

1 Purpose: To provide a complete substitute.

2

3

4 S. 2191

5

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

9

10 Referred to the Committee on _____ and ordered to
11 be printed

12 Ordered to lie on the table and to be printed

13 AMENDMENT IN THE NATURE OF A SUBSTITUTE INTENDED
14 TO BE PROPOSED BY MRS. BOXER

15 Viz:

16 Strike all after the enacting clause and insert the following:

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

18 (a) Short Title.—This Act may be cited as the “~~America’s~~”**Lieberman-Warner**
19 Climate Security Act of 2007”.

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

21 Sec.1.Short title; table of contents.

22 Sec.2.Findings.

23 Sec.3.Purposes.

24 Sec.4.Definitions.

25 **TITLE I—CAPPING GREENHOUSE GAS EMISSIONS**

26 **Subtitle A—Tracking Emissions**

27 Sec.1101.Purpose.

28 Sec.1102.Definitions.

29 Sec.1103.Reporting requirements.

30 Sec.1104.Data quality and verification.

1 Sec.1105.Federal greenhouse gas registry.

2 Sec.1106.Enforcement.

3 Subtitle B—Reducing Emissions

4 Sec.1201.Emission allowance account.

5 Sec.1202.Compliance obligation.

6 Sec.1203.Penalty for noncompliance.

7 ~~Sec.1204.Coverage of natural gas~~ **Sec.1204.Rulemaking.**

8 TITLE II—MANAGING AND CONTAINING COSTS 9 EFFICIENTLY

10 Subtitle A—Trading

11 Sec.2101.Sale, exchange, and retirement of emission allowances.

12 Sec.2102.No restriction on transactions.

13 Sec.2103.Allowance transfer system.

14 Sec.2104.Allowance tracking system.

15 Subtitle B—Banking

16 Sec.2201.Indication of calendar year.

17 Sec.2202.Effect of time.

18 Subtitle C—Borrowing

19 Sec.2301.Regulations.

20 Sec.2302.Term.

21 Sec.2303.Repayment with interest.

22 Subtitle D—Offsets

23 Sec.2401.Outreach initiative on revenue enhancement for agricultural producers.

24 Sec.2402.Establishment of domestic offset program.

25 Sec.2403.Eligible ~~agricultural and forestry~~ offset project types.

26 Sec.2404.Project initiation and approval.

27 Sec.2405.Offset verification and issuance of allowances for agricultural and forestry
28 projects.

29 Sec.2406.Tracking of reversals for sequestration projects.

30 Sec.2407.Examinations.

31 Sec.2408.Timing and the provision of offset allowances.

- 1 Sec.2409.Offset registry.
- 2 Sec.2410.Environmental considerations.
- 3 Sec.2411.Program review.

4 **Sec.2412.Retail carbon offsets.**

5 **Subtitle E—International Emission Allowances**

- 6 Sec.2501.Use of international emission allowances.
- 7 Sec.2502.Regulations.
- 8 Sec.2503.Facility certification.

9 **Subtitle F—Carbon Market Efficiency Board**

- 10 Sec.2601.Purposes.
- 11 Sec.2602.Establishment of Carbon Market Efficiency Board.
- 12 Sec.2603.Duties.
- 13 Sec.2604.Powers.
- 14 Sec.2605.Estimate of costs to economy of limiting greenhouse gas emissions.

15 **TITLE III—ALLOCATING AND DISTRIBUTING**
16 **ALLOWANCES**

17 **Subtitle A—~~Early Auctions~~ A—Auctions**

- 18 Sec.3101.Allocation for early auctions.
- 19 ~~Subtitle B—Annual Auctions~~
- 20 ~~Sec.3201.Allocation~~ **Sec.3102.Allocation** for annual auctions.

21 **Subtitle C—~~Early Action~~**

- 22 ~~Sec.3301.Allocation.~~
- 23 ~~Sec.3302.Distribution.~~

24 **Subtitle D—States**

25 **~~Sec.3401.Allocation~~ B—Early Action**

- 26 **Sec.3201.Allocation.**
- 27 **Sec.3202.Distribution.**

28 **Subtitle C—States**

- 29 **Sec.3301.Allocation** for energy savings.

1 ~~Sec.3402.Allocation~~ **Sec.3302.Allocation** for States with programs that exceed Federal
2 emission reduction targets.

3 ~~Sec.3403.General allocation.~~ **Sec.3303.General allocation.**

4 ~~Subtitle E—Electricity~~ **Sec.3304.Allocation for mass transit.**

5 **Subtitle D—Electricity Consumers**

6 **Sec.3401.Allocation.**

7 **Sec.3402.Distribution.**

8 **Sec.3403.Use.**

9 **Sec.3404.Reporting.**

10 **Subtitle E—Natural Gas Consumers**

11 Sec.3501.Allocation.

12 Sec.3502.Distribution.

13 Sec.3503.Use.

14 Sec.3504.Reporting.

15 **Subtitle F—Bonus Allowances for Carbon Capture and** 16 **Geological Sequestration**

17 Sec.3601.Allocation.

18 Sec.3602.Qualifying projects.

19 Sec.3603.Distribution.

20 Sec.3604.10-Year limit.

21 Sec.3605.Exhaustion of bonus allowance account.

22 **Subtitle G—Domestic Agriculture and Forestry**

23 Sec.3701.Allocation.

24 Sec.3702.Agricultural and forestry greenhouse gas management research.

25 Sec.3703.Distribution.

26 **Subtitle H—International Forest Protection**

27 Sec.3801.Findings.

28 Sec.3802.Definition of forest carbon activities.

29 Sec.3803.Allocation.

30 Sec.3804.Definition and eligibility requirements.

31 Sec.3805.International forest carbon activities.

1 Sec.3806.Reviews and discount.

2 **Subtitle I—Covered Facilities I—Transition Assistance**

3 ~~Sec.3901.Allocation.~~ **Sec.3901.General allocation and distribution.**

4 ~~Sec.3902.Distribution system.~~

5 ~~Sec.3903.Distributing~~ **Sec.3902.Distributing** emission allowances ~~within the electric~~
6 ~~power sector.~~ **to owners and operators of fossil fuel-fired electric power generating**
7 **covered facilities.**

8 ~~Sec.3904.Distributing~~ **Sec.3903.Distributing** additional emission allowances to rural
9 electric cooperatives.

10 **Sec.3904.Distributing** emission allowances to owners and operators of energy
11 **intensive manufacturing facilities.**

12 Sec.3905.Distributing emission allowances ~~within the industrial sector.~~ **to owners and**
13 **operators of facilities and other entities that produce or import petroleum-based**
14 **fuel.**

15 **Sec.3906.Distributing** emission allowances to hydrofluorocarbon producers and
16 **importers.**

17 **Subtitle J—Reducing Methane Emissions From**
18 **Landfills and Coal Mines**

19 **Sec.3907.Allocation.**

20 **Sec.3908.Distribution.**

21 **TITLE IV—AUCTIONS AND USES OF AUCTION**
22 **PROCEEDS**

23 **Subtitle A—Funds**

24 Sec.4101.Establishment.

25 Sec.4102.Amounts in Funds.

26 ~~Sec.4103.Transfers to Funds.~~

27 **Subtitle B—Climate Change Credit Corporation**

28 Sec.4201.Establishment.

29 Sec.4202.Applicable laws.

30 Sec.4203.Board of directors.

31 Sec.4204.Review and audit by Comptroller General.

32 **Subtitle C—Auctions**

1 Sec.4301.Early auctions.

2 Sec.4302.Annual auctions.

3 Subtitle D—Energy Technology Deployment

4 Sec.4401.General allocations.

5 Sec.4402.Zero- or low-carbon energy technologies deployment.

6 Sec.4403.Advanced coal and sequestration technologies program.

7 Sec.4404.Fuel from cellulosic biomass.

8 Sec.4405.Advanced technology vehicles manufacturing incentive program.

9 **Sec.4406.Sustainable energy program.**

10 Subtitle E—Energy Consumers

11 Sec.4501.Proportions of funding availability.

12 Sec.4502.Rural energy assistance program.

13 Subtitle F—Climate Change Worker Training Program

14 Sec.4601.Funding.

15 Sec.4602.Purposes.

16 Sec.4603.Establishment.

17 ~~Sec.4604.Grants to States.~~ **Sec.4604.Activities.**

18 ~~Sec.4605.Types of assistance.~~ **Sec.4605.Worker protections and nondiscrimination**
19 **requirements.**

20 **Sec.4606.Workforce training and safety.**

21 Subtitle G—Adaptation Program for Natural Resources in 22 United States and Territories

23 Sec.4701.Definitions.

24 Sec.4702.Adaptation fund.

25 ~~Subtitle H—Climate~~ **H—International Climate Change** 26 **Adaptation and National Security Program**

27 ~~Sec.4801.Interagency Climate Change and National Security Council.~~

28 **Sec.4801.Findings.**

29 ~~Sec.4802.Funding.~~ **Sec.4802.Purposes.**

30 **Sec.4803.Establishment.**

31 **Sec.4804.Funding.**

1 Subtitle I—Emergency Firefighting Programs

2 Sec.4901.Findings.

3 Sec.4902.Bureau of Land Management emergency firefighting program.

4 Sec.4903.Forest Service emergency firefighting program.

5 TITLE V—ENERGY EFFICIENCY

6 Subtitle A—Appliance Efficiency

7 Sec.5101.Residential boilers.

8 Sec.5102.Regional variations in heating or cooling standards.

9 Subtitle B—Building Efficiency

10 Sec.5201.Updating State building energy efficiency codes.

11 Sec.5202.Conforming amendment.

12 TITLE VI—GLOBAL EFFORT TO REDUCE
13 GREENHOUSE GAS EMISSIONS

14 Sec.6001.Definitions.

15 Sec.6002.Purposes.

16 Sec.6003.International negotiations.

17 Sec.6004.Interagency review.

18 Sec.6005.Presidential determinations.

19 Sec.6006.International reserve allowance program.

20 Sec.6007.Adjustment of international reserve allowance requirements.

21 TITLE VII—REVIEWS AND RECOMMENDATIONS

22 Sec.7001.National Academy of Sciences Reviews.

23 Sec.7002.Environmental Protection Agency ~~recommendations~~: **review**.

24 ~~Sec.7003.Adaptation~~ **Sec.7003.Environmental Protection Agency recommendations.**

25 **Sec.7004.Presidential recommendations.**

26 **Sec.7005.Adaptation** assessments and plan.

27 TITLE VIII—FRAMEWORK FOR GEOLOGICAL
28 SEQUESTRATION OF CARBON DIOXIDE

29 Sec.8001.National drinking water regulations.

30 Sec.8002.Assessment of geological storage capacity for carbon dioxide.

1 Sec.8003.Study of the feasibility relating to construction of pipelines and geological
2 carbon dioxide sequestration activities.

3 Sec.8004.Liabilities for closed geological storage sites.

4 **TITLE IX—MISCELLANEOUS**

5 Sec.9001.Paramount interest waiver.

6 ~~Sec.9002.Corporate environmental disclosure of climate change risks.~~

7 ~~Sec.9003.Administrative~~ **Sec.9002.Administrative** procedure and judicial review.

8 ~~Sec.9004.Retention~~ **Sec.9003.Retention** of State authority.

9 ~~Sec.9005.Tribal authority.~~ **Sec.9004.Tribal authority.**

10 ~~Sec.9006.Authorization of appropriations.~~ **Sec.9005.Authorization of appropriations.**

11 **TITLE X—CONTROL OF** 12 **HYDROFLUOROCARBON CONSUMPTION**

13 **Sec.10001.Applicability.**

14 **Sec.10002.Definitions.**

15 **Sec.10003.Cap on hydrofluorocarbon consumption and importation into United**
16 **States.**

17 **Sec.10004.Hydrofluorocarbon consumption allowance account.**

18 **Sec.10005.Allocation of hydrofluorocarbon consumption allowances.**

19 **Sec.10006.Compliance obligation.**

20 **Sec.10007.Sale, exchange, and other uses of hydrofluorocarbon consumption**
21 **allowances.**

22 **Sec.10008.Allowance transfer system.**

23 **Sec.10009.Banking and borrowing.**

24 **Sec.10010.Hydrofluorocarbon destruction allowances.**

25 **TITLE XI—AMENDMENTS TO CLEAN AIR ACT**

26 **Sec.11001.National recycling and emission reduction program.**

27 **Sec.11002.Servicing of motor vehicle air conditioners.**

28 **SEC. 2. FINDINGS.**

29 Congress finds that—

30 (1) unchecked global warming poses a significant threat to—

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

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

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

2 (D) the global environment;

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

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

12 (4) prompt, decisive action is critical, since global warming pollutants can persist
13 in the atmosphere for more than a century;

14 (5) the ingenuity of the people of the United States will allow the United States to
15 become a leader in curbing global warming;

16 (6) it is possible and desirable to cap greenhouse gas emissions, from sources that
17 together account for the majority of those emissions in the United States, at or
18 slightly below the current level in 2012, and to lower the cap each year between
19 2012 and 2050, on the condition that the system includes—

20 (A) cost containment measures;

21 (B) periodic review of requirements;

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

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

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

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

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

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

34 (A) the transportation sector, where reducing greenhouse gas emissions
35 requires changes in ~~the vehicle,~~ **vehicles**, in ~~the~~ fuels, and in consumer
36 behavior; and

37 (B) the built environment, where reducing direct and indirect greenhouse gas
38 emissions requires changes in buildings, appliances, lighting, heating, cooling,
39 and consumer behavior;

1 (10) significant and sustained domestic investments are required to support an
2 aggressive program for developing and deploying advanced technologies to reduce
3 greenhouse gas emissions;

4 (11) all, or virtually all, emissions of greenhouse gases from the combustion of
5 natural gas in the United States should be reduced through the inclusion in a cap-
6 and-trade system of ~~facilities~~ **entities** that sell natural gas in the United States;

7 (12) including natural gas in a cap-and-trade system in the United States should
8 be carried out in a way that minimizes, to the extent feasible, the number of ~~facilities~~
9 **entities** required to submit emission allowances for the natural gas sold by the
10 ~~facilities; and entities;~~

11 (13) including natural gas in a cap-and-trade system in the United States promotes
12 substantial reductions in total United States greenhouse gas emissions while also
13 minimizing, to the extent feasible, the activities within the industrial sector that
14 necessitate the submission of emission allowances-

15 ;

16 **(14) emissions of sulfur dioxide, nitrogen oxides, and mercury to the**
17 **atmosphere from coal-fired electric power generating facilities in the United**
18 **States inflicts harm on the public health, economy, and natural resources of the**
19 **United States;**

20 **(15) fossil fuel-fired electric power generating facilities emit approximately**
21 **67 percent of the total sulfur dioxide emissions, 23 percent of the total nitrogen**
22 **oxide emissions, 40 percent of the total carbon dioxide emissions, and 40**
23 **percent of the total mercury emissions in the United States;**

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

30 **(17) many existing fossil fuel-fired electric power generating facilities were**
31 **exempted by Congress from emissions limitations applicable to new and**
32 **modified units based on an expectation by Congress that, over time, the units**
33 **would be retired or updated with new pollution control equipment, but many of**
34 **the exempted facilities nevertheless continue to operate and emit pollutants at**
35 **relatively high rates and without new pollution control equipment.**

36 SEC. 3. PURPOSES.

37 The purposes of this Act are—

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

41 (2) to accomplish that purpose while preserving robust growth in the United

1 States economy, creating new jobs, and avoiding the imposition of hardship on
2 United States citizens.

3 SEC. 4. DEFINITIONS.

4 In this Act:

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

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

10 (B) greenhouse gas fluxes of the offset project.

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

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

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

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

19 (B) the storage of those greenhouse gases ~~without reversal~~ in the plants or
20 related soils.

21 (5) CARBON DIOXIDE EQUIVALENT.—The term “carbon dioxide equivalent”
22 means, for each greenhouse gas, the quantity of the greenhouse gas that the
23 Administrator determines makes the same contribution to global warming as 1
24 metric ton of carbon dioxide.

