
18 that, as determined by the Secretary of Energy,
19 would—

20 (A) mitigate any market risk described in
21 paragraph (2); or

22 (B) help ensure the construction of pipe-
23 lines dedicated to the transportation of carbon
24 dioxide for the purpose of sequestration or en-
25 hanced oil recovery;

1 Federal assumption of liability with respect to closed geo-
2 logical storage sites.

3 (b) REPORT.—Not later than 18 months after the
4 date of enactment of this Act, the task force established
5 under subsection (a) shall submit to Congress a report de-
6 scribing the results of the study conducted under sub-
7 section (a), including recommendations of the task force,
8 if any, with respect to the framework described in that
9 subsection.

10 **TITLE IX—MISCELLANEOUS**

11 **SEC. 9001. PARAMOUNT INTEREST WAIVER.**

12 (a) IN GENERAL.—If the President determines that
13 a national security emergency exists and, in light of infor-
14 mation that was not available as of the date of enactment
15 of this Act, it is in the paramount interest of the United
16 States to modify any requirement under this Act to mini-
17 mize the effects of the emergency, the President may,
18 after opportunity for public notice and comment, tempo-
19 rarily adjust, suspend, or waive any regulations promul-
20 gated pursuant to this Act to achieve that minimization.

21 (b) CONSULTATION.—In making an emergency deter-
22 mination under subsection (a), the President shall, to the
23 maximum extent practicable, consult with and take into
24 account any advice received from—

25 (1) the National Academy of Sciences;

1 (2) the Secretary of Energy; and

2 (3) the Administrator.

3 (c) JUDICIAL REVIEW.—An emergency determination
4 under subsection (a) shall be subject to judicial review in
5 accordance with section 307 of the Clean Air Act (42
6 U.S.C. 7607).

7 **SEC. 9002. ADMINISTRATIVE PROCEDURE AND JUDICIAL**
8 **REVIEW.**

9 (a) RULEMAKING PROCEDURES.—Any rule, require-
10 ment, regulation, method, standard, program, determina-
11 tion, or final action made or promulgated pursuant to any
12 title of this Act, with the exception of sections 3101, 3102,
13 3201, and 3901, shall be subject to the rulemaking proce-
14 dures described in sections 551 through 557 of title 5,
15 United States Code.

16 (b) ENFORCEMENT.—Each provision of this Act (in-
17 cluding provisions relating to mandatory duties of the Ad-
18 ministrator) shall be fully enforceable pursuant to sections
19 113, 303, and 304 of the Clean Air Act (42 U.S.C. 7413,
20 7603, 7604).

21 (c) RECORDKEEPING, INSPECTIONS, MONITORING,
22 ENTRY, AND SUBPOENAS.—The Administrator shall have
23 the same powers and authority provided under sections
24 114 and 307(a) of the Clean Air Act (42 U.S.C. 7414,

1 7607(a)) in carrying out, administering, and enforcing
2 this Act.

3 (d) JUDICIAL REVIEW.—A petition for judicial review
4 of any regulation promulgated, or final action carried out,
5 by the Administrator pursuant to this Act may be filed
6 only—

7 (1) in the United States Court of Appeals for
8 the District of Columbia; and

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

11 **SEC. 9003. RETENTION OF STATE AUTHORITY.**

12 (a) IN GENERAL.—Except as provided in subsection
13 (b), in accordance with section 116 of the Clean Air Act
14 (42 U.S.C. 7416) and section 510 of the Federal Water
15 Pollution Control Act (33 U.S.C. 1370), nothing in this
16 Act precludes or abrogates the right of any State to adopt
17 or enforce—

18 (1) any standard, cap, limitation, or prohibition
19 relating to emissions of greenhouse gas; or

20 (2) any requirement relating to control, abate-
21 ment, or avoidance of emissions of greenhouse gas.

22 (b) EXCEPTION.—Notwithstanding subsection (a), no
23 State may adopt a standard, cap, limitation, prohibition,
24 or requirement that is less stringent than the applicable

1 standard, cap, limitation, prohibition, or requirement
2 under this Act.

3 **SEC. 9004. TRIBAL AUTHORITY.**

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

8 **SEC. 9005. AUTHORIZATION OF APPROPRIATIONS.**

9 There are authorized to be appropriated such sums
10 as are necessary to carry out this Act.

11 **TITLE X—CONTROL OF**
12 **HYDROFLUOROCARBON CON-**
13 **SUMPTION**

14 **SEC. 10001. APPLICABILITY.**

15 For purposes of this Act, it shall be unlawful for any
16 person to produce or import for consumption in the United
17 States any hydrofluorocarbon, or product or equipment
18 containing a hydrofluorocarbon, except exclusively in ac-
19 cordance with this title and the regulations promulgated
20 by the Administrator pursuant to this title.