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

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

28 (A) any facility ~~within the electric power sector that contains fossil fuel fired~~
29 ~~electricity generating units that together emit more than 10,000 carbon dioxide~~
30 ~~equivalents of greenhouse gas in any~~ **that uses more than 5,000 tons of coal**
31 **in a calendar year;**

32 (B) any facility ~~within the industrial sector that emits more than 10,000~~
33 ~~carbon dioxide equivalents of greenhouse gas in any year;~~ **that is a natural gas**
34 **processing plant or that produces natural gas in the State of Alaska, or any**
35 **entity that imports natural gas (including liquefied natural gas);**

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

1 or

2 (D) any facility that in any year produces, or any entity that in any year
3 imports, ~~nonfuel chemicals that will emit~~ more than 10,000 carbon dioxide
4 equivalents of **chemicals that are group I** greenhouse gas, assuming no
5 capture and destruction or permanent sequestration of that gas; or

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

9

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

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

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

15 ~~(9) Electric power sector.—The term “electric power sector” means the “Electric~~
16 ~~Power Industry”, as that term is used in Table ES7 of the Environmental Protection~~
17 ~~Agency document entitled “Inventory of U.S. Greenhouse Gas Emissions and Sinks:~~
18 ~~1990-2005”.~~

19 ~~(10) EMISSION ALLOWANCE.—The term “emission allowance” means an~~
20 authorization to emit 1 carbon dioxide equivalent of greenhouse gas.

21 ~~(11)~~**(10)** EMISSION ALLOWANCE ACCOUNT.—The term “Emission Allowance
22 Account” means the aggregate of emission allowances that the Administrator
23 establishes for a calendar year.

24 ~~(12)~~**(11)** FACILITY.—The term “facility” means—

25 (A) ~~a building, structure, or installation~~ **1 or more buildings, structures, or**
26 **installations** located on 1 or more contiguous or adjacent properties of an
27 entity in the United States; and

28 (B) at the option of the Administrator, any activity or operation ~~that that~~—

29 **(i) emits 10,000 carbon dioxide equivalents in any year; and**

30 **(ii) has a technical connection with the activities carried out at a facility,**
31 **such as use of transportation fleets, pipelines, transmission lines, and**
32 **distribution lines, but that is not conducted or located on the property of**
33 **the facility.**

34 ~~(13)~~**(12)** FAIR MARKET VALUE.—The term “fair market value” means the average
35 market price, in a particular calendar year, of an emission allowance.

36 ~~(14)~~**(13)** GEOLOGICAL SEQUESTRATION; GEOLOGICALLY SEQUESTERED.—The
37 terms “geological sequestration” and “geologically sequestered” mean the ~~long-term~~
38 **permanent** isolation of greenhouse gases, without reversal, in geological
39 formations, in accordance with ~~section 1421(d)~~ **part C** of the Safe Drinking Water
40 Act (42 U.S.C. 300h ~~(d)~~). **et seq.**

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

- 3 (A) carbon dioxide;
4 (B) methane;
5 (C) nitrous oxide;
6 (D) sulfur hexafluoride; ~~or (E) a hydrofluorocarbon; or~~
7 ~~(F) a perfluorocarbon.~~ **(E) a perfluorocarbon.**

8 ~~(16) Industrial sector.~~—The term “industrial sector” means “Industry”, as that
9 term is used in Table ES7 of the Environmental Protection Agency document
10 entitled “Inventory of U.S. Greenhouse Gas Emissions and Sinks: 19902005”. **(15)**
11 **GROUP II GREENHOUSE GAS.**—**The term “group II greenhouse gas” means a**
12 **hydrofluorocarbon.**

13 ~~(17)~~**(16) LEAKAGE.**—The term “leakage” means—

14 (A) a ~~potentially~~ **significant** unaccounted increase in greenhouse gas
15 emissions by a facility or entity caused by an offset project that produces an
16 accounted reduction in greenhouse gas emissions, **as determined by the**
17 **Administrator;** or

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

21 ~~(18)~~**(17) LOAD-SERVING ENTITY.**—The term “load-serving entity” means an
22 entity, whether public or private—

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

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

28 **(18) NATURAL GAS PROCESSING PLANT.**—**The term “natural gas processing**
29 **plant” means a facility in the United States that is designed to separate natural**
30 **gas liquids from natural gas.**

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

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

39 (21) OFFSET PROJECT.—The term “offset project” means a project, other than a
40 project at a covered facility, that reduces greenhouse gas emissions or increases

1 sequestration of carbon dioxide.

2 (22) PROJECT DEVELOPER.—The term “project developer” means an individual or
3 entity implementing an offset project.

4 (23) RETAIL RATE FOR DISTRIBUTION SERVICE.—

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

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

10 (24) RETIRE AN EMISSION ALLOWANCE.—The term “retire an emission allowance”
11 means to disqualify an emission allowance for any subsequent use, regardless of
12 whether the use is a sale, exchange, or submission of the allowance in satisfying a
13 compliance obligation.

14 (25) REVERSAL.—The term “reversal” means an intentional or unintentional loss
15 of sequestered carbon dioxide to the atmosphere **in significant quantities, as**
16 **determined by the Administrator, in order to accomplish the purposes of this**
17 **Act in an effective and efficient manner.**

18 (26) RURAL ELECTRIC COOPERATIVE.—The term “rural electric cooperative”
19 means a cooperatively-owned association that ~~is~~ **was** in existence as of October 18,
20 2007, and is eligible to receive loans under section 4 of the Rural Electrification Act
21 of 1936 (7 U.S.C. 904).

22 (27) SEQUESTERED AND SEQUESTRATION.—The terms “sequestered” and
23 “sequestration” mean the capture, permanent separation, isolation, or removal of
24 greenhouse gases from the atmosphere, **as determined by the Administrator.**

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

28 ~~(29) Transportation sector.—The term “transportation~~
29 ~~sector” means “Transportation”, as that term is used in~~
30 ~~Table ES7 of the Environmental Protection Agency~~
31 ~~document entitled, “Inventory of U.S. Greenhouse Gas~~
32 ~~Emissions and Sinks: 1990-2005”.~~

33 TITLE I—CAPPING GREENHOUSE GAS EMISSIONS

34 Subtitle A—Tracking Emissions

35 SEC. 1101. PURPOSE.

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

- 1 (1) is complete, consistent, transparent, and accurate;
- 2 (2) will collect reliable and accurate data that can be used by public and private
- 3 entities to design efficient and effective energy security initiatives and greenhouse
- 4 gas emission reduction strategies; and
- 5 (3) will provide appropriate high-quality data to be used for implementing
- 6 greenhouse gas reduction policies.

7 **SEC. 1102. DEFINITIONS.**

8 In this subtitle:

9 (1) AFFECTED FACILITY.—

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

11 (i) a covered facility;

12 (ii) another facility that emits a greenhouse gas, as determined by the

13 Administrator; and

14 (iii) at the option of the Administrator, a vehicle fleet with emissions of

15 more than 10,000 carbon dioxide equivalents in any year, assuming no

16 double-counting of emissions.

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

18 that—

19 (i) is not a covered facility;

20 (ii) is owned or operated by a small business (as described in part 121 of

21 title 13, Code of Federal Regulations (or a successor regulation)); and

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

23 (2) CARBON CONTENT.—The term “carbon content” means the quantity of carbon

24 (in carbon dioxide equivalent) contained in a fuel.

25 (3) CLIMATE REGISTRY.—The term “Climate Registry” means the greenhouse gas

26 emissions registry jointly established and managed by more than 40 States and

27 Indian tribes to collect high-quality greenhouse gas emission data from facilities,

28 corporations, and other organizations to support various greenhouse gas emission

29 reporting and reduction policies for the member States and Indian tribes.

30 (4) FEEDSTOCK FOSSIL FUEL.—The term “feedstock fossil fuel” means fossil fuel

31 used as raw material in a manufacturing process.

32 (5) GREENHOUSE GAS EMISSIONS.—The term “greenhouse gas emissions” means

33 emissions of a greenhouse gas, including—

34 (A) stationary combustion source emissions emitted as a result of

35 combustion of fuels in stationary equipment, such as boilers, furnaces, burners,

36 turbines, heaters, incinerators, engines, flares, and other similar sources;

37 (B) process emissions consisting of emissions from chemical or physical

38 processes other than combustion;

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

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

6 (6) INDIAN TRIBE.—The term “Indian tribe” has the meaning given the term in
7 section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C.
8 450b).

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

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

14 SEC. 1103. REPORTING REQUIREMENTS.

15 (a) In General.—Subject to this section, each affected facility shall submit to the
16 Administrator, for inclusion in the Registry, periodic reports, including annual and
17 quarterly data, that—

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

21 (2) include the quantity of hydrofluorocarbons, perfluorocarbons, sulfur
22 hexafluoride, nitrous oxide, carbon dioxide that has been captured and sequestered,
23 and other greenhouse gases generated, produced, imported, exported, or consumed
24 at or by the facility;

25 (3) include the quantity of electricity generated, imported, exported, or consumed
26 by or at the facility, and information on the quantity of greenhouse gases emitted
27 when the imported, exported, or consumed electricity was generated, as determined
28 by the Administrator;

29 (4) include the aggregate quantity of all greenhouse gas emissions from sources at
30 the facility, including stationary combustion source emissions, process emissions,
31 and fugitive emissions;

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

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

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

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

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

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

5 (b) De Minimis Exemptions.—

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

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

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

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

17 (c) Verification of Report Required.—Before including the information from a report
18 required under this section in the Registry, the Administrator shall verify the
19 completeness and accuracy of the report using information provided under this section,
20 obtained under section ~~9003(e)~~ **9002(c)**, or obtained under other provisions of law.

21 (d) Timing.—

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

25 (2) SUBSEQUENT CALENDAR YEARS.—For calendar year 2008 and each subsequent
26 calendar year, each affected facility shall submit quarterly data described in this
27 section to the Administrator not later than 60 days after the end of the applicable
28 quarter.

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

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

32 (2) greenhouse gas emission data; or

33 (3) other relevant data.

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

35 (a) Protocols and Methods.—

36 (1) IN GENERAL.—The Administrator shall establish by regulation, taking into
37 account the work done by the Climate Registry, comprehensive protocols and
38 methods to ensure the accuracy, completeness, consistency, and transparency of data
39 on greenhouse gas emissions and fossil fuel production, refining, importation,

1 exportation, and consumption submitted to the Registry that include—

2 (A) accounting and reporting standards for fossil fuel production, refining,
3 importation, exportation, and consumption;

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

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

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

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

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

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

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

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

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

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

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

39 (A) data sources;

40 (B) information on internal control activities;

- 1 (C) information on assumptions used in reporting emissions and fuels;
2 (D) uncertainty analyses; and
3 (E) other relevant data and information to facilitate the verification of reports
4 submitted to the Registry.

5 (c) Waiver of Reporting Requirements.—The Administrator may waive reporting
6 requirements for specific facilities if the Administrator determines that sufficient and
7 equally or more reliable data are available under other provisions of law.

8 (d) Missing Data.—If information, satisfactory to the Administrator, is not provided
9 for an affected facility, the Administrator shall—

10 (1) prescribe methods to estimate emissions for the facility for each period for
11 which data are missing, reflecting the highest emission levels that may reasonably
12 have occurred during the period for which data are missing; and

13 (2) take appropriate enforcement action pursuant to this section and section
14 ~~9003(b)~~ **9002(b)**.

15 SEC. 1105. FEDERAL GREENHOUSE GAS REGISTRY.

16 (a) Establishment.—The Administrator shall establish a Federal greenhouse gas
17 registry.

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

19 (1) design and operate the Registry;

20 (2) establish an advisory body that is broadly representative of private enterprise,
21 agriculture, environmental groups, and State, tribal, and local governments to guide
22 the development and management of the Registry;

23 (3) provide coordination and technical assistance for the development of proposed
24 protocols and methods, taking into account the duties carried out by the Climate
25 Registry, to be published by the Administrator;

26 (4)(A) develop an electronic format for reporting under guidelines established
27 under section 1104(a)(1); and

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

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

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

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

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

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

1 (B) confidential business information that cannot be derived from
2 information that is otherwise publicly available and that would cause
3 significant calculable competitive harm if published (except that information
4 relating to greenhouse gas emissions shall not be considered to be confidential
5 business information).

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

8 (d) Regulations.—The Administrator shall—

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

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

13 SEC. 1106. ENFORCEMENT.

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

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

19 Subtitle B—Reducing Emissions

20 SEC. 1201. EMISSION ALLOWANCE ACCOUNT.

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

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

26 (c) Legal Status of Emission Allowances.—

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

28 (2) TERMINATION OR LIMITATION.—Nothing in this Act or any other provision of
29 law limits the authority of the United States to terminate or limit an emission
30 allowance.

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

34 (d) Allowances for Each Calendar Year.—The numbers of emission allowances
35 established by the Administrator for each of calendar years 2012 through 2050 shall be as
36 follows:2,L4(4,4,4,4,0),tp0,p10,10/12,g1,t1,x1150C,30C

37 1Calendar Year1Number of Emission Allowances (in Millions)

1 ~~20125,200~~ **20125,775** s,s
2 ~~20135,104~~ **20135,669** s,s
3 ~~20145,008~~ **20145,562** s,s
4 ~~20154,912~~ **20155,456** s,s
5 ~~20164,816~~ **20165,349** s,s
6 ~~20174,720~~ **20175,243** s,s
7 ~~20184,624~~ **20185,137** s,s
8 ~~20194,528~~ **20195,030** s,s
9 ~~20204,432~~ **20204,924** s,s
10 ~~20214,336~~ **20214,817** s,s
11 ~~20224,240~~ **20224,711** s,s
12 ~~20234,144~~ **20234,605** s,s
13 ~~20244,048~~ **20244,498** s,s
14 ~~20253,952~~ **20254,392** s,s
15 ~~20263,856~~ **20264,286** s,s
16 ~~20273,760~~ **20274,179** s,s
17 ~~20283,664~~ **20284,073** s,s
18 ~~20293,568~~ **20293,966** s,s
19 ~~20303,472~~ **20303,860** s,s
20 ~~20313,376~~ **20313,754** s,s
21 ~~20323,280~~ **20323,647** s,s
22 ~~20333,184~~ **20333,541** s,s
23 ~~20343,088~~ **20343,435** s,s
24 ~~20352,992~~ **20353,328** s,s
25 ~~20362,896~~ **20363,222** s,s
26 ~~20372,800~~ **20373,115** s,s
27 ~~20382,704~~ **20383,009** s,s
28 ~~20392,608~~ **20392,903** s,s
29 ~~20402,512~~ **20402,796** s,s
30 ~~20412,416~~ **20412,690** s,s
31 ~~20422,320~~ **20422,584** s,s
32 ~~20432,224~~ **20432,477** s,s
33 ~~20442,128~~ **20442,371** s,s

- 1 ~~20452,032~~ **20452,264** s,s
- 2 ~~20461,936~~ **20462,158** s,s
- 3 ~~20471,840~~ **20472,052** s,s
- 4 ~~20481,744~~ **20481,945** s,s
- 5 ~~20491,646~~ **20491,839** s,s
- 6 ~~20501,560~~ **20501,732**

7 **SEC. 1202. COMPLIANCE OBLIGATION.**

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

13 ~~(1) group I greenhouse gas that~~ was emitted by **the use of coal by that**
14 **covered** facility during the preceding year;

15 (2) **group I greenhouse gas that** will, assuming no capture and permanent
16 geological sequestration of that gas, be emitted from the ~~use~~ **combustion** of any
17 petroleum- or coal-based ~~transportation~~ fuel that was produced or imported ~~at~~ **by**
18 that **covered** facility during the preceding year;

19 and

20 ~~(3) will, assuming no capture and destruction or permanent geological~~
21 ~~sequestration of that gas, be emitted from any nonfuel chemical~~ **(3) group I**
22 **greenhouse gas** that was produced or imported ~~at that~~ **by that facility during the**
23 **preceding year;**

24 (4) **group II greenhouse gas** was emitted as a byproduct of
25 **hydrochlorofluorocarbon production; or**

26 (5) **group I greenhouse gas that will, assuming no capture and destruction or**
27 **permanent geological sequestration of that gas, be emitted—**

28 **(A) from the combustion of natural gas that was, by that covered**
29 **facility, processed, imported, or produced and not reinjected into the field;**
30 **or**

31 **(B) from the combustion of natural gas liquids that were processed or**
32 **imported by that covered facility during the preceding year.**

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

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

38 **SEC. 1203. PENALTY FOR NONCOMPLIANCE.**

1 (a) Excess Emissions Penalty.—

2 (1) IN GENERAL.—The owner or operator of any covered facility that fails for any
3 year to submit to the Administrator by the deadline described in section 1202(a) or
4 2303, 1 or more of the emission allowances due pursuant to either of those sections
5 shall be liable for the payment to the Administrator of an excess emissions penalty.

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

9 (A) the number of excess emission allowances that the owner or operator
10 failed to submit; and

11 (B) the greater of—

12 (i) \$200; or

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

16 (3) TIMING.—An excess emissions penalty required under this subsection shall be
17 immediately due and payable to the Administrator, without demand, in accordance
18 with such regulations as shall be promulgated by the Administrator by the date that
19 is 1 year after the date of enactment of this Act.

20 (4) DEPOSIT.—The Administrator shall deposit each excess emissions penalty
21 paid under this subsection in the Treasury of the United States.