21 **SEC. 10002. DEFINITIONS.**

22 In this title:

23 (1) **BASELINE.**—The term “baseline” means
24 the global warming potential-weighted equivalent of
25 300,000,000 metric tons of carbon dioxide.

1 (2) ENTITY; PERSON.—The terms “entity” and
2 “person” have the meaning given the term “person”
3 in section 551 of title 5, United States Code.

4 (3) GLOBAL WARMING POTENTIAL.—

5 (A) IN GENERAL.—The term “global
6 warming potential” means the potential con-
7 tribution to global warming of a
8 hydrofluorocarbon, as compared to the potential
9 contribution to global warming of an equal
10 weight of carbon dioxide.

11 (B) CALCULATION.—For the purposes of
12 calculating the global warming potential of a
13 hydrofluorocarbon, the values for the 100-year
14 time horizon in the fourth assessment report of
15 the Intergovernmental Panel on Climate
16 Change shall be used.

17 (4) GLOBAL WARMING POTENTIAL-WEIGHT-
18 ED.—The term “global warming potential-weight-
19 ed”, with respect to a hydrofluorocarbon, means the
20 value equal to the product obtained, for purposes of
21 determining the quantity of carbon dioxide with an
22 equivalent global warming potential, by multi-
23 plying—

24 (A) a certain quantity of the
25 hydrofluorocarbon; and

1 (B) the global warming potential of the
2 hydrofluorocarbon.

3 (5) HYDROCHLOROFLUOROCARBON.—The term
4 “hydrochlorofluorocarbon” means any
5 hydrochlorofluorocarbon identified in section 602(b)
6 of the Clean Air Act (42 U.S.C. 7671a(b)).

7 (6) HYDROFLUOROCARBON.—The term
8 “hydrofluorocarbon” means a hydrofluoroalkane.

9 (7) HYDROFLUOROCARBON CONSUMPTION.—

10 (A) IN GENERAL.—The term
11 “hydrofluorocarbon consumption”, with respect
12 to a hydrofluorocarbon, means—

13 (i) in the case of a hydrofluorocarbon
14 producer, a value equal to the difference
15 between—

16 (I) a value equal to the sum of—

17 (aa) the quantity of the
18 hydrofluorocarbon produced in
19 the United States; and

20 (bb) the quantity of the
21 hydrofluorocarbon imported from
22 any source into the United States
23 or acquired in the United States
24 from another hydrofluorocarbon

1 producer through sale or other
2 transaction; and

3 (II) the quantity of the
4 hydrofluorocarbon exported or trans-
5 ferred to another hydrofluorocarbon
6 producer or importer in the United
7 States through sale or other trans-
8 action; and

9 (ii) in the case of a hydrofluorocarbon
10 importer, a value equal to the difference
11 between—

12 (I) the quantity of the
13 hydrofluorocarbon imported from any
14 source into the United States; and

15 (II) the quantity of the
16 hydrofluorocarbon exported.

17 (B) EXCLUSION.—The term
18 “hydrofluorocarbon consumption” does not in-
19 clude a quantity of hydrofluorocarbon that is
20 recycled.

21 (8) HYDROFLUOROCARBON CONSUMPTION AL-
22 LOWANCE.—The term “hydrofluorocarbon consump-
23 tion allowance” means an authorization—

24 (A) to produce or import a global warming
25 potential-weighted quantity of

1 hydrofluorocarbon equivalent to 1 metric ton of
2 carbon dioxide; or

3 (B) to import products or equipment con-
4 taining a quantity of hydrofluorocarbon equiva-
5 lent in global warming potential to 1 metric ton
6 of carbon dioxide.

7 (9) HYDROFLUOROCARBON DESTRUCTION.—

8 The term “hydrofluorocarbon destruction” means a
9 process that results in the permanent transformation
10 or decomposition of all or a significant portion of a
11 hydrofluorocarbon to another gas, liquid, or solid
12 with a lower or zero global warming potential.

13 (10) HYDROFLUOROCARBON DESTRUCTION AL-

14 LOWANCE.—The term “hydrofluorocarbon destruc-
15 tion allowance” means an authorization to produce
16 or import a global warming potential-weighted quan-
17 tity of hydrofluorocarbon equal to the global warm-
18 ing potential-weighted quantity of hydrofluorocarbon
19 destroyed pursuant to section 10010.

20 (11) HYDROFLUOROCARBON IMPORTER.—The

21 term “hydrofluorocarbon importer” means an entity
22 that imported hydrofluorocarbon or products or
23 equipment containing hydrofluorocarbon into the
24 United States during calendar year 2005.