22 (5) NO EFFECT ON LIABILITY.—An excess emissions penalty due and payable by
23 the owner or operator of a covered facility under this subsection shall not diminish
24 the liability of the owner or operator for any fine, penalty, or assessment against the
25 owner or operator for the same violation under any other provision of this Act or any
26 other law.

27 (b) Excess Emission Allowance.—

28 (1) IN GENERAL.—The owner or operator of a covered facility that fails for any
29 year to submit to the Administrator by the deadline described in section 1202(a) or
30 2303 1 or more of the emission allowances due pursuant to either of those sections
31 shall be liable to offset the excess emissions by an equal quantity, in tons, during—

32 (A) the following calendar year; or

33 (B) such longer period as the Administrator may prescribe.

34 (2) PLAN.—

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

40 (B) CONDITION OF OPERATION.—Upon approval of a proposed plan described

1 in subparagraph (A) by the Administrator, the plan, as submitted, modified, or
2 conditioned, shall be considered to be a condition of the operating permit for
3 the covered facility, without further review or revision of the permit.

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

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

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

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

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

15 (d) No Effect on Other Section.—Nothing in this subtitle limits or otherwise affects the
16 application of section ~~9003(b)~~. **9002(b)**.

17 ~~SEC. 1204. COVERAGE OF NATURAL GAS. SEC.~~
18 **1204. RULEMAKING.**

19 ~~Not later than January 1, 2010, Not later than 2 years after the date of enactment of~~
20 **this Act, the Administrator shall, by rule—**

21 (1) **expand** the definition of the term “covered facility”, ~~and the compliance~~
22 ~~obligations under this Act, shall be such that emissions of greenhouse gases from the~~
23 ~~use of natural gas~~ **to ensure the inclusion of all greenhouse gas emissions from**
24 **natural gas sold for combustion** in the United States ~~shall be included within the;~~
25 **and**

26 (2) **accordingly adjust the number of emission allowances in the annual**
27 **Emission Allowance Account for each calendar year and accordingly limited**
28 **established pursuant to section 1201.**

29 **TITLE II—MANAGING AND CONTAINING COSTS**
30 **EFFICIENTLY**

31 **Subtitle A—Trading**

32 **SEC. 2101. SALE, EXCHANGE, AND RETIREMENT**
33 **OF EMISSION ALLOWANCES.**

34 Except as otherwise provided in this Act, the lawful holder of an emission allowance
35 may, **without restriction**, sell, exchange, transfer, submit for compliance in accordance
36 with section 1202, or retire the emission allowance.

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

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

4 **SEC. 2103. ALLOWANCE TRANSFER SYSTEM.**

5 (a) In General.—Not later than 18 months after the date of enactment of this Act, the
6 Administrator shall promulgate regulations to carry out the provisions of this Act relating
7 to emission allowances, including regulations providing that the transfer of emission
8 allowances shall not be effective until such date as a written certification of the transfer,
9 signed by a responsible official of each party to the transfer, is received and recorded by
10 the Administrator in accordance with those regulations.

11 (b) Transfers.—

12 (1) IN GENERAL.—The regulations promulgated under subsection (a) shall permit
13 the transfer of allowances prior to the issuance of the allowances.

14 (2) DEDUCTION AND ADDITION OF TRANSFERS.—A recorded pre-allocation transfer
15 of allowances shall be—

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

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

19 **SEC. 2104. ALLOWANCE TRACKING SYSTEM.**

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

24 **Subtitle B—Banking**

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

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

30 **SEC. 2202. EFFECT OF TIME.**

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

33 **Subtitle C—Borrowing**

34 **SEC. 2301. REGULATIONS.**

35 (a) In General.—Not later than 3 years after the date of enactment of this Act, the

1 Administrator shall promulgate regulations under which, subject to subsection (b), the
2 owner or operator of a covered facility may—

3 (1) borrow emission allowances from the Administrator; and

4 (2) for a calendar year, submit borrowed emission allowances to the
5 Administrator in satisfaction of up to 15 percent of the compliance obligation under
6 section 1202(a).

7 (b) Limitation.—An emission allowance borrowed under subsection (a) shall be an
8 emission allowance established by the Administrator for a specific future calendar year
9 under subsection 1201(a).

10 SEC. 2302. TERM.

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

16 SEC. 2303. REPAYMENT WITH INTEREST.

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

23 (1) 1.1; and

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

25 Subtitle D—Offsets

26 SEC. 2401. OUTREACH INITIATIVE ON REVENUE 27 ENHANCEMENT FOR AGRICULTURAL 28 PRODUCERS.

29 (a) Establishment.—The Secretary of Agriculture, acting through the Chief of the
30 Natural Resources Conservation Service, the Chief of the Forest Service, the
31 Administrator of the Cooperative State Research, Education, and Extension Service, and
32 land-grant colleges and universities, in consultation with the Administrator and the heads
33 of other appropriate departments and agencies, shall establish an outreach initiative to
34 provide information to agricultural producers, agricultural organizations, foresters, and
35 other landowners about opportunities under this subtitle to earn new revenue.

36 (b) Components.—The initiative under this section—

37 (1) shall be designed to ensure that, to the maximum extent practicable,

1 agricultural organizations and individual agricultural producers, foresters, and other
2 landowners receive detailed practical information about—

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

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

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

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

10 (2) shall provide—

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

13 (B) workshops; and

14 (C) technical assistance; and

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

19 (c) Handbook.—

20 (1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act,
21 the Secretary of Agriculture, in consultation with the Administrator and after an
22 opportunity for public comment, shall publish a handbook for use by agricultural
23 producers, agricultural cooperatives, foresters, other landowners, offset buyers, and
24 other stakeholders that provides easy-to-use guidance on achieving, reporting,
25 registering, and marketing offsets.

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

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

29 (B) includes, with respect to the electronic form of the handbook described
30 in subparagraph (A), electronic forms and calculation tools to facilitate the
31 petition process described in section 2404; and

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

34 SEC. 2402. ESTABLISHMENT OF DOMESTIC OFFSET 35 PROGRAM.

36 (a) Alternative Means of Compliance.—Beginning with calendar year 2012, the owner
37 or operator of a covered entity may satisfy **up to** 15 percent of the total allowance
38 submission requirement of the covered entity under section 1202(a) by submitting offset

1 allowances generated in accordance with this subtitle.

2 (b) Regulations ~~Required.~~—**Not Required.**—

3 (1) **IN GENERAL.**—**Not** later than 18 months after the date of enactment of this
4 Act, the Administrator, in conjunction with the Secretary of Agriculture, shall
5 promulgate regulations authorizing the issuance and certification of offset
6 allowances.

7 (2) **CERTAIN SOURCES.**—

8 (A) **IN GENERAL.**—**For offsets from sources of greenhouse gases not**
9 **linked to agricultural, forestry, or other land use-related projects, the**
10 **regulations promulgated under this subsection shall require that the owner**
11 **of the project establish the project baseline and register emissions under**
12 **the Federal Greenhouse Gas Registry established under section 1105.**

13 (B) **REQUIREMENT.**—**The regulations described in subparagraph (A)**
14 **shall—**

15 (i) **authorize the issuance and certification of offset allowances for**
16 **greenhouse gas emission reductions below the project baseline; and**

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

20 (3) **AGRICULTURAL, FORESTRY, AND OTHER LAND USE-RELATED PROJECTS.**—
21 **For offsets from certain agricultural, forestry, and other land use-related projects**
22 **undertaken within the United States, and ~~certain other projects identified by the~~**
23 **Administrator under section 2403(b)(4), including provisions that— the regulations**
24 **promulgated under this subsection shall include provisions that—**

25 ~~(1)~~(A) ensure that those offsets represent real, verifiable, additional,
26 permanent, and enforceable reductions in greenhouse gas emissions or
27 increases in biological sequestration;

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

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

32 ~~(4)~~(D) establish procedures to monitor, quantify, and discount reductions in
33 greenhouse gas emissions or increases in biological sequestration, in
34 accordance with subsections (d) through (g) of section 2404;

35 ~~(5)~~(E) establish procedures for **third-party** verification, registration, and
36 issuance of offset allowances, in accordance with section 2405;

37 ~~(6)~~(F) ensure permanence of offsets by mitigating and compensating for
38 reversals, in accordance with section 2406; and

39 ~~(7)~~(G) assign a unique serial number to each offset allowance issued under
40 this section.

1 (c) Offset Allowances Awarded.—The Administrator shall issue offset allowances for
2 qualifying emission reductions and biological sequestrations from offset projects that
3 satisfy the applicable requirements of this subtitle.

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

6 (e) Transferability.—An offset allowance generated pursuant to this subtitle may be
7 sold, traded, or transferred, on the conditions that—

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

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

11 **SEC. 2403. ELIGIBLE AGRICULTURAL AND**
12 **~~FORESTRY~~ OFFSET PROJECT TYPES.**

13 (a) In General.—Offset allowances from agricultural, forestry, and other land use-
14 related projects shall be limited to those allowances achieving an offset of 1 or more
15 greenhouse gases by a method other than a reduction of combustion of greenhouse gas-
16 emitting fuel.

17 (b) Categories of Eligible ~~Agricultural, Forestry, and Other Land Use Related~~ Offset
18 Projects.—Subject to the requirements promulgated pursuant to section 2402(b), the
19 types of operations eligible to generate offset allowances under this subtitle include—

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

22 (A) altered tillage practices;

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

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

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

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

30 (F) reduction in carbon emissions from organic soils;

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

33 (A) afforestation or reforestation of acreage not forested as of October 18,
34 2007; and

35 (B) forest management resulting in an increase in forest stand volume;

36 (3) manure management and disposal, including—

37 (A) waste aeration; and

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

13 ~~(c) Exclusion. A project participating in a Federal, State,~~
14 ~~or local cost sharing, competitive grant, or technical~~
15 ~~assistance program shall not be eligible to generate offset~~
16 ~~allowances under this subtitle.~~

17 SEC. 2404. PROJECT INITIATION AND APPROVAL.

18 (a) Project Approval.—A project developer—

19 (1) may submit a petition for offset project approval at any time following the
20 effective date of regulations promulgated under section 2402(b); but

21 (2) may not register or issue offset allowances until such approval is received and
22 until after the emission reductions or sequestrations supporting the offset allowances
23 have actually occurred.

24 (b) Petition Process.—Prior to offset registration and issuance of offset allowances, a
25 project developer shall submit a petition to the Administrator, consisting of—

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

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

29 (3) subject to the requirements of this subtitle, any other information identified by
30 the Administrator in the regulations promulgated under section 2402 as necessary to
31 meet the objectives of this subtitle.

32 (c) Approval and Notification.—

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

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

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

3 (C) notify the project developer of the determinations under subparagraphs
4 (A) and (B); and

5 (D) issue offset allowances for approved projects.

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

8 (d) Monitoring and Quantification.—

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

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

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

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

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

19 (4) PLAN REQUIREMENTS.—Subject to section 2402, the Administrator, in
20 conjunction with the Secretary of Agriculture, shall specify the required components
21 of a monitoring and quantification plan, including—

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

23 (B) a determination of accounting periods;

24 (C) an assignment of reporting responsibility;

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

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

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

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

35 (H) based on the standardized methods chosen in subparagraphs (F) and (G),
36 a determination of uncertainty in accordance with subsection (h);

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

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

4
5 (K) subject to the requirements of this subtitle, any other information
6 identified by the Administrator or the Secretary of Agriculture as being
7 necessary to meet the objectives of this subtitle; **and**

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

11
12 (e) Greenhouse Gas Initiation Certification.—

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

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

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

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

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

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

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

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

37 (f) Development of Monitoring and Quantification Tools for ~~Agricultural and Forestry~~
38 **Offset Projects.**—

39 (1) IN GENERAL.—Subject to section 2402(b), the Administrator, in conjunction
40 with the Secretary of Agriculture, shall develop standardized tools for use in the

1 monitoring and quantification of changes in greenhouse gas fluxes or carbon stocks
2 for each offset project type listed under section 2403(b).

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

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

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

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

11 (g) Development of Accounting and Discounting Methods.—

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

14 (A) develop standardized methods for use in accounting for additionality and
15 uncertainty, estimating the baseline, and discounting for leakage for each offset
16 project type listed under section 2403(b); and

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

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

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

24 (i) similarity in current management practices;

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

26 (iii) similarity in geographical and biophysical characteristics;

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

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

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

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

35 (B) the markets relevant to the offset project;

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

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

1 (h) Uncertainty for Agricultural and Forestry Projects.—

2 (1) IN GENERAL.—The Administrator, in conjunction with the Secretary of
3 Agriculture, shall develop standardized methods for use in determining and
4 discounting for uncertainty for each offset project type listed under section 2403(b).

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

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

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

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

14 (i) Acquisition of New Data and Review of Methods for Agricultural and Forestry
15 Projects.—The Administrator, in conjunction with the Secretary of Agriculture, shall—

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

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

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

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

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

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

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

31 **SEC. 2405. OFFSET VERIFICATION AND ISSUANCE**
32 **OF ALLOWANCES FOR AGRICULTURAL AND**
33 **FORESTRY PROJECTS.**

34 (a) In General.—Offset allowances may be claimed for net emission reductions or
35 increases in sequestration annually, after accounting for any necessary discounts in
36 accordance with section 2404, by submitting a verification report for an offset project to
37 the Administrator.

38 (b) Offset Verification.—

- 1 (1) SCOPE OF VERIFICATION.—A verification report for an offset project shall—
2 (A) be completed by a verifier accredited in accordance with paragraph (3);
3 and
4 (B) shall be developed taking into consideration—
5 (i) the information and methodology contained within a monitoring and
6 quantification plan;
7 (ii) data and subsequent analysis of the offset project, including—
8 (I) quantification of net emission reductions or increases in
9 sequestration;
10 (II) determination of additionality;
11 (III) calculation of leakage;
12 (IV) assessment of permanence;
13 (V) discounting for uncertainty; and
14 (VI) the adjustment of net emission reductions or increases in
15 sequestration by the discounts determined under clauses (II) through
16 (V); and
17 (iii) subject to the requirements of this subtitle, any other information
18 identified by the Administrator as being necessary to achieve the purposes
19 of this subtitle.
- 20 (2) VERIFICATION REPORT REQUIREMENTS.—The Administrator shall specify the
21 required components 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 appropriateness of those methods);
25 (D) an assessment of quantitative errors or omissions (and the effect of the
26 errors or omissions on offsets);
27 (E) any potential conflicts of interest between a verifier and project
28 developer; and
29 (F) any other provision that the Administrator considers to be necessary to
30 achieve the purposes of this subtitle.
- 31 (3) VERIFIER ACCREDITATION.—
32 (A) IN GENERAL.—Not later than 18 months after the date of enactment of
33 this Act, the Administrator shall promulgate regulations establishing a process
34 and requirements for accreditation by a third-party verifier that has no conflicts
35 of interest.
36 (B) PUBLIC ACCESSIBILITY.—Each verifier meeting the requirements for
37 accreditation in accordance with this paragraph shall be listed in a publicly-

1 accessible database, which shall be maintained and updated by the
2 Administrator.

3 (c) Registration and Awarding of Offsets.—

4 (1) IN GENERAL.—Not later than 90 days after the date on which the
5 Administrator receives a complete petition required under section 2404(b), the
6 Administrator shall—

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

9 (B) notify the project developer of that determination.

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

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

13 (B) issue the offset allowances.

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

16 SEC. 2406. TRACKING OF REVERSALS FOR 17 SEQUESTRATION PROJECTS.

18 (a) Reversal Certification.—

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

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

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

27 (B) the quantity of each unmitigated reversal.

28 (b) Effect on Offset Allowances.—

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

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

34 (c) Accountability for Reversals.—Liability and responsibility for compensation of a
35 reversal of a registered offset allowance under subsection (a) shall lie with the ~~person that~~
36 **submitted owner of the offset allowance to the Administrator for the purpose of**
37 **compliance with section 1202(a), unless otherwise specified in a legally binding contract**
38 **or agreement., as described in section 2402.**

1 (d) Compensation for Reversals.—The unmitigated reversal of 1 or more registered
2 offset allowances that were submitted for the purpose of compliance with section 1202(a)
3 shall require the submission of—

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

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

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

12 SEC. 2407. EXAMINATIONS.

13 (a) Regulations.—Not later than 2 years after the date of enactment of this Act, the
14 Administrator, in conjunction with the Secretary of Agriculture, shall promulgate
15 regulations governing the examination and auditing of offset allowances.

16 (b) Requirements.—The regulations promulgated under this section shall specifically
17 consider—

18 (1) principles for initiating and conducting examinations;

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

20 (A) reporting and recordkeeping; and

21 (B) site review or visitation;

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

23 (4) the establishment of an appeal process.