1 (12) HYDROFLUOROCARBON PRODUCER.—The
2 term “hydrofluorocarbon producer” means an entity
3 that produced hydrofluorocarbon in the United
4 States for sale in the United States during calendar
5 year 2005.

6 (13) IMPORT.—The term “import” means the
7 action of landing on or bringing or introducing a
8 product into, or attempting to land on or bring or
9 introduce a product into, any area subject to the ju-
10 risdiction of the United States, regardless of whether
11 the action constitutes an importation within the
12 meaning of the customs laws of the United States.

13 (14) PRODUCE; PRODUCTION.—

14 (A) IN GENERAL.—The terms “produce”
15 and “production” mean the manufacture of a
16 hydrofluorocarbon from any raw material, feed-
17 stock, or chemical.

18 (B) EXCLUSIONS.—The terms “produce”
19 and “production” do not include—

20 (i) the manufacture of a
21 hydrofluorocarbon that is used and entirely
22 consumed (except for trace quantities) in
23 the manufacture of other chemicals or
24 products; or

1 (ii) the reuse or recycling of a
2 hydrofluorocarbon.

3 (15) RECYCLE; REUSE.—The terms “reuse”
4 and “recycle” mean—

5 (A) the removal of a quantity of
6 hydrofluorocarbon from a product or equip-
7 ment;

8 (B) the reprocessing of the product or
9 equipment to remove impurities; and

10 (C) the offering of the product or equip-
11 ment for sale in the United States.

12 **SEC. 10003. CAP ON HYDROFLUOROCARBON CONSUMPTION**
13 **AND IMPORTATION INTO UNITED STATES.**

14 (a) ESTABLISHMENT.—The Administrator shall es-
15 tablish a cap on hydrofluorocarbon consumption in the
16 United States for each calendar year during the period
17 of calendar years 2010 through 2050, as directed in sec-
18 tion 10004 that shall not be exceeded except as provided
19 in section 10009.

20 (b) PROHIBITION.—Consumption of a
21 hydrofluorocarbon or products or equipment containing
22 any hydrofluorocarbon, except as provided in this title,
23 shall be illegal.

1 **SEC. 10004. HYDROFLUOROCARBON CONSUMPTION ALLOW-**
2 **ANCE ACCOUNT.**

3 (a) ALLOWANCE ACCOUNT.—

4 (1) ESTABLISHMENT.—Not later than April 1,
5 2009, and annually thereafter through April 1,
6 2050, the Administrator shall establish and allocate
7 a separate quantity of hydrofluorocarbon consump-
8 tion allowances.

9 (2) DENOMINATION.—Hydrofluorocarbon con-
10 sumption allowances shall be denominated in metric
11 tons of carbon dioxide equivalent.

12 (b) IDENTIFICATION NUMBERS.—The Administrator
13 shall assign to each hydrofluorocarbon consumption allow-
14 ance established under subsection (a) a unique identifica-
15 tion number that includes the calendar year for which the
16 hydrofluorocarbon consumption allowance was assigned.

17 (c) LEGAL STATUS OF HYDROFLUOROCARBON CON-
18 SUMPTION ALLOWANCES.—

19 (1) IN GENERAL.—A consumption allowance al-
20 located under this title is a limited authorization to
21 produce or import a hydrofluorocarbon and any
22 product or equipment containing a
23 hydrofluorocarbon, in accordance with this title.

24 (2) ALLOWANCE NOT PROPERTY RIGHT.—A
25 hydrofluorocarbon consumption allowance does not
26 constitute a property right.

1 (3) TERMINATION OR LIMITATION.—Nothing in
2 this Act or any other provision of law limits the au-
3 thority of the United States to terminate or limit
4 hydrofluorocarbon consumption allowances.

5 (4) EFFECT OF ACT.—Nothing in this Act re-
6 lating to hydrofluorocarbon consumption allowances
7 shall affect the application of, or any requirement of
8 compliance with, any other provision of law by any
9 person.

10 (d) LIFETIME OF HYDROFLUOROCARBON CONSUMP-
11 TION ALLOWANCES.—Hydrofluorocarbon consumption al-
12 lowances distributed by the Administrator and
13 hydrofluorocarbon destruction allowances may be used for
14 compliance for a period of not more than 5 years after
15 the calendar year for which the allowances are allocated.

16 (e) HYDROFLUOROCARBON CONSUMPTION ALLOW-
17 ANCES FOR EACH CALENDAR YEAR.—The number of
18 hydrofluorocarbon consumption allowances established
19 and allocated by the Administrator for each of calendar
20 years 2010 through 2050 shall be as follows:

Calendar year	HFC consumption allowances (in million metric tons)
2010	300
2011	294
2012	289
2013	283
2014	278
2015	272
2016	267

2017	261
2018	256
2019	250
2020	245
2021	239
2022	234
2023	228
2024	222
2025	217
2026	206
2027	195
2028	184
2029	173
2030	162
2031	150
2032	139
2033	128
2034	117
2035	106
2036	95
2037	90
2038	90
2039	90
2040	90
2041	90
2042	90
2043	90
2044	90
2045	90
2046	90
2047	90
2048	90
2049	90
2050	90

1 SEC. 10005. ALLOCATION OF HYDROFLUOROCARBON CON-
2 SUMPTION ALLOWANCES.

3 (a) IN GENERAL.—Not later than 90 days before the
4 beginning of each applicable calendar year, the Adminis-
5 trator shall allocate the portion of the hydrofluorocarbon
6 consumption allowances in the hydrofluorocarbon con-
7 sumption allowance account that is available for allocation
8 for that calendar year.

9 (b) ELIGIBLE ENTITIES.—

1 (1) IN GENERAL.—The Administrator shall al-
2 locate hydrofluorocarbon consumption allowances as
3 described in paragraph (2) to entities that—

4 (A) were hydrofluorocarbon producers or
5 hydrofluorocarbon importers during the period
6 beginning on January 1, 2004, and ending on
7 December 31, 2006; and

8 (B) are hydrofluorocarbon producers or
9 hydrofluorocarbon importers on the date of en-
10 actment of this Act.

11 (2) DESCRIPTION OF ALLOCATION.—
12 Hydrofluorocarbon consumption allowances shall be
13 allocated to entities described in paragraph (1) as
14 follows:

15 (A) HYDROFLUOROCARBON PRODUCERS.—
16 Each hydrofluorocarbon producer shall receive a
17 quantity of hydrofluorocarbon allowances equal
18 to the ratio that—

19 (i) a value equal to the difference be-
20 tween—

21 (I) the global warming potential-
22 weighted average of 100 percent of
23 the hydrofluorocarbon and 60 percent
24 of the hydrochlorofluorocarbon pro-
25 duced in the United States, imported

1 into the United States, or acquired in
2 the United States by the
3 hydrofluorocarbon producer during
4 the period beginning on January 1,
5 2004, and ending on December 31,
6 2006; and

7 (II) the global warming potential-
8 weighted average of 100 percent of
9 the hydrofluorocarbon and 60 percent
10 of the hydrochlorofluorocarbon that
11 the producer produced in the United
12 States or imported into the United
13 States, as a product or contained in
14 equipment, during the period de-
15 scribed in subclause (I); bears to

16 (ii) a value equal to the difference be-
17 tween—

18 (I) the total global warming po-
19 tential-weighted average of 100 per-
20 cent of the hydrofluorocarbon and 60
21 per cent of the
22 hydrochlorofluorocarbon produced in
23 or imported into the United States, as
24 a product or contained in equipment,

1 during the period described in clause
2 (i)(I); and

3 (II) the global warming potential-
4 weighted average of 100 percent of
5 the hydrofluorocarbon and 60 per cent
6 of the hydrochlorofluorocarbon ex-
7 ported from the United States during
8 that period.

9 (B) HYDROFLUOROCARBON IMPORTERS.—

10 Each hydrofluorocarbon importer shall receive a
11 quantity of hydrofluorocarbon allowances equal
12 to the ratio that—

13 (i) the global warming potential-
14 weighted average of 100 percent of
15 hydrofluorocarbon and 60 percent of
16 hydrochlorofluorocarbon imported by the
17 hydrofluorocarbon importer as a product
18 or contained in equipment, or acquired in
19 the United States from a
20 hydrofluorocarbon producer through sale
21 or other transaction during the period be-
22 ginning on January 1, 2004, and ending
23 on December 31, 2006; bears to

24 (ii) a value equal to the difference be-
25 tween—

1 (I) the total global warming po-
2 tential-weighted average of 100 per-
3 cent of the hydrofluorocarbon and 60
4 per cent of the
5 hydrochlorofluorocarbon produced in,
6 or imported into, the United States
7 during the period described in clause
8 (i); and

9 (II) the global warming potential-
10 weighted average of 100 percent of
11 the hydrofluorocarbon and 60 per cent
12 of the hydrochlorofluorocarbon ex-
13 ported from the United States during
14 that period.

15 (c) WITHHOLDING ALLOWANCES.—

16 (1) IN GENERAL.—For calendar year 2010 and
17 each calendar year thereafter, the Administrator
18 shall withhold a quantity of hydrofluorocarbon con-
19 sumption allowances that would otherwise be allo-
20 cated under subsection (b) for auction at least annu-
21 ally by the Corporation to the entities identified in
22 subsection (b)(1).