24 SEC. 2408. TIMING AND THE PROVISION OF 25 OFFSET ALLOWANCES.

26 (a) Initiation of Offset Projects.—An offset project that commences operation on or
27 after the effective date of regulations promulgated under section 2407(a) shall be eligible
28 to generate offset allowances under this subtitle if the offset project meets the other
29 applicable requirements of this subtitle.

30 (b) Pre-Existing Projects.—

31 (1) IN GENERAL.—The Administrator may allow for the transition into the
32 Registry of offset projects and banked offset allowances ~~operating under other~~
33 ~~Federal, State, or private reporting programs or registries that~~, as of the effective
34 date of regulations promulgated under section 2407(a), **are registered under or**
35 **meet the standards of the Climate Registry, the California Action Registry, the**
36 **GHG Registry, the Chicago Climate Exchange, the GHG CleanProjects**
37 **Registry, or any other Federal, State, or private reporting programs or**
38 **registries** if the Administrator determines that ~~the~~ **such other** offset projects and

1 banked offset allowances **under those other programs or registries** satisfy the
2 applicable requirements of this subtitle.

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

6 SEC. 2409. OFFSET REGISTRY.

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

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

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

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

13 SEC. 2410. ENVIRONMENTAL CONSIDERATIONS.

14 (a) Coordination to Minimize Negative Effects.—In promulgating regulations under
15 this subtitle, the Administrator, in conjunction with the Secretary of Agriculture, shall act
16 (including by rejecting projects, if necessary) to avoid or minimize, to the maximum
17 extent practicable, adverse effects on human health or the environment resulting from the
18 implementation of offset projects under this subtitle.

19 (b) Report on Positive Effects.—Not later than 2 years after the date of enactment of
20 this Act, the Administrator, in conjunction with the Secretary of Agriculture, shall submit
21 to Congress a report detailing—

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

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

26 (c) Use of Native Plant Species in Offset Projects.—Not later than 18 months after the
27 date of enactment of this Act, the Administrator, in conjunction with the Secretary of
28 Agriculture, shall promulgate regulations for the selection, use, and storage of native and
29 nonnative plant materials—

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

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

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

36 SEC. 2411. PROGRAM REVIEW.

37 Not later than 5 years after the date of enactment of this Act, and periodically
38 thereafter, the Administrator, in conjunction with the Secretary of Agriculture, shall

1 review and revise, as necessary to achieve the purposes of this Act, the regulations
2 promulgated under this subtitle.

3 **SEC. 2412. RETAIL CARBON OFFSETS.**

4 (a) **Definition of Retail Carbon Offset.**—In this section, the term “retail carbon
5 offset” means any carbon credit or carbon offset that cannot be used in satisfaction
6 of any mandatory compliance obligation under a regulatory system for reducing
7 greenhouse gas emissions.

8 (b) **Qualifying Levels and Requirements.**—Not later than January 1, 2009, the
9 Administrator shall establish new qualifying levels and requirements for Energy
10 Star certification for retail carbon offsets, effective beginning January 1, 2010.

11 Subtitle E—International Emission Allowances

12 **SEC. 2501. USE OF INTERNATIONAL EMISSION** 13 **ALLOWANCES.**

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

19 **SEC. 2502. REGULATIONS.**

20 (a) **In General.**—Not later than 2 years after the date of enactment of this Act, the
21 Administrator shall promulgate regulations, taking into consideration protocols adopted
22 in accordance with the United Nations Framework Convention on Climate Change, done
23 at New York on May 9, 1992—

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

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

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

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

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

37 **SEC. 2503. FACILITY CERTIFICATION.**

1 The owner or operator of a covered facility who submits an international emission
2 allowance under this subtitle shall certify that the allowance has not been retired from use
3 in the registry of the applicable foreign country.

4 Subtitle F—Carbon Market Efficiency Board

5 SEC. 2601. PURPOSES.

6 The purposes of this subtitle are—

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

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

12 SEC. 2602. ESTABLISHMENT OF CARBON MARKET 13 EFFICIENCY BOARD.

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

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

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

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

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

23 (A) describing—

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

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

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

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

31
32 (v) plans to compensate for those measures to ensure that the long-term
33 emission-reduction goals of this Act are achieved; **and**

34 (vi) **any instances of actual or potential fraud on, or manipulation**
35 **of, the market that the Board has identified, and the effects of such**
36 **fraud or manipulation;**

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

3 (C) that are prepared independently by the Board.

4 (c) Membership.—

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

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

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

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

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

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

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

20 (3) COMPENSATION.—

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

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

31 (4) PROHIBITIONS.—

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

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

40 (d) Term; Vacancies.—

1 (1) TERM.—

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

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

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

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

11 (C) REMOVAL.—

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

14 (ii) NOTIFICATION.—~~THE PRESIDENT SHALL SUBMIT TO CONGRESS A~~
15 ~~NOTIFICATION OF ANY DETERMINATION BY THE PRESIDENT TO REMOVE A~~
16 ~~MEMBER OF~~ **NOTIFICATION.—Not later than 30 days before removing a**
17 **member from** the Board for cause under clause (i), **the President shall**
18 **provide to Congress an advance notification of the determination by**
19 **the President to remove the member.**

20 (2) VACANCIES.—

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

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

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

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

29 (e) Chairperson and Vice-Chairperson.—Of members of the Board, the President shall
30 appoint—

31 (1) 1 member to serve as Chairperson of the Board for a term of 4 years; and

32 (2) 1 member to serve as Vice-Chairperson of the Board for a term of 4 years.

33 (f) Meetings.—

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

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

38 (A) the Chairperson;

- 1 (B) in any case in which the Chairperson is absent, the Vice-Chairperson; or
2 (C) in any case in which the Chairperson and Vice-Chairperson are absent, a
3 chairperson pro tempore, to be elected by the members of the Board.

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

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

8 SEC. 2603. DUTIES.

9 (a) Information Gathering.—

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

13 (2) INFORMATION.—The Board shall gather such information as the Board
14 determines to be appropriate regarding the status of the market, including
15 information relating to—

16 (A) emission allowance allocation and availability;

17 (B) the price of emission allowances;

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

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

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

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

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

31 (b) Treatment as Primary Activity.—

32 (1) IN GENERAL.—During the initial 2-year period of operation of the Board,
33 information gathering under subsection (a) shall be the primary activity of the
34 Board.

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

38 (c) Study.—

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

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

10 (d) Employment of Cost Relief Measures.—

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

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

20 (A) increase the quantity of emission allowances that covered facilities may
21 borrow from the prescribed allocations of the covered facilities for future years;
22 and

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

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

26 (e) Reports.—The Board shall submit to the President and Congress quarterly
27 reports—

28 (1) describing the status of the emission allowance market established under this
29 Act, the economic effects of the market, regional, industrial, and consumer
30 responses to the market, energy investment responses to the market, **the effects on**
31 **the market of any fraud on, or manipulation of, the market that the Board has**
32 **identified**, any corrective measures that should be carried out to relieve excessive
33 costs of the market, and plans to compensate for those measures; and

34 (2) that are prepared independently by the Board, and not in partnership with
35 Federal agencies.

36 **SEC. 2604. POWERS.**

37 (a) Cost Relief Measures.—

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

1 for emission allowances:

2 (A) Increase the quantity of emission allowances that covered facilities may
3 borrow from the prescribed allocations of the covered facilities for future years.

4 (B) Expand the period during which a covered facility may repay the
5 Administrator for an emission allowance as described in subparagraph (A).

6 (C) Lower the interest rate at which an emission allowance may be borrowed
7 as described in subparagraph (A).

8 (D) Increase the quantity of emission allowances obtained on a foreign
9 greenhouse gas emissions trading market that the owner or operator of any
10 covered facility may use to satisfy the allowance submission requirement of the
11 covered facility under section 1202(a), on the condition that the Administrator
12 has certified the market in accordance with the regulations promulgated
13 pursuant to section 2502(a).

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

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

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

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

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

27 (C) specify the terms of the relief to be achieved using the cost relief
28 measure, including requirements for entity-level or national market-level
29 compensation to be achieved by a specific date or within a specific time period;

30 (D) in accordance with section 2603(e), submit to the President and Congress
31 a report describing the actions carried out by the Board and recommendations
32 for the terms under which the cost relief measure should be authorized by
33 Congress and carried out by Federal entities; and

34 (E) evaluate, at the end of the applicable allocation year, actions that need to
35 be carried out during subsequent years to compensate for any cost relief
36 measure carried out during the applicable allocation year.

37 (3) ACTION ON EXPANSION OF BORROWING.—

38 (A) IN GENERAL.—If the Board carries out a cost relief measure pursuant to
39 paragraph (1) that results in the expansion of borrowing of emission allowances
40 under this Act, and if the average daily closing price of emission allowances for

1 the 180-day period beginning on the date on which borrowing is so expanded
2 exceeds the upper range of the estimate provided under section 2605, the Board
3 shall increase the quantity of emission allowances available for the applicable
4 allocation year in accordance with this paragraph.

5 (B) REQUIREMENTS.—An increase in the quantity of emission allowances
6 under subparagraph (A) shall—

7 (i) apply to all covered facilities;

8 (ii) be allocated in accordance with the applicable formulas and
9 procedures established under this Act;

10 (iii) be equal to not more than 5 percent of the total quantity of emission
11 allowances otherwise available for the applicable allocation year under
12 this Act;

13 (iv) remain in effect only for the applicable allocation year;

14 (v) specify the date by which the increase shall be repaid by covered
15 facilities through a proportionate reduction of emission allowances
16 available for subsequent allocation years; and

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

19 (b) Assessments.—Not more frequently than semiannually, the Board may levy on
20 owners and operators of covered facilities an assessment sufficient to pay the estimated
21 expenses of the Board and the salaries of members of and employees of the Board during
22 the 180-day period beginning on the date on which the assessment is levied, taking into
23 account any deficit carried forward from the preceding 180-day period.

24 (c) Limitations.—Nothing in this section gives the Board the authority—

25 (1) to consider or prescribe entity-level petitions for relief from the costs of an
26 emission allowance allocation or trading program established under Federal law;

27 (2) to carry out any investigative or punitive process under the jurisdiction of any
28 Federal or State court;

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

31 (4) to modify the total quantity of **emission** allowances issued under this Act for
32 the period of calendar years 2012 through 2050.

33 SEC. 2605. ESTIMATE OF COSTS TO ECONOMY OF 34 LIMITING GREENHOUSE GAS EMISSIONS.

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

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

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

2 **TITLE III—ALLOCATING AND DISTRIBUTING**
3 **ALLOWANCES**

4 **Subtitle A—~~Early Auctions~~ A—Auctions**

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

6 Not later than 180 days after the date of enactment of this Act, the Administrator shall
7 allocate ~~6 5~~ percent of the emission allowances established for calendar year 2012, ~~4 3~~
8 percent of the emission allowances established for calendar year 2013, and ~~2 1~~ percent of
9 the emissions established for calendar 2014, to the Corporation for early auctioning in
10 accordance with section 4301.

11 **Subtitle B—~~Annual Auctions~~**

12 ~~SEC. 3201~~ **SEC. 3102. ALLOCATION FOR ANNUAL**
13 **AUCTIONS.**

14 Not later than April 1, 2011, and annually thereafter through calendar year 2049, the
15 Administrator shall allocate to the Corporation for annual auctioning a percentage of
16 emission allowances for the following calendar year, as
17 follows:2,L4(4,4,4,4,0,0),tp0,p10,10/12,g1,t1,x1150C,30C

18 1Calendar Year1Percentage of Emission Allowance Account Allocated to the
19 Corporation

20 ~~201218~~ **201222.5** s,s

21 ~~201321~~ **201325.5** s,s

22 ~~201424~~ **201428.5** s,s

23 ~~201527~~ **201530.5** s,s

24 ~~201628~~ **201631.5** s,s

25 ~~201731~~ **201732.5** s,s

26 ~~201833~~ **201834.5** s,s

27 ~~201935~~ **201935.5** s,s

28 ~~202037~~ **202037.5** s,s

29 ~~202139~~ **202140.75** s,s

30 ~~202241~~ **202242** s,s

31 ~~202343~~ **202344.25** s,s

32 ~~202445~~ **202446.75** s,s

33 ~~202547~~ **202549.5** s,s

- 1 ~~202649~~ **202652.5** s,s
- 2 ~~202751~~ **202756.5** s,s
- 3 ~~202853~~ **202859.5** s,s
- 4 ~~202955~~ **202962.5** s,s
- 5 ~~203057~~ **203063.75** s,s
- 6 ~~203159~~ **203170.5** s,s
- 7 ~~203261~~ **203270.5** s,s
- 8 ~~203363~~ **203370.5** s,s
- 9 ~~203465~~ **203470.5** s,s
- 10 ~~203567~~ **203570.5** s,s
- 11 ~~203673~~ **203670.5** s,s
- 12 ~~203773~~ **203770.5** s,s
- 13 ~~203873~~ **203870.5** s,s
- 14 ~~203973~~ **203970.5** s,s
- 15 ~~204073~~ **204070.5** s,s
- 16 ~~204173~~ **204170.5** s,s
- 17 ~~204273~~ **204270.5** s,s
- 18 ~~204373~~ **204370.5** s,s
- 19 ~~204473~~ **204470.5** s,s
- 20 ~~204573~~ **204570.5** s,s
- 21 ~~204673~~ **204670.5** s,s
- 22 ~~204773~~ **204770.5** s,s
- 23 ~~204873~~ **204870.5** s,s
- 24 ~~204973~~ **204970.5** s,s
- 25 ~~205073~~ **205070.5**

26 Subtitle ~~C~~—**Early B**—**Early Action**

27 ~~SEC. 3301.~~ **3201. ALLOCATION.**

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

- 33 (1) 5 percent of the emission allowances established for calendar year 2012;

- 1 (2) 4 percent of the emission allowances established for calendar year 2013;
2 (3) 3 percent of the emission allowances established for calendar year 2014;
3 (4) 2 percent of the emission allowances established for calendar year 2015; and
4 (5) 1 percent of the emission allowances established for calendar year 2016.

5 **SEC. ~~3302.~~ 3202. DISTRIBUTION.**

6 (a) In General.—Not later than 1 year after the date of enactment of this Act, the
7 Administrator shall establish, by regulation, procedures and standards for use in
8 distributing, to owners and operators of covered facilities **and other facilities that emit**
9 **greenhouse gas**, emission allowances allocated under section ~~3304~~ **3201**.

10 (b) Consideration.—The procedures and standards established under subsection (a)
11 shall provide for consideration of verified and credible emission reductions registered
12 before the date of enactment of this Act under—

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

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

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

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

22 (c) Distribution.—Not later than 4 years after the date of enactment of this Act, the
23 Administrator shall distribute all emission allowances allocated under section ~~3304~~ **3201**.

24 **Subtitle ~~D~~—States C—States**

25 **SEC. ~~3404~~ 3301. ALLOCATION FOR ENERGY**
26 **SAVINGS.**

27 (a) Allocation.—Not later than April 1, 2011, and annually thereafter through calendar
28 year 2049, the Administrator shall allocate 1 percent of the Emission Allowance Account
29 for the following calendar year among States that have adopted regulations by not later
30 than the date on which the allowance allocations are made, that subject regulated natural
31 gas and electric utilities that deliver gas or electricity in ~~the State~~ **those States** to
32 regulations that—

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

36 (2) make cost-effective energy-efficiency investments by investor-owned natural
37 gas or electric utilities at least as rewarding to their shareholders, ~~on a risk-adjusted~~
38 ~~basis~~ for the equity capital invested, as power or energy purchases, or investments in

1 new energy supplies or infrastructure.

2 (b) Allocation for Building Efficiency.—Not later than January 1, 2012, and annually
3 thereafter through January 1, 2050, the Administrator shall allocate 1 percent of the
4 Emission Allowance Account among States that are in compliance with ~~subsection~~
5 **section 304(c)** of the Energy Conservation and Production Act (as amended by section
6 5201).

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

10 (d) Use.—Any State receiving emission allowances under this section for a calendar
11 year shall retire or use, in 1 or more of the ways described in section ~~3403(e)(1)~~
12 **3303(c)(1)**, not less than 90 percent of the emission allowances allocated to the State (or
13 proceeds of the sale of those allowances) under this section for the calendar year.

14 **SEC. ~~3402~~ 3302. ALLOCATION FOR STATES WITH**
15 **PROGRAMS THAT EXCEED FEDERAL EMISSION**
16 **REDUCTION TARGETS.**

17 (a) Allocation.—Not later than April 1, 2011, and annually thereafter through calendar
18 year 2049, the Administrator shall allocate 2 percent of the Emission Allowance Account
19 for the following calendar year among States that have—

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

23 (2) by the time of an allocation under this subsection, imposed on covered
24 facilities within the States aggregate greenhouse gas emission limitations more
25 stringent than those imposed on covered facilities under title II.

26 (b) Distribution.—Not later than 2 years after the date of enactment of this Act, the
27 Administrator shall establish procedures and standards for use in distributing emission
28 allowances among States in accordance with subsection (a).

29 (c) Use.—Any State receiving emission allowances under this section for a calendar
30 year shall retire or use, in 1 or more of the ways described in section ~~3403(e)(1)~~
31 **3303(c)(1)**, not less than 90 percent of the emission allowances allocated to the State (or
32 proceeds of the sale of those allowances) under this section for the calendar year.

33 **SEC. ~~3403~~ 3303. GENERAL ALLOCATION.**

34 (a) Allocation.—Subject to subsection (d)(3), not later than April 1, 2011, and annually
35 thereafter through calendar year 2049, the Administrator shall allocate 5 percent of the
36 Emission Allowance Account for the following calendar year among States.

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

39 (1) For each calendar year, $\frac{1}{3}$ of the quantity of allowances available for

1 allocation to States under subsection (a) shall be ~~allocated~~ **distributed** among
2 individual States based on the proportion that—

3 (A) the expenditures of a State for the low-income home energy assistance
4 program established under the Low-Income Home Energy Assistance Act of
5 1981 (42 U.S.C. 8621 et seq.) for the preceding calendar year; bears to

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

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

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

14 (B) the population of all States, as determined by that census.

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

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

23 (B) the aggregate quantity of carbon dioxide that would be emitted assuming
24 that all of the coal that is mined, natural gas that is processed, and petroleum
25 that is refined in all States for the preceding year is completely combusted and
26 that none of the carbon dioxide emissions are captured, as determined by the
27 Secretary of Energy.

28 (c) Use.—

29 (1) IN GENERAL.—During any calendar year, a State shall retire or use in 1 or
30 more of the following ways not less than 90 percent of the allowances allocated to
31 the State (or proceeds of sale of those emission allowances) under this section for
32 that calendar year:

33 (A) To mitigate impacts on low-income energy consumers.

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

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

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

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

1 (F) To address local or regional impacts of climate change, including the
2 relocation of communities displaced by the impacts of climate change.

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

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

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

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

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

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

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

17 (d) Program for Tribal Communities.—

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

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

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

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

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

33 (a) Allocation.—Not later than April 1, 2011, and annually thereafter through
34 calendar year 2049, the Administrator shall allocate ~~1(3) Allocations to states.~~ For
35 each calendar year for which the Administrator allocates 0.5 percent of the Emission
36 Allowance Account to the program established under paragraph (1), the general
37 allocation for forest carbon activities under section 3803 shall be 2.5 percent of the
38 Emission Allowance Account. **for the following calendar year among States.**

39 ~~Subtitle E—Electricity Consumers~~(b) Distribution.—The emission allowances

1 available for allocation to States under subsection (a) for a calendar year shall be
2 distributed among the States based on the formula established in section
3 104(b)(1)(A) of title 23, United States Code.

4 ~~SEC. 3501.~~(c) Use.—During any calendar year, a State receiving emission
5 allowances under this section shall—

6 (1) use the emission allowances (or proceeds of sale of those emission
7 allowances) only for—

8 (A) the operating costs of State and municipal mass transit systems;

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

11 (C) efforts to increase the efficiency of mass transit systems through the
12 development, purchase, or deployment of innovative technologies that
13 reduce emissions of greenhouse gases; and

14 (2) shall ensure that use of the emission allowances (or proceeds of sale of
15 those emission allowances) by the State for the purposes described in
16 paragraph (1) is geographically distributed as follows:

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

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

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

20 (d) Return of Unused Emission Allowances.—Any State receiving emission
21 allowances under this section shall return to the Administrator any such emission
22 allowance that the State has failed to use in accordance with subsection (c) by not
23 later than 5 years after the date of receipt of the emission allowance from the
24 Administrator.

25 (e) Use of Returned Emission Allowances.—The Administrator shall immediately
26 transfer to the Corporation for auctioning under section 4302 any emission
27 allowances returned to the Administrator under subsection (d).

28 Subtitle D—Electricity Consumers

29 SEC. 3401. ALLOCATION.

30 Not later than April 1, 2011, and annually thereafter through calendar year 2049, the
31 Administrator shall allocate among load-serving entities ~~40~~ 9 percent of the Emission
32 Allowance Account for the following calendar year.

33 ~~SEC. 3502.~~ 3402. DISTRIBUTION.

34 (a) In General.—For each calendar year, the emission allowances allocated under
35 section ~~3501~~ 3401 shall be distributed by the Administrator to each load-serving entity,
36 including each rural electric cooperative that serves as a load-serving entity in a State that
37 is not a participant in the pilot program established under ~~subsection 3904(a)~~ section
38 3903(a), based on the proportion that—

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

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

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

12 ~~SEC. 3503.~~ **3403. USE.**

13 (a) In General.—Any load-serving entity that accepts emission allowances distributed
14 under section ~~3502~~ **3402** shall—

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

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

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

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

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

24 ~~(c) Inclusion in Retail Rates.—To facilitate the prompt pass through of the benefits~~
25 ~~from the sale of emission allowances to retail customers—~~

26 ~~(1) any credit from the sale of allowances shall be reflected in the retail rates of a load-~~
27 ~~serving entity not later than 90 days after the sale of the allowances;~~

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

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

32 ~~(d) Prohibition on Rebates.—No load-serving entity may use any proceeds from the~~
33 ~~sale of emission allowances under subsection (a) to provide to any consumer a rebate that~~
34 ~~is based on the quantity of electricity used by the consumer.~~

35 ~~SEC. 3504.~~ **3404. REPORTING.**

36 (a) In General.—Each load-serving entity that accepts emission allowances distributed
37 under section ~~3502~~ **3402** shall, for each calendar year for which the load-serving entity
38 accepts emission allowances, submit to the Administrator a report describing—

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

6 (b) Availability of Reports.—The Administrator shall make available to the public all
7 reports submitted by any load-serving entity under subsection (b), including by
8 publishing those reports on the Internet.

9 ~~Subtitle F—Bonus Allowances for Carbon Capture and~~
10 ~~Geological Sequestration E—Natural Gas Consumers~~

11 ~~SEC. 3601. ALLOCATION. SEC. 3501. ALLOCATION.~~

12 ~~(a) In General.—Not later than April 1, 2011, and annually thereafter through~~
13 ~~calendar year 2049, the Administrator shall allocate among natural gas local~~
14 ~~distribution companies 2 percent of the Emission Allowance Account for the~~
15 ~~following calendar year.~~

16 **SEC. 3502. DISTRIBUTION.**

17 For each calendar year, the emission allowances allocated under section 3501
18 shall be distributed by the Administrator to each natural gas local distribution
19 company based on the proportion that—

20 (1) the quantity of natural gas delivered by the natural gas local distribution
21 company during the 3 calendar years preceding the calendar year for which the
22 emission allowances are distributed, adjusted upward for natural gas not
23 delivered as a result of consumer energy-efficiency programs implemented by
24 the natural gas local distribution company and verified by the regulatory
25 agency of the natural gas local distribution company; bears to

26 (2) the total quantity of natural gas delivered by all natural gas local
27 distribution companies during those 3 calendar years.

28 **SEC. 3503. USE.**

29 (a) In General.—Any natural gas local distribution company that accepts
30 emission allowances distributed under section 3502 shall—

31 (1) sell each emission allowance distributed to the natural gas local
32 distribution company by not later than 1 year after receiving the emission
33 allowance; and

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

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

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

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

4 (c) **Prohibition on Rebates.**—No natural gas local distribution company may use
5 any proceeds from the sale of emission allowances under subsection (a) to provide to
6 any consumer a rebate that is based on the quantity of natural gas used by the
7 consumer.

8 **SEC. 3504. REPORTING.**

9 (a) **In General.**—Each natural gas local distribution company that accepts
10 emission allowances distributed under section 3502 shall, for each calendar year for
11 which the natural gas local distribution company accepts emission allowances,
12 submit to the Administrator a report describing—

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

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

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

19 (b) **Availability of Reports.**—The Administrator shall make available to the
20 public all reports submitted by any natural gas local distribution company under
21 subsection (a), including by publishing those reports on the Internet.

22 **Subtitle F—Bonus Allowances for Carbon Capture and** 23 **Geological Sequestration**

24 **SEC. 3601. ALLOCATION.**

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

26 (1) establish a Bonus Allowance Account; and

27 (2) allocate 4 percent of the emission allowances established for calendar years
28 2012 through ~~2035~~ **2030** to the Bonus Allowance Account.

29 ~~(b) **Initial Number of Allowances.**—As of January 1, 2012,~~
30 ~~there shall be 3,932,160,000 emission allowances in the~~
31 ~~Bonus Allowance Account.~~

32 **SEC. 3602. QUALIFYING PROJECTS.**

33 (a) **Definitions.**—In this section:

34 (1) **COMMENCED.**—The term “commenced”, with respect to construction,
35 means that an owner or operator has obtained the necessary permits to

1 undertake a continuous program of construction and has entered into a binding
2 contractual obligation, with substantial financial penalties for cancellation, to
3 undertake such a program.

4 (2) CONSTRUCTION.—The term “construction” means the fabrication,
5 erection, or installation of the technology for the carbon capture and
6 sequestration project.

7 (b) Eligibility.—~~To~~ To be eligible to receive emission allowances under this subtitle, a
8 carbon capture and sequestration project shall—

9 (1) comply with such criteria and procedures as the Administrator may establish,
10 including a requirement for a minimum of an 85 percent capture rate, as prescribed
11 in subsection (c), for an annual emissions performance standard for carbon
12 dioxide emissions on an annual basis from any unit for which allowances are
13 allocated;

14 (2) sequester, in a geological formation permitted by the Administrator for that
15 purpose in accordance with regulations promulgated under section 1421(d) part C
16 of the Safe Drinking Water Act (42 U.S.C. 300h (d)) et seq.), carbon dioxide
17 resulting from electric power generation; and

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

20 (c) Emission Performance Standards.—Subject to subsection (d), a carbon
21 capture and sequestration project shall be eligible to receive emission allowances
22 under this subtitle only if the project achieves 1 of the following emissions
23 performance standards for limiting carbon dioxide emissions from the unit on an
24 annual average basis:

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

29 (2) For any new entrant electric generation unit for which construction of the
30 unit commenced prior to July 1, 2018, an annual emissions rate of not more
31 than 800 pounds of carbon dioxide per megawatt-hour of net electricity
32 generation, after subtracting the carbon dioxide that is captured and
33 sequestered.

34 (3) For any new entrant electric generation unit for which construction of the
35 unit commenced on or after July 1, 2018, an annual emissions rate of not more
36 than 350 pounds of carbon dioxide per megawatt-hour of net electricity
37 generation, after subtracting the carbon dioxide that is captured and
38 sequestered.

39 (4) For any unit at covered facility that is not an electric generation unit, an
40 annual emissions rate of not more than 350 pounds of carbon dioxide per
41 megawatt-hour of net electricity generation, after subtracting the carbon
42 dioxide that is captured and sequestered.

1 **(d) Adjustment of Performance Standards.—**

2 **(1) IN GENERAL.—**The Corporation may adjust the emissions performance
3 **standard for a carbon capture and sequestration project under subsection (c)**
4 **for an electric generation unit that uses subbituminous coal, lignite, or**
5 **petroleum coke in significant amounts.**

6 **(2) REQUIREMENT.—**In any case described in paragraph (1), the performance
7 **standard for the project shall prescribe an annual emissions rate that requires**
8 **the project to achieve an equivalent reduction from uncontrolled carbon**
9 **dioxide emissions levels from the use of subbituminous coal, lignite, or**
10 **petroleum coke, as compared to the emissions that the project would have**
11 **achieved if that unit had combusted only bituminous coal during the particular**
12 **year.**

13 **SEC. 3603. DISTRIBUTION.**

14 ~~Subject~~**(a) In General.—**Subject to section 3604, for each of calendar years 2012
15 through 2039, the Administrator shall distribute emission allowances from the Bonus
16 Allowance Account to each qualifying project under this subtitle in a quantity equal to
17 the product obtained by ~~multiplying~~ **multiplying—**

18 **(1) the bonus allowance adjustment factor, as determined under subsection**
19 **(b);**

20 **(2) the number of metric tons of carbon dioxide ~~geologically sequestered by the~~**
21 **project and ~~emissions avoided through capture and geologic sequestration of~~**
22 **emissions by the project; and**

23 **(3) the bonus allowance rate for that calendar year, as provided in the following**
24 **table:**

25 1 Year1Bonus Allowance Rate

26 20124.5

27 20134.5

28 20144.5

29 20154.5

30 20164.5

31 20174.5

32 20184.2

33 20193.9

34 20203.6

35 20213.3

36 20223.0

37 20232.7

1 20242.4
2 20252.1
3 20261.8
4 20271.5
5 20281.3
6 20291.1
7 20300.9
8 20310.7
9 20320.5
10 20330.5
11 20340.5
12 20350.5
13 20360.5
14 20370.5
15 20380.5
16 20390.5

17 **(b) Bonus Allowance Adjustment Ratio.—The Administrator shall determine the**
18 **bonus allowance adjustment factor by dividing a carbon dioxide emissions rate of**
19 **350 pounds per megawatt-hour by the annual carbon dioxide emissions rate, on a**
20 **pounds per megawatt-hour basis, that a qualifying project at the electric generation**
21 **unit achieved during a particular year, except that—**

22 **(1) the factor shall be equal to 1 in the case of a project that qualifies under**
23 **section 3602(b)(1) during the first 4 years that emissions allowances are**
24 **distributed to the project; and**

25 **(2) the factor shall not exceed 1 for any qualifying project.**

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

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

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

30 (2) if the unit covered by the qualifying project began operating before January 1,
31 2012, the period of calendar years 2012 through 2021.

32 **SEC. 3605. EXHAUSTION OF BONUS ALLOWANCE** 33 **ACCOUNT.**

34 If, at the beginning of a calendar year, the Administrator determines that the number of
35 emission allowances remaining in the Bonus Allowance Account will be insufficient to

1 allow the distribution, in that calendar year, of the number of allowances that otherwise
2 would be distributed under section 3603 for the calendar year, the Administrator shall, for
3 the calendar year—

4 (1) distribute the remaining bonus allowances only to qualifying projects that
5 were already qualifying projects during the preceding calendar year;

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

8 (3) discontinue the program established under this subtitle as of the date on which
9 the Bonus Allowance Account is projected to be fully used based on projects already
10 in operation.

11 Subtitle G—Domestic Agriculture and Forestry

12 SEC. 3701. ALLOCATION.

13 Not later than April 1, 2011, and annually thereafter through calendar year 2049, the
14 Administrator shall allocate to the Secretary of Agriculture 5 percent of the Emission
15 Allowance Account for the following calendar year for use in—

16 (1) ~~reducing~~ **achieving real, verifiable, additional, permanent, and enforceable**
17 **reductions in** greenhouse gas emissions from the agriculture and forestry sectors of
18 the United States economy; and

19 (2) ~~increasing~~ **achieving real, verifiable, additional, permanent, and**
20 **enforceable increases in** greenhouse gas sequestration from those sectors.

21 SEC. 3702. AGRICULTURAL AND FORESTRY 22 GREENHOUSE GAS MANAGEMENT RESEARCH.

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

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

29 (2) any additional research that is necessary;

30 (3) the proposed priority for additional research;

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

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

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

36 (1) IN GENERAL.—As soon as practicable after the date of enactment of this Act,
37 the Secretary of Agriculture shall establish a standardized system of carbon

1 measurement and certification for the agricultural and forestry sectors.

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

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

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

8 (c) Research.—After the date of submission of the report described in paragraph (1),
9 the President and the Secretary of Agriculture (in collaboration with the member
10 institutions of higher education of the Consortium for Agricultural Soil Mitigation of
11 Greenhouse Gases, institutions of higher education, and research entities) shall initiate a
12 program to conduct any additional research that is necessary.

13 SEC. 3703. DISTRIBUTION.

14 ~~Taking~~**(a) In General.**—~~Taking~~ into account the report prepared under ~~subsection~~
15 **section 3702(a)**, the Secretary of Agriculture shall establish, by regulation, a program
16 under which agricultural and forestry ~~sequestration~~ allowances may be distributed to
17 entities that carry out ~~sequestration~~ projects on agricultural and forest land that achieve
18 **long-term real, verifiable, additional, permanent, and enforceable** greenhouse gas
19 emission mitigation benefits.