23 (2) AUCTIONS BY CORPORATION.—For each ap-
24 plicable calendar year, the Administrator shall with-
25 hold, and the Corporation shall auction to the enti-

1 ties identified in subsection (b)(1), the following
2 quantities of the hydrofluorocarbon consumption al-
3 lowances established under section 10004:

Calendar year	Percent withheld for auction
2010	5
2011	10
2012	10
2013	10
2014	15
2015	20
2016	25
2017	30
2018	35
2019	40
2020	45
2021	50
2022	55
2023	60
2024	65
2025	70
2026	75
2027	80
2028	85
2029	90
2030	95
2031	100
2032	100
2033	100
2034	100
2035	100
2036	100
2037	100
2038	100
2039	100
2040	100
2041	100
2042	100
2043	100
2044	100
2045	100
2046	100
2047	100
2048	100
2049	100
2050	100

1 (3) PROCEEDS.—The Corporation shall award
2 the proceeds of the auction to support the following
3 purposes:

4 (A) A program to recover and destroy the
5 maximum economically recoverable
6 chlorofluorocarbons, halons, and other sub-
7 stances listed under title VI of the Clean Air
8 Act (42 U.S.C. 7671 et seq.) that have signifi-
9 cant ozone depletion potential and global warm-
10 ing potential.

11 (B) A program of incentives for consumer
12 purchases of refrigeration and cooling equip-
13 ment that—

14 (i) contains refrigerants with no or
15 low global warming potential; and

16 (ii) achieves energy efficiency that
17 represents at least a 30 percent improve-
18 ment, as compared to the more efficient
19 of—

20 (I) the applicable Federal energy
21 efficiency standard; and

22 (II) the applicable Energy Star
23 rating.

24 (C) A program to support the development
25 and deployment of—

1 (i) hydrofluorocarbons with low global
2 warming potential; and

3 (ii) energy efficient technologies,
4 equipment, and products containing or
5 using hydrofluorocarbons.

6 (D) The programs receiving auction pro-
7 ceeds under title IV.

8 **SEC. 10006. COMPLIANCE OBLIGATION.**

9 (a) SUBMISSION OF ALLOWANCES.—

10 (1) IN GENERAL.—Not later than 90 days after
11 the end of each applicable calendar year, a
12 hydrofluorocarbon producer or hydrofluorocarbon
13 importer shall submit to the Administrator a quan-
14 tity of hydrofluorocarbon consumption allowances, or
15 hydrofluorocarbon destruction allowances awarded
16 pursuant to section 10010, equal to the total num-
17 ber of global warming potential-weighted tons of
18 hydrofluorocarbon consumed in the United States
19 during the preceding calendar year by the
20 hydrofluorocarbon producer or hydrofluorocarbon
21 importer, as determined in accordance with para-
22 graphs (2) and (3).

23 (2) HYDROFLUOROCARBON PRODUCERS.—For
24 hydrofluorocarbon producers, the quantity of

1 hydrofluorocarbon consumed shall be a value equal
2 to the difference between—

3 (A) the global warming potential-weighted
4 tons of hydrofluorocarbon produced in the
5 United States, imported as a product or con-
6 tained in equipment, or acquired in the United
7 States from another hydrofluorocarbon pro-
8 ducer through sale or other transaction; and

9 (B) the global warming potential-weighted
10 tons of hydrofluorocarbon the producer ex-
11 ported as a product or contained in equipment,
12 or transferred to another hydrofluorocarbon
13 producer in the United States through sale or
14 other transaction.

15 (3) HYDROFLUOROCARBON IMPORTERS.—For
16 hydrofluorocarbon importers, hydrofluorocarbon con-
17 sumed shall be a value equal to the global warming
18 potential-weighted tons of hydrofluorocarbon im-
19 ported by the hydrofluorocarbon importer as a prod-
20 uct or contained in equipment, or acquired in the
21 United States from a hydrofluorocarbon producer
22 through sale or other transaction.

23 (b) RETIREMENT.—Immediately on receipt of a
24 hydrofluorocarbon consumption allowance or a

1 hydrofluorocarbon destruction allowance under subsection
2 (a), the Administrator shall retire the allowance.

3 (c) DETERMINATION OF COMPLIANCE.—Not later
4 than July 1 of each year, the Administrator shall—

5 (1) determine whether each hydrofluorocarbon
6 producer and hydrofluorocarbon importer achieved
7 compliance with subsection (a) for the preceding
8 year; and

9 (2) so notify each hydrofluorocarbon producer
10 and hydrofluorocarbon importer.