20 **(b) Nitrous Oxide and Methane.**—**The Secretary of Agriculture shall ensure that,**
21 **during any 5-year period, the average annual percentage of the Emission Allowance**
22 **Account that is distributed to entities under the program established under**
23 **subsection (a) specifically for achieving real, verifiable, additional, permanent, and**
24 **enforceable reductions in nitrous oxide emissions through soil management or**
25 **achieving real, verifiable, additional, permanent, and enforceable reductions in**
26 **methane emissions through enteric fermentation and manure management shall be**
27 **0.5 percent.**

28 Subtitle H—International Forest Protection

29 SEC. 3801. FINDINGS.

30 Congress finds that—

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

33 (2) land conversion and deforestation are 2 of the largest sources of greenhouse
34 gas emissions in the developing world, amounting to roughly 40 percent of the total
35 greenhouse gas emissions of the developing world;

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

38 (4) encouraging reduced deforestation and other forest carbon activities in other
39 countries can—

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

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

5 (C) substantially benefit

6 ~~(D)~~ biodiversity, conservation, and indigenous and other forest-dependent
7 people in developing countries.

8 SEC. 3802. DEFINITION OF FOREST CARBON 9 ACTIVITIES.

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

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

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

17 SEC. 3803. ALLOCATION.

18 Not later than April 1, 2011, and annually thereafter through calendar year 2049, the
19 Administrator shall allocate and distribute ~~3~~ **2.5** percent of the Emission Allowance
20 Account for the following calendar year for use in carrying out forest carbon activities in
21 countries other than the United States.

22 SEC. 3804. DEFINITION AND ELIGIBILITY 23 REQUIREMENTS.

24 (a) Eligibility Requirements for Forest Carbon Activities.—Not later than 2 years after
25 the date of enactment of this Act, the Administrator, in consultation with the Secretary of
26 the Interior, the Secretary of State, and the Secretary of Agriculture, shall promulgate
27 eligibility requirements for forest carbon activities directed at reducing emissions from
28 deforestation and forest degradation, and at sequestration of carbon through restoration of
29 forests and degraded land, afforestation, and improved forest management in countries
30 other than the United States, including requirements that those activities be—

31 (1) carried out and managed in accordance with widely-accepted environmentally
32 sustainable forestry practices; and

33 (2) designed—

34 (A) to promote native species and restoration of native forests, where
35 practicable; and

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

37 (b) Quality Criteria for Forest Carbon Allocations.—Not later than 2 years after the

1 date of enactment of this Act, the Administrator, in consultation with the Secretary of the
2 Interior, the Secretary of State, and the Secretary of Agriculture, shall promulgate
3 regulations establishing the requirements for eligibility to receive allowances under this
4 section, including requirements that ensure that the emission reductions or sequestrations
5 are real, permanent, additional, ~~and~~ verifiable **and enforceable**, with reliable measuring
6 and monitoring and appropriate accounting for leakage.

7 SEC. 3805. INTERNATIONAL FOREST CARBON 8 ACTIVITIES.

9 (a) In General.—The Administrator, in consultation with the Secretary of State, shall
10 identify and periodically update a list of countries that have—

11 (1) demonstrated capacity to participate in international forest carbon activities,
12 including—

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

14 (B) technical capacity to monitor and measure forest carbon fluxes with an
15 acceptable level of uncertainty; and

16 (C) institutional capacity to reduce emissions from deforestation and
17 degradation;

18 (2) capped greenhouse gas emissions or otherwise established a national emission
19 reference scenario based on historical data; and

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

21 (b) Additionality.—

22 (1) REDUCTION IN DEFORESTATION AND FOREST DEGRADATION.—A verified
23 reduction in greenhouse gas emissions from deforestation and forest degradation
24 under a cap or from a nationwide emissions reference scenario described in
25 subsection (a) shall be—

26 (A) eligible for distribution of emission allowances under this section; and

27 (B) considered to satisfy the additionality criterion.

28 (2) PERIODIC REVIEW OF NATIONAL LEVEL REDUCTIONS IN DEFORESTATION AND
29 DEGRADATION.—The Administrator, in consultation with the Secretary of State,
30 shall identify and periodically update a list of countries described in subsection (a)
31 that have—

32 (A) achieved national-level reductions of deforestation and degradation
33 below a historical reference scenario, taking into consideration the average
34 annual deforestation and degradation rates of the country and of all countries
35 during a period of at least 5 years; and

36 (B) demonstrated those reductions using remote sensing technology that
37 meets international standards.

38 (3) OTHER FOREST CARBON ACTIVITIES.—A forest carbon activity, other than a
39 reduction in deforestation or forest degradation, shall be eligible for distribution of

1 emission allowances under this section, subject to the quality criteria for forest
2 carbon activities identified in this Act or in regulations promulgated under this Act.

3 (c) Recognition of Forest Carbon Activities.—With respect to countries other than
4 countries described in subsection (a), the Administrator—

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

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

11 SEC. 3806. REVIEWS AND DISCOUNT.

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

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

22 Subtitle I—~~Covered Facilities I~~—Transition Assistance

23 SEC. 3901. GENERAL ALLOCATION AND 24 DISTRIBUTION.:-

25 (a) ~~General Electric Power Sector.~~—~~Not Allocation.~~—~~Not~~ later than April 1, 2011,
26 and annually thereafter through January 1, ~~2033~~ **2029**, the Administrator shall allocate a
27 ~~percentage~~ **percentages** of the Emission Allowance Account for the following calendar
28 year to owners ~~or operators of covered facilities within the electric power sector~~
29 ~~(including rural electric cooperatives that own or operate covered facilities in that sector~~
30 ~~in any State that is not a participant in the pilot program established under section~~
31 ~~3904(a)), as follows:~~**2, L2(4,4,4,0,0,0) and operators of industrial covered facilities as**
32 **follows:6, L4(4,4,4,4,0),tp0,p10,10/12,g1,t1, s150,r150**

33 ~~1Calendar year1Percentage of Emission Allowance Account~~

34 20121195

35 20131195

36 20141195

37 20151195

38 20161195

- 1 20171185
- 2 20181175
- 3 20191165
- 4 20201155
- 5 20211145
- 6 20221135
- 7 20231125
- 8 20241115
- 9 20251105
- 10 2026195
- 11 2027185
- 12 2028175
- 13 2029165
- 14 2030155
- 15 2031145
- 16 2032135
- 17 2033125
- 18 203411.

19 (b) Rural Electric Cooperatives. — Not later than April 1, 2011, and annually thereafter
20 through January 1, 2034 xl60,8,8,8,8,8

21 **1Calendar Year1Fossil fuel-fired electric power generating facilities1Rural**
22 **electric cooperatives1Owners and operators of energy intensive manufacturing**
23 **facilities1Facilities that produce or import petroleum-based fuel1HFC producers**
24 **and importers**

25 **20121911022 s,s,s,s,s**

26 **20131911022 s,s,s,s,s**

27 **20141911022 s,s,s,s,s**

28 **20151911022 s,s,s,s,s**

29 **20161911022 s,s,s,s,s**

30 **20171911022 s,s,s,s,s**

31 **2018181922 s,s,s,s,s**

32 **2019171922 s,s,s,s,s**

33 **2020161822 s,s,s,s,s**

34 **2021141722 s,s,s,s,s**

- 1 202213171.751.75 s,s,s,s,s,s
- 2 202312161.751.75 s,s,s,s,s,s
- 3 202411151.51.25 s,s,s,s,s,s
- 4 2025101411 s,s,s,s,s,s
- 5 202681311 s,s,s,s,s,s
- 6 20276120.50.5 s,s,s,s,s,s
- 7 20284110.50.5 s,s,s,s,s,s
- 8 2029210.50.250.25 s,s,s,s,s,s
- 9 2030110.250.250.25

10 **(b) General Distribution.**—Not later than 1 year after the date of enactment of
11 **this Act**, the Administrator shall ~~allocate 1 percent of the quantity~~ establish a system for
12 **distributing to covered facilities identified under subsection (a) the emission**
13 **allowances allocated under that subsection.**

14 **(c) Facilities That Shut Down.**—The system established pursuant to subsection (b)
15 **shall ensure, notwithstanding any other provision of this subtitle, that—**

16 **(1) emission allowances are not distributed to an owner or operator for any**
17 **covered facility that has been permanently shut down at the time of the**
18 **distribution;**

19 **(2) the owner or operator of any covered facility that permanently shuts**
20 **down in a calendar year shall promptly return to the Administrator any**
21 **emission allowances that the Administrator has distributed for that covered**
22 **facility for any subsequent calendar years; and**

23 **(3) that, if an energy intensive manufacturing facility receives a distribution**
24 **of emission allowances under this subtitle for a calendar year and subsequently**
25 **permanently shuts down during that calendar year, the owner or operator of**
26 **the facility shall promptly return to the Administrator a number in the Emission**
27 **Allowance Account for the following year to rural electric cooperatives.**

28 **(e) Industrial Sector.**—Not later than April 1, 2011, and annually thereafter
29 **through January 1, 2034, the Administrator shall allocate a percentage of the**
30 **quantity of emission allowances in Emission Allowance Account for the following**
31 **year to owners or operators of covered facilities in the industrial sector, as**
32 **follows: 2, L2(4,4,4,0,0,0), tp0, p10, 10/12, g1, t1, s150, r150 equal to the number that**
33 **the Administrator determines is the portion that the owner or operator will no**
34 **longer need to submit for that facility under section 1202(a).**

35 ~~1Calendar year 1Percentage of Emission Allowance~~
36 ~~Account~~

37 ~~20121205~~

1 ~~20131205~~

2 ~~20141205~~

3 ~~20151205~~

4 ~~20161205~~

5 ~~20171195~~

6 ~~20181185~~

7 ~~20191175~~

8 ~~20201165~~

9 ~~20211155~~

10 ~~20221145~~

11 ~~20231135~~

12 ~~20241125~~

13 ~~20251115~~

14 ~~20261105~~

15 ~~2027195~~ **SEC. 3902. DISTRIBUTING EMISSION**
16 **ALLOWANCES TO OWNERS AND OPERATORS**
17 **OF FOSSIL FUEL-FIRED ELECTRIC POWER**
18 **GENERATING COVERED FACILITIES.**

19

20 * ~~2-2028185~~

21 ~~2029175~~

22 ~~2030165~~

23 ~~2031155~~

24 ~~2032145~~

25 ~~2033135~~

26 ~~2034125~~

27 ~~203511.~~

1 ~~SEC. 3902. DISTRIBUTION SYSTEM.~~

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

5 ~~SEC. 3903. DISTRIBUTING EMISSION ALLOWANCES WITHIN THE~~
6 ~~ELECTRIC POWER SECTOR.~~

7 (a) New Entrants.—

8 (1) IN GENERAL.—As part of the system established under section ~~3902~~ **3901(b)**,
9 the Administrator shall, for each calendar year, set aside, from the quantity of
10 emission allowances represented by the percentages described in the table contained
11 in section 3901(a) for ~~the general owners and operators of fossil fuel-fired~~ electric
12 power sector **generating covered facilities**, a quantity of emission allowances for
13 distribution to **owners and operators of new entrant fossil fuel-fired electric**
14 **power generating covered facilities (including such** new entrant covered electric
15 power sector facilities ~~(including new entrant electric power sector facilities owned~~
16 or operated by rural electric cooperatives in any State that is not a participant in the
17 pilot program established under section ~~3904(a))~~ **3903(a)**).

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

22 (A) the average greenhouse gas emission rate of all ~~covered~~ **fossil fuel-fired**
23 electric power sector **generating** facilities that commenced operations during
24 the 5 years preceding the date of enactment of this Act; and

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

28 (b) Incumbents.—

29 (1) IN GENERAL.—As part of the system established under section ~~3902~~ **3901(b)**,
30 the Administrator shall, for each calendar year, distribute to ~~covered~~ **fossil fuel-fired**
31 electric power sector **generating covered** facilities (including **such** covered electric
32 power sector facilities owned or operated by rural electric cooperatives in any State
33 that is not a participant in the pilot program established under section ~~3904(a))~~
34 **3903(a)**) that were operating during the calendar year preceding the year in which
35 this Act was enacted the emission allowances represented by the percentages
36 described in the table contained in section 3901(a) for ~~the general owners and~~
37 **operators of fossil fuel-fired** electric power sector **generating covered** facilities
38 that remain after the distribution of emission allowances under subsection (a).

39 (2) CALCULATION OF ALLOWANCES.—The quantity of emission allowances
40 distributed to a ~~covered~~ **fossil fuel-fired** electric power sector **generating covered**
41 facility under paragraph (1) shall be equal to the product obtained by multiplying—

42 (A) the quantity of emission allowances available for distribution under

- 1 paragraph (1); and
- 2 (B) the quotient obtained by dividing—
- 3 (i) the annual average quantity of carbon dioxide equivalents emitted by
- 4 the ~~covered electric power sector~~ facility during the 3 calendar years
- 5 preceding the date of enactment of this Act; by
- 6 (ii) the annual average of the aggregate quantity of carbon dioxide
- 7 equivalents emitted by all ~~covered~~ **fossil fuel-fired** electric power ~~sector~~
- 8 **generating covered** facilities during those 3 calendar years.

9 **SEC. ~~3904~~ 3903. DISTRIBUTING ADDITIONAL**

10 **EMISSION ALLOWANCES TO RURAL ELECTRIC**

11 **COOPERATIVES.**

12 (a) Establishment of Pilot Program.—

13 (1) IN GENERAL.—As part of the system established under section ~~3902~~ **3901(b)**,

14 the Administrator shall establish a pilot program for distributing to rural electric

15 cooperatives in the States described in paragraph (2), for each of calendar years

16 2012 through ~~2035~~ **2029**, 15 percent of the total number of emission allowances

17 allocated for the calendar year to rural electric cooperatives under ~~subsection~~

18 ~~3901(b)~~ **section 3901(a)**.

19 (2) DESCRIPTION OF STATES.—The States referred to in subsection (a) are—

20 (A) 1 State east of the Mississippi River in which 13 rural electric

21 cooperatives sold to consumers in that State electricity in a quantity of

22 9,000,000 to 10,000,000 MWh, according to Energy Information

23 Administration data for calendar year 2005; and

24 (B) 1 State west of the Mississippi River in which 30 rural electric

25 cooperatives sold to consumers in that State electricity in a quantity of

26 3,000,000 to 4,000,000 MWh, according to Energy Information Administration

27 data for calendar year 2005.

28 (b) Distribution to Other States.—As part of the system established under section ~~3902~~

29 **3901(b)**, the Administrator shall establish a system for distributing to rural electric

30 cooperatives in all States other than the 2 States described in subsection (a)(2), for each

31 of calendar years 2012 through ~~2035~~ **2029**, 85 percent of the total number of emission

32 allowances allocated for the calendar year to rural electric cooperatives under section

33 ~~3901(b)~~ **3901(a)**, in proportion to the sales of each rural electric cooperative, as reported

34 by the Energy Information Administration.

35 (c) Limitation.—No rural electric cooperative that receives emission allowances under

36 subsection (a) shall receive any emission allowance under subsection (b), **section 3902**,

37 or section ~~3903~~ **3402**.

38 (d) Report.—Not later than January 1, 2015, and every 3 years thereafter, the

39 Administrator shall submit to Congress a report describing the success of the pilot

40 program established under subsection (a), including a description of—

1 (1) the benefits realized by ratepayers of the rural electric cooperatives that
2 receive allowances under the pilot program; and

3 (2) the use by those rural electric cooperatives of advanced, low greenhouse gas-
4 emitting electric generation technologies, if any.

5 **SEC. 3904. DISTRIBUTING EMISSION**
6 **ALLOWANCES TO OWNERS AND OPERATORS**
7 **OF ENERGY INTENSIVE MANUFACTURING**
8 **FACILITIES.**

9 (a) **Definitions.—In this section:**

10 (1) **CURRENTLY OPERATING FACILITY.—**The term “currently operating
11 facility” means an eligible manufacturing facility that had significant
12 operations during the calendar year preceding the calendar year for which
13 emission allowances are being distributed under this section.

14 (2) **ELIGIBLE MANUFACTURING FACILITY.—**

15 (A) **IN GENERAL.—**The term “eligible manufacturing facility” means a
16 manufacturing facility located in the United States that principally
17 manufactures iron, steel, aluminum, pulp, paper, cement, chemicals, or
18 such other products as the Administrator may determine, by rule, are
19 likely to be significantly disadvantaged in competitive international
20 markets as a result of indirect costs of the program established under this
21 Act.

22 (B) **EXCLUSION.—**The term “eligible manufacturing facility” does not
23 include a facility eligible to receive emission allowances under section 3902,
24 3903, or 3905.

25 (3) **INDIRECT CARBON DIOXIDE EMISSIONS.—**The term “indirect carbon
26 dioxide emissions” means the product obtained by multiplying (as determined
27 by the Administrator)—

28 (A) the quantity of electricity consumption at an eligible manufacturing
29 facility; and

30 (B) the rate of carbon dioxide emission per kilowatt-hour output for the
31 region in which the manufacturer is located.

32 (4) **NEW ENTRANT MANUFACTURING FACILITY.—**The term “new entrant
33 manufacturing facility”, with respect to a calendar year, means an eligible
34 manufacturing facility that began operation during or after the calendar year
35 for which emission allowances are being distributed under this section.

36 (b) **Total Allocation for Currently Operating Facilities.—**As part of the system
37 established under section 3901(b), the Administrator shall, for each calendar year,
38 distribute 96 percent of the total quantity of emission allowances available for
39 allocation to carbon-intensive manufacturing under section 3901(a) to currently

1 operating facilities.

2 (c) **Total Allocation for Currently Operating Facilities in Each Category of**
3 **Manufacturing Facilities.**—The quantity of emission allowances distributed by the
4 Administrator for a calendar year to facilities in each category of currently
5 operating facilities shall be equal to the product obtained by multiplying—

6 (1) the total quantity of emission allowances available for allocation under
7 subsection (b); and

8 (2) the ratio that (during the calendar year preceding the calendar year for
9 which emission allowances are being distributed under this section)—

10 (A) the sum of the direct and indirect carbon dioxide emissions by
11 currently operating facilities in the category; bears to

12 (B) the sum of the direct and indirect carbon dioxide emissions by all
13 currently operating facilities.

14 (d) **Individual Allocations to Currently Operating Facilities.**—The quantity of
15 emission allowances distributed by the Administrator for a calendar year to a
16 currently operating facility shall be a quantity equal to the product obtained by
17 multiplying—

18 (1) the total quantity of emission allowances available for allocation to
19 currently-operating facilities in the appropriate category, as determined under
20 subsection (c); and

21 (2) the ratio that (during the 3 calendar years preceding the year for which
22 the allocation rule is promulgated for the allocation period)—

23 (A) the average number of production employees employed at the
24 facility; bears to

25 (B) the average number of production employees employed at all
26 existing eligible manufacturing facilities in the appropriate category.

27 (e) **New Entrant Manufacturing Facilities.**—

28 (1) **IN GENERAL.**—As part of the system established under section 3901(b),
29 the Administrator shall, for each calendar year, distribute 4 percent of the total
30 quantity of emission allowances available for allocation to carbon intensive
31 manufacturing under section 3901(a) to new entrant manufacturing facilities.

32 (2) **INDIVIDUAL ALLOCATIONS.**—The quantity of emission allowances
33 distributed by the Administrator for a calendar year to a new entrant
34 manufacturing facility shall be proportional to the product obtained by
35 multiplying—

36 (A) the average number of production employees employed at the new
37 entrant manufacturing facility during the prior calendar year; and

38 (B) the rate (in emission allowances per production employee) at which
39 emission allowances were allocated to currently operating facilities in the
40 appropriate category for the calendar year, as determined under

1 subsection (d).

2 SEC. 3905. DISTRIBUTING EMISSION ALLOWANCES
3 ~~WITHIN THE INDUSTRIAL SECTOR. TO OWNERS~~
4 **AND OPERATORS OF FACILITIES AND OTHER**
5 **ENTITIES THAT PRODUCE OR IMPORT**
6 **PETROLEUM-BASED FUEL.**

7 (a) New Entrants.—

8 (1) IN GENERAL.—As part of the system established under section ~~3902~~ **3901(b)**,
9 the Administrator shall, for each calendar year, set aside, from the quantity of
10 emission allowances represented by the percentages described in the table contained
11 in section ~~3901(c) for the industrial sector~~ **3901(a) for owners and operators of**
12 **facilities or entities that produce or import petroleum-based fuel**, a quantity of
13 emission allowances for distribution to ~~new entrant covered industrial sector~~
14 ~~facilities.~~ **owners and operators of new entrant facilities or entities that produce**
15 **or import petroleum-based fuel.**

16 (2) CALCULATION OF ALLOWANCES.—The quantity of emission allowances
17 distributed by the Administrator ~~in~~ **for** a calendar year to a new ~~covered industrial~~
18 ~~sector facility~~ **entrant facility or entity that produces or imports petroleum-**
19 **based fuel** under paragraph (1) shall be ~~calculated pursuant to such formula as shall~~
20 ~~be established under the system established under section 3902.~~ **equal to the**
21 **product obtained by multiplying—**

22 (A) **the average annual number of emission allowances that all facilities**
23 **or entities that produce or import petroleum-based fuel and that**
24 **commenced operations during the 5 years preceding the date of enactment**
25 **of this Act would have been required to submit under section 1202(a); and**

26 (B) **the number of emission allowances that the facility or entity is**
27 **required to submit during the calendar year, adjusted downward on a pro**
28 **rata basis for each new facility in the event that insufficient allowances are**
29 **available under section 3901(a) for a calendar year.**

30 (b) Incumbents.—

31 (1) IN GENERAL.—As part of the system established under section ~~3902~~ **3901(b)**,
32 the Administrator shall, for each calendar year, distribute to ~~covered industrial sector~~
33 ~~facilities~~ **facilities or entities that produce or import petroleum-based fuel** that
34 were operating during the calendar year preceding the year in which this Act was
35 enacted the emission allowances represented by the percentages described in the
36 table contained in section 3901 ~~for the industrial sector~~ **(a) for owners and**
37 **operators of facilities or entities that produce or import petroleum-based fuel**
38 that remain after the distribution of emission allowances under subsection (a).

39 (2) CALCULATION OF ALLOWANCES.—The quantity of emission allowances
40 distributed to a ~~covered industrial sector facility~~ **facility or entity that produces or**

1 **imports petroleum-based fuel** under paragraph (1) shall be equal to the product
2 obtained by multiplying—

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

5 (B) the quotient obtained by dividing—

6 (i) the annual average quantity of ~~carbon dioxide equivalents emitted by~~
7 ~~the covered industrial sector facility~~ **emission allowances that the facility**
8 **or entity would have been required to submit under section 1202(a)**
9 **during the 3 calendar years preceding the date of enactment of this Act; by**

10 (ii) the annual average of the aggregate quantity of ~~carbon dioxide~~
11 ~~equivalents emitted by all covered industrial sector facilities~~ **emission**
12 **allowances that all facilities or entities that produce or import**
13 **petroleum-based fuel would have been required to submit during those**
14 **3 calendar years.**

15 **SEC. 3906. DISTRIBUTING EMISSION**
16 **ALLOWANCES TO HYDROFLUOROCARBON**
17 **PRODUCERS AND IMPORTERS.**

18 (a) **In General.**—~~The(e) Revocation of Distribution Upon Facility Shutdown.~~—If a
19 ~~covered facility within the industrial sector receives a distribution of emission allowances~~
20 ~~under this section for a calendar year and is subsequently permanently shut down during~~
21 ~~that calendar year, the owner or operator of the facility shall promptly return to the~~
22 ~~Administrator a number of emission allowances equal to the difference between—~~
23 **allocated to hydrofluorocarbon producers and hydrofluorocarbon importers under**
24 **section 3901(a) shall be distributed to the individual hydrofluorocarbon producers**
25 **and hydrofluorocarbon importers in accordance with section 10005.**

26 ~~(1) the number of carbon dioxide equivalents emitted by the facility in that calendar~~
27 ~~year prior to the shutdown; and~~(b) **Effect.**—The distributions under subsection (a)
28 **shall not, in any way, limit or otherwise alter the prohibitions set forth in subsection**
29 **10007(b).**

30 ~~(2) the number of emission allowances distributed to the~~
31 ~~facility by the Administrator for that calendar year.~~

32 **Subtitle J—Reducing Methane Emissions From**
33 **Landfills and Coal Mines**

34 **SEC. 3907. ALLOCATION.**

35 **Not later than April 1, 2011, and annually thereafter through 2049, the**
36 **Administrator shall allocate 0.5 percent of the Emission Allowance Account for the**
37 **following calendar year to a program for achieving real, verifiable, additional,**
38 **permanent, and enforceable reductions in emissions of methane from landfills and**

1 coal mines.

2 **SEC. 3908. DISTRIBUTION.**

3 Not later than 1 year after the date of enactment of this Act, the Administrator
4 shall establish a program that includes a system for distributing to individual
5 entities the emission allowances allocated under section 3906.

6 **TITLE IV—AUCTIONS AND USES OF AUCTION**
7 **PROCEEDS**

8 **Subtitle A—Funds**

9 **SEC. 4101. ESTABLISHMENT.**

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

- 11 (1) The Energy Assistance Fund.
- 12 (2) The Climate Change Worker Training Fund.
- 13 (3) The Adaptation Fund.
- 14 (4) The Climate Change and National Security Fund.
- 15 (5) The Bureau of Land Management Emergency Firefighting Fund.
- 16 (6) The Forest Service Emergency Firefighting Fund.

17 **SEC. 4102. AMOUNTS IN FUNDS.**

18 Each Fund established by section 4101 shall consist of such amounts as are
19 ~~appropriated to~~ **deposited into** the respective Fund under **subtitle C.** ~~section 4103.~~

20 ~~SEC. 4103. TRANSFERS TO FUNDS.~~

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

24 **Subtitle B—Climate Change Credit Corporation**

25 **SEC. 4201. ESTABLISHMENT.**

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

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

30 **SEC. 4202. APPLICABLE LAWS.**

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

1 **SEC. 4203. BOARD OF DIRECTORS.**

2 (a) In General.—The Corporation shall have a board of directors composed of 5
3 individuals who are citizens of the United States, of whom 1 shall be elected annually by
4 the board to serve as Chairperson.

5 (b) Political Affiliation.—Not more than 3 members of the board serving at any time
6 may be affiliated with the same political party.

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

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

11 **(e) Prohibitions.—**

12 **(1) CONFLICTS OF INTEREST.—An individual employed by, or holding any**
13 **official relationship (including any shareholder) with, any entity engaged in the**
14 **generation, transmission, distribution, or sale of energy, an individual who has**
15 **any pecuniary interest in the generation, transmission, distribution, or sale of**
16 **energy, or an individual who has a pecuniary interest in the implementation of**
17 **this Act, shall not be appointed to the Corporation under this subtitle.**

18 **(2) NO OTHER EMPLOYMENT.—A member of the Corporation shall not hold**
19 **any other employment during the term of service of the member.**

20 **(f) Vacancies.—**

21 **(1) IN GENERAL.—A vacancy on the Corporation—**

22 **(A) shall not affect the powers of the Corporation; and**

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

25 **(2) SERVICE UNTIL NEW APPOINTMENT.—A member of the Corporation the**
26 **term of whom has expired or otherwise been terminated shall continue to serve**
27 **until the date on which a replacement is appointed if the President determines**
28 **that service to be appropriate.**

29 **(g) Removal.—**

30 **(1) IN GENERAL.—A member may be removed from the Corporation on**
31 **determination of the President for cause.**

32 **(2) NOTIFICATION.—Not later than 30 days before removing a member from**
33 **the Corporation for cause under paragraph (1), the President shall provide to**
34 **Congress an advance notification of the determination by the President to**
35 **remove the member.**

36 **SEC. 4204. REVIEW AND AUDIT BY COMPTROLLER**
37 **GENERAL.**

38 ~~Not later than January 1, 2014, and not less frequently than once every 3 years~~ **2013,**

1 **and annually** thereafter, the Comptroller General of the United States shall conduct a
2 review and audit of each expenditure made pursuant to this title to determine the efficacy
3 of the programs, expenditures, and projects funded under this title.

4 Subtitle C—Auctions

5 SEC. 4301. EARLY AUCTIONS.

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

9 (b) Completion of Auctioning.—Not later than December 31, 2010, the Corporation
10 shall complete auctioning of all allowances allocated to the Corporation under section
11 3101.

12 (c) Proceeds From Early Auctioning.—The Corporation shall use to carry out
13 programs established under subtitle D all proceeds of early auctioning conducted by the
14 Corporation under this section.

15 SEC. 4302. ANNUAL AUCTIONS.

16 (a) In General.—Not later than 330 days before the beginning of a calendar year
17 identified in the table contained in section ~~3204~~ **3102**, the Corporation shall auction all of
18 the allowances allocated to the Corporation for that year by the Administrator under
19 section ~~3204~~ **3102**.

20 (b) Proceeds From Annual Auctioning.—

21 (1) BUREAU OF LAND MANAGEMENT EMERGENCY FIREFIGHTING FUND.—For each
22 of calendar years 2012 through 2050, the Corporation shall deposit into the Bureau
23 of Land Management Emergency Firefighting Fund established by section 4101(5)
24 proceeds, from annual auctions that the Corporation conducts for the calendar year
25 under this section, that are sufficient to ensure that the amount in the Fund equals
26 \$300,000,000.

27 (2) FOREST SERVICE EMERGENCY FIREFIGHTING FUND.—For each of calendar years
28 2012 through 2050, the Corporation shall deposit into the Forest Service Emergency
29 Firefighting Fund established by section 4101(6) proceeds, from annual auctions
30 that the Corporation conducts for the calendar year under this section, that are
31 sufficient to ensure that the amount in the Fund equals \$800,000,000.

32 (3) USE OF REMAINING PROCEEDS.—

33 (A) ~~IN GENERAL.—SUBJECT TO SUBTITLE H, FOR GENERAL.~~—**For** each of
34 calendar years 2012 through 2050, the Corporation shall use the proceeds of the
35 annual auctions conducted by the Corporation for the calendar year under this
36 section in accordance with this paragraph.

37 (B) ~~Use of initial 55 percent.~~—

38 (i) ~~ENERGY TECHNOLOGY DEPLOYMENT.—SUBJECT TO CLAUSE (II), FOR~~
39 **DEPLOYMENT.**—**For** each of calendar years 2012 through 2050, the

1 Corporation shall use to carry out the programs established under subtitle D ~~55~~
2 **52** percent of the proceeds of the annual auctions conducted by the Corporation
3 for the calendar year under this section.

4 ~~(ii)~~**(C) ENERGY INDEPENDENCE ACCELERATION FUND.**—In any of calendar
5 years 2012 through 2050 during which there exists in the Treasury of the
6 United States an energy transformation acceleration fund administered by the
7 Director of the Advanced Research Projects Agency within the Department of
8 Energy, of the proceeds of the annual auctions conducted by the Corporation
9 for the calendar year under this section, the Corporation ~~shall~~ **shall deposit 2**
10 **percent of the proceeds into that fund.**

11 ~~(I) deposit 5 percent of the proceeds into that fund; and~~

12 ~~(II) use 50 percent of the proceeds to carry out the programs established~~
13 ~~under subtitle D.~~

14 ~~(C) Use of remaining 45 percent.~~—~~For~~**(D) ENERGY CONSUMERS.**—**For** each
15 of calendar years 2012 through 2050, the Corporation shall deposit into the
16 following funds **Energy Assistance Fund** established by section 4101 the
17 following percentages**(1) 18 percent** of the proceeds of the annual auctions
18 conducted by the Corporation for the calendar year under this
19 section:~~2,L0(0,0,0,4,0,0),tp0,p1,10/12,g1,t1,s190n,xs95n.~~

20 ~~1Fund1Percentages of Annual Auction Proceeds~~

21 ~~1Energy Assistance Fund20~~

22 **(E) CLIMATE CHANGE WORKER TRAINING PROGRAM.**—**For each of**
23 **calendar years 2012 through 2050, the Corporation shall deposit into the**
24 **Climate Change Worker Training Fund**~~15~~ **Fund established by section 4101(2)**
25 **5 percent of the proceeds of the annual auctions conducted by the**
26 **Corporation for the calendar year under this section.**

27 ~~Adaptation Fund~~~~20~~**(F) ADAPTATION PROGRAM FOR NATURAL RESOURCES**
28 **IN UNITED STATES AND TERRITORIES.**—**For each of calendar years 2012**
29 **through 2050, the Corporation shall deposit into the Adaptation Fund**
30 **established by section 4101(3) 18 percent of the proceeds of the annual**
31 **auctions conducted by the Corporation for the calendar year under this**
32 **section.**

33 **(G) CLIMATE CHANGE AND NATIONAL SECURITY PROGRAM.**—**For each of**
34 **calendar years 2012 through 2050, the Corporation shall deposit into the**
35 **Climate Change and National Security Fund established by section 4101(4)**
36 **5 percent of the proceeds of the annual auctions conducted by the**
37 **Corporation for the calendar year under this section.**

38 Subtitle D—Energy Technology Deployment

39 SEC. 4401. GENERAL ALLOCATIONS.

40 For each calendar year, the Corporation shall use the amounts described in section

1 ~~sections~~ 4301(c) and ~~clause (i) or (ii)(II) of section~~ 4302(b)(3)(B), as applicable, to carry
2 out the programs established under this subtitle, as follows:

3 (1) ~~Not more than 45~~ **32** percent of the funds shall be used to carry out the zero-
4 or low-carbon energy technologies program under section 4402.