11 (d) PENALTIES.—A hydrofluorocarbon producer or
12 hydrofluorocarbon importer that is not in compliance with
13 subsection (a), as determined under subsection (c), shall
14 be liable for the payment of an excess consumption penalty
15 as provided in section 1203, except that the deadlines de-
16 scribed in this title shall be substituted for the deadlines
17 described in that section.

18 **SEC. 10007. SALE, EXCHANGE, AND OTHER USES OF**
19 **HYDROFLUOROCARBON CONSUMPTION AL-**
20 **LOWANCES.**

21 (a) PERMISSIBLE USES.—

22 (1) IN GENERAL.—A hydrofluorocarbon pro-
23 ducer or hydrofluorocarbon importer may purchase,
24 hold, sell, exchange, transfer, submit for compliance
25 in accordance with section 10006, or retire

1 hydrofluorocarbon consumption allowances or
2 hydrofluorocarbon destruction allowances.

3 (2) ACTION ON RETIREMENT.—If any
4 hydrofluorocarbon producer or hydrofluorocarbon
5 importer permanently retires a hydrofluorocarbon
6 consumption allowance, the Administrator shall
7 promptly redistribute the allowance to another
8 hydrofluorocarbon producer or hydrofluorocarbon
9 importer pursuant to section 10005(b).

10 (b) PROHIBITIONS.—

11 (1) IN GENERAL.—Hydrofluorocarbon con-
12 sumption allowances or hydrofluorocarbon destruc-
13 tion allowances shall not be traded or exchanged
14 with allowances associated with any other emission
15 allowance allocation or trading program under this
16 Act.

17 (2) CERTAIN USES.—Hydrofluorocarbon con-
18 sumption allowances shall not be used to achieve
19 compliance with any other obligation relating to
20 emissions of greenhouse gases regulated under any
21 other provision of this Act, and emission allowances
22 established and allocated under any other provision
23 of this Act shall not be used to achieve compliance
24 with this title.

1 (c) LIMITATION.—The privilege of purchasing, hold-
2 ing, selling, exchanging, transferring, and submitting for
3 compliance in accordance with section 10006, and retiring
4 hydrofluorocarbon consumption allowances or
5 hydrofluorocarbon destruction allowances shall be re-
6 stricted to entities described in section 10005(b)(1).

7 **SEC. 10008. ALLOWANCE TRANSFER SYSTEM.**

8 (a) REGULATIONS.—Not later than 18 months after
9 the date of enactment of this Act, the Administrator shall
10 promulgate regulations to carry out the provisions of this
11 title relating to hydrofluorocarbon consumption allowances
12 and hydrofluorocarbon destruction allowances, including
13 regulations providing that the transfer of those allowances
14 shall not be effective until the date on which a written
15 certification of the transfer, signed by a responsible official
16 of each party to the transfer, is received and recorded by
17 the Administrator in accordance with those regulations.

18 (b) TRANSFERS.—

19 (1) IN GENERAL.—The regulations promulgated
20 under subsection (a) shall permit the transfer of
21 hydrofluorocarbon consumption allowances prior to
22 the allocation of the allowances.

23 (2) DEDUCTION AND ADDITION OF TRANS-
24 FERS.—A recorded preallocation transfer of

1 hydrofluorocarbon consumption allowances shall
2 be—

3 (A) deducted by the Administrator from
4 the number of hydrofluorocarbon consumption
5 allowances that would otherwise be allocated to
6 the transferor; and

7 (B) added to those hydrofluorocarbon con-
8 sumption allowances allocated to the transferee.

9 (c) **ISSUANCE, RECORDING, AND TRACKING SYS-**
10 **TEM.**—The regulations promulgated under subsection (a)
11 shall include a system for issuing, recording, and tracking
12 hydrofluorocarbon consumption and hydrofluorocarbon de-
13 struction allowances that shall specify all necessary proce-
14 dures and requirements for an orderly and competitive
15 functioning of the hydrofluorocarbon consumption allow-
16 ance system.

17 **SEC. 10009. BANKING AND BORROWING.**

18 (a) **BANKING.**—A hydrofluorocarbon producer or
19 hydrofluorocarbon importer that submits
20 hydrofluorocarbon consumption allowances or
21 hydrofluorocarbon destruction allowances to the Adminis-
22 trator to achieve compliance with section 10006 shall indi-
23 cate in the identification number of the hydrofluorocarbon
24 consumption allowance or hydrofluorocarbon destruction

1 allowance the calendar year for which the allowance is sub-
2 mitted.

3 (b) BORROWING OF HYDROFLUOROCARBON CON-
4 SUMPTION ALLOWANCES.—In accordance with the regula-
5 tions promulgated under section 10008(a), and subject to
6 subsection (d), a hydrofluorocarbon producer or
7 hydrofluorocarbon importer may—

8 (1) borrow hydrofluorocarbon consumption al-
9 lowances from the Administrator; and

10 (2) for a calendar year, submit borrowed
11 hydrofluorocarbon consumption allowances to the
12 Administrator to satisfy not more than 15 percent of
13 the compliance obligation under section 10006.

14 (c) LIMITATION ON BORROWING.—A
15 hydrofluorocarbon consumption allowance borrowed under
16 subsection (b) shall be a hydrofluorocarbon consumption
17 allowance established by the Administrator for a specific
18 subsequent calendar year under section 10004(g).

19 (d) TERM.—A producer or importer shall not submit,
20 and the Administrator shall not accept, a borrowed
21 hydrofluorocarbon consumption allowance in partial satis-
22 faction of the compliance obligation under section 10006
23 for any calendar year that is more than 5 years before
24 the calendar year included in the identification number of
25 the borrowed hydrofluorocarbon consumption allowance.

1 (e) REPAYMENT OF INTEREST.—For any borrowed
2 hydrofluorocarbon consumption allowance submitted in
3 partial satisfaction of the compliance obligation under sec-
4 tion 10006 for a particular calendar year (referred to in
5 this subsection as the “use year”), the number of
6 hydrofluorocarbon consumption allowances or
7 hydrofluorocarbon destruction allowances that the
8 hydrofluorocarbon producer or hydrofluorocarbon im-
9 porter is required to submit under section 10006 for the
10 year from which the borrowed hydrofluorocarbon con-
11 sumption allowance was taken (referred to in this sub-
12 section as the “source year”) shall be increased by an
13 amount equal to the product obtained by multiplying—
14 (1) 1.1; and
15 (2) the number of calendar years beginning
16 after the use year but before the source year.

17 **SEC. 10010. HYDROFLUOROCARBON DESTRUCTION ALLOW-**
18 **ANCES.**

19 (a) DESTRUCTION OF HYDROFLUOROCARBON.—
20 (1) IN GENERAL.—The Administrator shall
21 issue hydrofluorocarbon destruction allowances to
22 any hydrofluorocarbon producer or
23 hydrofluorocarbon importer that performs or ar-
24 ranges for recovery and destruction of
25 hydrofluorocarbon from products or equipment.

1 (2) ISSUANCE AND DENOMINATION.—

2 Hydrofluorocarbon destruction allowances shall be
3 issued on a global warming potential-weighted basis,
4 denominated in terms of metric tons of carbon diox-
5 ide.

6 (3) LIMITATIONS.—

7 (A) BYPRODUCTS.—No hydrofluorocarbon
8 destruction allowance shall be issued under this
9 section for destruction of hydrofluorocarbon
10 produced as a byproduct in a production proc-
11 ess.

12 (B) CERTAIN PURPOSES.—No
13 hydrofluorocarbon destruction allowance shall
14 be issued under this section for destruction or
15 recycling of hydrofluorocarbon produced for a
16 purpose other than the ultimate sale and use of
17 the product.

18 (b) REGULATIONS.—

19 (1) REQUIREMENT.—The regulations promul-
20 gated under section 10008(a) shall authorize the
21 issuance of hydrofluorocarbon destruction allow-
22 ances.

23 (2) CRITERIA.—Those regulations shall estab-
24 lish appropriate criteria for determining—

25 (A) the effectiveness of destruction;

1 (B) the net quantity of global warming po-
2 tential-weighted hydrofluorocarbon that has
3 been destroyed; and

4 (C) procedures for verification, registra-
5 tion, and issuance of hydrofluorocarbon destruc-
6 tion allowances.

7 (c) SATISFACTION OF REQUIREMENTS.—Beginning
8 with calendar year 2012, a hydrofluorocarbon producer or
9 hydrofluorocarbon importer may satisfy a portion of the
10 hydrofluorocarbon consumption allowance submission re-
11 quirement under section 10006 by submitting
12 hydrofluorocarbon destruction allowances generated in ac-
13 cordance with the regulations promulgated pursuant to
14 section 10008(a).

15 (d) OWNERSHIP.—Initial ownership of a
16 hydrofluorocarbon destruction allowance shall be held by
17 the hydrofluorocarbon producer or hydrofluorocarbon im-
18 porter that performs or arranges for recovery and destruc-
19 tion or recycling of hydrofluorocarbon, including
20 hydrofluorocarbon from products or equipment containing
21 hydrofluorocarbon, unless otherwise specified in a legally
22 binding contract or agreement to which the
23 hydrofluorocarbon producer or hydrofluorocarbon im-
24 porter is a party.

1 (e) TRANSFERABILITY.—A hydrofluorocarbon de-
2 struction allowance generated pursuant to the regulations
3 promulgated pursuant to subsection (b)—

4 (1) may be sold, traded, or transferred to any
5 hydrofluorocarbon producer or hydrofluorocarbon
6 importer referred to in section 10005(b); but

7 (2) shall not be sold, traded, transferred, or
8 used for compliance with any other emission allow-
9 ance requirement of this Act or any other law.

10 **TITLE XI—AMENDMENTS TO**
11 **CLEAN AIR ACT**

12 **SEC. 11001. NATIONAL RECYCLING AND EMISSION REDUC-**
13 **TION PROGRAM.**

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

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

18 (2) by inserting before subsection (b) (as so re-
19 designated) the following:

20 “(a) DEFINITION OF HYDROFLUOROCARBON SUB-
21 STITUTE.—In this section, the term ‘hydrofluorocarbon
22 substitute’ means a hydrofluorocarbon—

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

1 “(2) that is used in or for types of equipment,
2 appliances, or processes that previously relied on
3 class I or class II substances.”;

4 (3) in subsection (b) (as so redesignated)—

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

8 “(5) The regulations”;

9 (B) by redesignating paragraph (3) as
10 paragraph (4); and

11 (C) by inserting after paragraph (2) the
12 following:

13 “(3)(A) Not later than 1 year after the date of
14 enactment of the Lieberman-Warner Climate Secu-
15 rity Act of 2007, the Administrator shall promulgate
16 regulations establishing standards and requirements
17 regarding the sale or distribution, or offer for sale
18 and distribution in interstate commerce, use, and
19 disposal of hydrofluorocarbon substitutes for class I
20 and class II substances not covered by paragraph
21 (1), including the use, recycling, and disposal of
22 those hydrofluorocarbon substitutes during the
23 maintenance, service, repair, or disposal of appli-
24 ances and industrial process refrigeration equipment.

1 “(B) The standards and requirements estab-
2 lished under subparagraph (A) shall take effect not
3 later than 1 year after the date of promulgation of
4 the regulations.”;

5 (4) in subsection (c) (as so redesignated)—

6 (A) by redesignating paragraphs (1)
7 through (3) as subparagraphs (A) through (C),
8 respectively, and indenting the subparagraphs
9 appropriately;

10 (B) by striking the subsection designation
11 and heading and all that follows through “fol-
12 lowing—” and inserting the following:

13 “(c) SAFE DISPOSAL.—The regulations under sub-
14 section (b) shall—

15 “(1) establish standards and requirements for
16 the safe disposal of class I and II substances and
17 hydrofluorocarbon substitutes for those substances;
18 and

19 “(2) include each of the following:”;

20 (C) in subparagraph (A) (as redesignated
21 by subparagraph (A)), by inserting “(or
22 hydrofluorocarbon substitutes for those sub-
23 stances)” after “class I or class II substances”;
24 and

1 (D) in paragraphs (2) and (3), by inserting
2 “(or a hydrofluorocarbon substitutes for such a
3 substance)” after “class I or class II sub-
4 stance” each place it appears.

5 **SEC. 11002. SERVICING OF MOTOR VEHICLE AIR CONDI-**
6 **TIONERS.**

7 Section 609 of the Clean Air Act (42 U.S.C. 7671h)
8 is amended—

9 (1) in subsection (b), by adding at the end the
10 following:

11 “(5) The term ‘hydrofluorocarbon substitute’
12 means a hydrofluorocarbon—

13 “(A) with a global warming potential of
14 more than 150; and

15 “(B) that is used in or for types of equip-
16 ment, appliances, or processes that previously
17 relied on class I or class II substances.”; and

18 (2) in subsection (e)—

19 (A) by striking the subsection designation
20 and heading and all that follows through “Ef-
21 fective” and inserting the following:

22 “(e) **SMALL CONTAINERS OF CLASS I OR CLASS II**
23 **SUBSTANCES AND HYDROFLUOROCARBON SUB-**
24 **STITUTES.—**

1 “(1) CLASS I OR CLASS II SUBSTANCES.—Effec-
2 tive beginning”); and

3 (B) by adding at the end the following:

4 “(2) HYDROFLUOROCARBON SUBSTITUTES.—
5 Effective beginning January 1, 2010, it shall be un-
6 lawful for any person to sell or distribute, or offer
7 for sale or distribution, in interstate commerce to
8 any person (other than a person performing service
9 for consideration on motor vehicle air-conditioning
10 systems in compliance with this section) any
11 hydrofluorocarbon substitute that is—

12 “(A) suitable for use in a motor vehicle
13 air-conditioning system; and

14 “(B) in a container that contains less than
15 20 pounds of the hydrofluorocarbon sub-
16 stitute.”.