5 (2) ~~25 Not more than 35 percent of the funds shall be used as follows:~~

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

8 (B) ~~Not more than 7~~ **(3) 6** percent shall be used to carry out the **fuel from**
9 cellulosic biomass ~~ethanol technology deployment programs~~ **program** under section
10 4404.

11 (3) ~~Not more than 20~~ **(4) 12** percent shall be used to carry out the advanced
12 technology vehicles manufacturing incentive program under section 4405.

13 **(5) 25 percent shall be used to carry out the sustainable energy program**
14 **under section 4406.**

15 SEC. 4402. ZERO- OR LOW-CARBON ENERGY 16 TECHNOLOGIES DEPLOYMENT.

17 (a) Definitions.—In this section:

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

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

27 (3) ZERO- OR LOW-CARBON GENERATION.—The term “zero- or low-carbon
28 generation” means generation of electricity by an electric generation unit that—

29 (A) emits no carbon dioxide into the atmosphere, or is fossil-fuel fired and
30 emits into the atmosphere not more than 250 pounds of carbon dioxide per
31 megawatt-hour (after adjustment for any carbon dioxide from the unit that is
32 geologically sequestered); and

33 (B) was placed into commercial service after the date of enactment of this
34 Act.

35 (b) Financial Incentives Program.—During each fiscal year beginning on or after
36 October 1, 2008, the Corporation shall competitively award financial incentives under
37 this subsection in the technology categories of—

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

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

1 (c) Requirements.—

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

5 (A) in the case of producers of new zero- or low-carbon generation, based on
6 the bid of each producer in terms of dollars per megawatt-hour of electricity
7 generated; and

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

11 (2) ACCEPTANCE OF BIDS.—

12 (A) IN GENERAL.—In making awards under this subsection, the Corporation
13 shall—

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

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

19 (B) FACTORS FOR CONVERSION.—

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

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

27 (d) Forms of Awards.—

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

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

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

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

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

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

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

5 (a) Advanced Coal Technologies.—

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

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

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

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

19 (2) DEMONSTRATION PROJECTS.—The Corporation shall use not less than $\frac{1}{4}$ of
20 the amounts made available to carry out this section for each fiscal year to support
21 demonstration projects using advanced coal generation technology, including retrofit
22 technology that could be deployed on existing coal generation facilities.

23 (3) DEPLOYMENT INCENTIVES.—

24 (A) IN GENERAL.—The Corporation shall use not less than $\frac{1}{4}$ of the
25 amounts made available to carry out this subsection for each fiscal year to
26 provide Federal financial incentives to facilitate the deployment of not more
27 than 20 gigawatts of advanced coal generation technologies.

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

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

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

35 (C) FUNDING REQUIREMENTS.—

36 (i) SEQUESTRATION ACTIVITIES.—The Corporation shall provide
37 incentives only to projects that will capture and sequester at least 85
38 percent of the carbon dioxide produced by the project facilities.

39 (ii) STORAGE AGREEMENT REQUIRED.—The Corporation shall require a

1 binding storage agreement for the carbon dioxide captured in a project
2 under this subsection, in a geological storage project permitted by the
3 Administrator under regulations promulgated pursuant to section 1421(d)
4 of the Safe Drinking Water Act (42 U.S.C. 300h(d)).

5 (iii) PROJECTS USING CERTAIN COALS.—In providing incentives under
6 this paragraph, the Corporation shall set aside not less than 25 percent of
7 any amounts made available to carry out this subsection for projects using
8 coal with an energy content of not more than 10,000 British thermal units
9 per pound.

10 (4) DISTRIBUTION OF FUNDS.—A project that receives an award under this
11 subsection may elect 1 of the following Federal financial incentives:

12 (A) A loan guarantee.

13 (B) A cost-sharing grant to cover the incremental cost of installing and
14 operating carbon capture and storage equipment (for which utilization costs
15 may be covered for the first 10 years of operation).

16 (C) Production payments of not more than 1.5 cents per kilowatt-hour of
17 electric output during the first 10 years of commercial service of the project.

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

20 (b) Sequestration.—

21 (1) IN GENERAL.—The Corporation shall use not less than $\frac{1}{2}$ of the amounts
22 made available to carry out this subsection for each fiscal year for large-scale
23 geological carbon storage demonstration projects that store carbon dioxide captured
24 from facilities for the generation of electricity using coal gasification or other
25 advanced coal combustion processes, including facilities that receive assistance
26 under subsection (a).

27 (2) PROJECT CAPITAL AND OPERATING COSTS.—The Corporation shall provide
28 assistance under this ~~paragraph~~ **subsection** to reimburse the project owner for a
29 percentage of the incremental project capital and operating costs of the project that
30 are attributable to carbon capture and sequestration, as the Secretary determines to
31 be appropriate.

32 SEC. 4404. FUEL FROM CELLULOSIC BIOMASS.

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

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

39 (1) meet United States fuel and emission specifications;

40 (2) help diversify domestic transportation energy supplies; and

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

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

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

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

8 (d) Reverse Auction.—

9 (1) IN GENERAL.—In providing incentives under this section, the Corporation
10 shall—

11 (A) prescribe rules under which producers of fuel from cellulosic biomass
12 may bid for production payments under subsection (c)(2); and

13 (B) solicit bids from producers of different classes of transportation fuel, as
14 the Corporation determines to be appropriate.

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

19 SEC. 4405. ADVANCED TECHNOLOGY VEHICLES 20 MANUFACTURING INCENTIVE PROGRAM.

21 (a) Definitions.—In this section:

22 (1) ADVANCED TECHNOLOGY VEHICLE.—The term “advanced technology vehicle”
23 means an electric or plug-in hybrid electric vehicle, or an advanced diesel light duty
24 motor vehicle, that meets—

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

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

30 (C) a standard of at least 35 miles per gallon combined fuel economy,
31 calculated on an energy-equivalent basis.

32 (2) COMBINED FUEL ECONOMY.—The term “combined fuel economy” means—

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

35 (B) in the case of an electric drive vehicle with the ability to recharge from
36 an off-board source, the reported mileage, as determined in a manner consistent
37 with the Society of Automotive Engineers recommended practice for that
38 configuration, or a similar practice recommended by the Secretary of Energy,

1 using a petroleum equivalence factor for the off-board electricity (as defined by
2 the Secretary of Energy).

3 (3) ENGINEERING INTEGRATION COSTS.—The term “engineering integration costs”
4 includes the cost of engineering tasks **performed in the United States** relating to—

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

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

10 (4) QUALIFYING COMPONENT.—The term “qualifying component” means a
11 component that the Secretary of Energy determines to be—

12 (A) specially designed for advanced technology vehicles; ~~and~~

13

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

17 (C) **manufactured in the United States.**

18

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

22 (1) reequipping or expanding an existing manufacturing facility to produce—

23 (A) qualifying advanced technology vehicles; or

24 (B) qualifying components; and

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

26 (c) Period of Availability.—An award under subsection (b) shall apply to—

27 (1) facilities and equipment placed in service after the date of enactment of this
28 Act and before January 1, 2020; and

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

30 **SEC. 4406. SUSTAINABLE ENERGY PROGRAM.**

31 (a) **Definition of Sustainable Energy Technology.**—In this section, the term
32 “sustainable energy technology” means a technology to harness a renewable energy
33 source (as defined in section 609(a) of the Public Utility Regulatory Policies Act of
34 1978 (7 U.S.C. 918c(a)), including in distributed energy systems.

35 (b) **Demonstration Projects.**—The Corporation shall use not less than 25 percent
36 of the amounts made available to carry out this section for each fiscal year to
37 support demonstration projects in the United States using sustainable energy

1 technology, including in distributed energy systems.

2 (c) **Deployment Incentives.**—

3 (1) **IN GENERAL.**—The Corporation shall use not less than 25 percent of the
4 amounts made available to carry out this section for each fiscal year to provide
5 Federal financial incentives to facilitate the deployment in the United States of
6 sustainable energy technology, including in distributed energy systems.

7 (2) **ADMINISTRATION.**—In providing incentives under this subsection, the
8 Corporation shall provide appropriate incentives for regulated investor-owned
9 utilities, municipal utilities, electric cooperatives, independent power
10 producers, and consumers, as determined by the Secretary of Energy.

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

13 (1) A loan guarantee.

14 (2) A cost-sharing grant to cover the incremental cost of installing and
15 operating equipment (for which utilization costs may be covered for the first 10
16 years of operation).

17 (3) Production payments of not more than 1.5 cents per kilowatt-hour of
18 electric output during the first 10 years of commercial service of the project.

19 (e) **Limitation.**—A project may not receive an award under this subsection if the
20 project receives an award under section 4402.

21 **Subtitle E—Energy Consumers**

22 **SEC. 4501. PROPORTIONS OF FUNDING**
23 **AVAILABILITY.**

24 All funds deposited into the Energy Assistance Fund established by section 4101(1)
25 shall be made available, without further appropriation or fiscal year limitation, to the
26 following programs in the following proportions:

27 (1) 50 percent of the funds to the low-income home energy assistance program
28 established under the Low Income Home Energy Assistance Act of 1981 (42 U.S.C.
29 8621 et seq.).

30 (2) 25 percent of the funds to the Weatherization Assistance Program for Low-
31 Income Persons established under part A of title IV of the Energy Conservation and
32 Production Act (42 U.S.C. 6861 et seq.).

33 (3) 25 percent of the funds to the rural energy assistance program described in
34 section 4502.

35 **SEC. 4502. RURAL ENERGY ASSISTANCE**
36 **PROGRAM.**

37 The Secretary of Energy shall carry out a program to use the funds made available

1 under section 4501(3) to provide financial assistance to promote the availability of
2 reasonably-priced distributed electricity in off-grid rural regions in which electricity
3 prices exceed 150 percent of the national average, as determined by the Secretary of
4 Energy.

5 Subtitle F—Climate Change Worker Training Program

6 SEC. 4601. FUNDING.

7 All funds deposited into the Climate Change Worker Training Fund established by
8 section 4101(2) shall be made available, without further appropriation or fiscal year
9 limitation, to carry out the programs established under this subtitle.

10 SEC. 4602. PURPOSES.

11 The purposes of this subtitle are—

12 ~~(1) to provide quality job training to any workers displaced by this Act; create a~~
13 **sustainable, comprehensive public program that provides quality training that**
14 **is linked to jobs that are created through low-carbon energy, sustainable**
15 **energy, and energy efficiency initiatives;**

16 ~~(2) to provide assistance in the form of temporary wages and health care benefits~~
17 ~~to workers in training;~~

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

19 ~~(4) to provide skilled workers to enterprises developing and marketing advanced~~
20 ~~technologies and practices that reduce greenhouse gas emissions~~**(2) to satisfy**
21 **industry demand for a skilled workforce, support economic growth, boost the**
22 **global competitiveness of the United States ; and in expanding low-carbon**
23 **energy, sustainable energy, and energy efficiency industries, and provide**
24 **economic self-sufficiency and family-sustaining jobs for United States workers,**
25 **including low-wage workers, through quality training and placement in job**
26 **opportunities in those industries; and**

27 ~~(5) to provide funding for State worker~~**(3) to provide funds for Federal and**
28 **State industry-wide research, labor market information and labor exchange**
29 **programs, and the development of Federal- and State-administered training**
30 **programs.**

31 SEC. 4603. ESTABLISHMENT.

32 Not later than 180 days after the date of enactment of this Act, the Secretary of Labor
33 **(referred to in this subtitle as the “Secretary”)**, in consultation with the Administrator
34 and the Secretary of Energy, shall establish a climate change worker training program
35 that achieves the purposes of this subtitle.

36 SEC. 4604. ~~GRANTS TO STATES.~~

37 ~~Not later than 1 year after the date of enactment of this Act,~~

1 ~~the Secretary of Labor shall establish a program to award~~
2 ~~grants to States, for use in funding State worker training~~
3 ~~programs, based on the impact of this Act on the workforce~~
4 ~~of each State, as determined by the Secretary of Labor.~~

5 ~~SEC. 4605. TYPES OF ASSISTANCE.~~

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

9 ~~(1) income replacement;~~

10 ~~(2) health care credits;~~

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

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

14 **ACTIVITIES.**

15 (a) **National Research Program.**—Under the program established under section
16 **4603**, the Secretary, acting through the Bureau of Labor Statistics, shall provide
17 assistance to support national research to develop labor market data and to track
18 future workforce trends resulting from energy-related initiatives carried out under
19 this section, including—

20 (1) **linking research and development in low-carbon energy, sustainable**
21 **energy, and energy efficiency technology with the development of standards**
22 **and curricula for current and future jobs;**

23 (2) **the tracking and documentation of academic and occupational**
24 **competencies and future skill needs with respect to low-carbon energy,**
25 **sustainable energy, and energy efficiency technology;**

26 (3) **tracking and documentation of occupational information and workforce**
27 **training data with respect to low-carbon energy, sustainable energy, and energy**
28 **efficiency technology;**

29 (4) **assessing new employment and work practices, including career ladder**
30 **and upgrade training and high-performance work systems; and**

31 (5) **collaborating with State agencies, industry, organized labor, and**
32 **community and nonprofit organizations to disseminate successful innovations**
33 **for labor market services and worker training with respect to low-carbon**
34 **energy, sustainable energy, and energy efficiency technology.**

1 **(b) National Energy Training Partnership Grants.—**

2 **(1) GRANTS.—**

3 **(A) IN GENERAL.—Under the program established under section 4603,**
4 **the Secretary shall award national energy training partnerships grants on**
5 **a competitive basis to eligible entities to enable the entities—**

6 **(i) to carry out national training that leads to economic self-**
7 **sufficiency; and**

8 **(ii) to develop a low-carbon energy, sustainable energy, and energy**
9 **efficiency industries workforce.**

10 **(B) DIVERSITY.—Grants shall be awarded under this paragraph so as to**
11 **ensure geographic diversity, with—**

12 **(i) at least 2 grants awarded to entities located in each of the 4**
13 **Petroleum Administration for Defense Districts with no subdistricts;**
14 **and**

15 **(ii) at least 1 grant awarded to an entity located in each of the**
16 **subdistricts of the Petroleum Administration for Defense District with**
17 **subdistricts.**

18 **(2) ELIGIBILITY.—To be eligible to receive a grant under paragraph (1), an**
19 **entity shall be a nonprofit partnership that—**

20 **(A) includes the equal participation of industry, including public or**
21 **private employers, and labor organizations, including joint labor-**
22 **management training programs, and may include community-based**
23 **organizations, educational institutions, small businesses, cooperatives,**
24 **State and local veterans agencies, and veterans service organizations; and**

25 **(B) demonstrates—**

26 **(i) experience in implementing and operating worker skills training**
27 **and education programs;**

28 **(ii) the ability to identify and involve in training programs carried**
29 **out using the grant, target populations of workers that are or will be**
30 **engaged in activities relating to low-carbon energy, sustainable**
31 **energy, and energy efficiency industries; and**

32 **(iii) the ability to help workers achieve economic self-sufficiency.**

33 **(3) ACTIVITIES.—Activities to be carried out using a grant provided under**
34 **this subsection may include—**

35 **(A) the provision of occupational skills training, including curriculum**
36 **development, on-the-job training, and classroom training;**

37 **(B) the provision of safety and health training;**

38 **(C) the provision of basic skills, literacy, general equivalency degree,**
39 **English as a second language, and job readiness training;**

1 (D) individual referral and tuition assistance for a community college
2 training program;

3 (E) the provision of customized training in conjunction with an existing
4 registered apprenticeship program or labor-management partnership;

5 (F) the provision of career ladder and upgrade training; and

6 (G) the implementation of transitional jobs strategies.

7 (c) **State Labor Market Research, Information, and Labor Exchange Research**
8 **Program.**—

9 (1) **IN GENERAL.**—Under the program established under section 4603, the
10 Secretary shall award competitive grants to States to enable the States to
11 administer labor market and labor exchange informational programs that
12 include the implementation of the activities described in paragraph (2).

13 (2) **ACTIVITIES.**—A State shall use amounts awarded under this subsection to
14 provide funding to the State agency that administers the Wagner-Peyser Act
15 (29 U.S.C. 49 et seq.) and State unemployment compensation programs to carry
16 out the following activities using State agency merit staff:

17 (A) The identification of job openings in the low-carbon energy,
18 sustainable energy, and energy efficiency sector.

19 (B) The administration of skill and aptitude testing and assessment for
20 workers.

21 (C) The counseling, case management, and referral of qualified job
22 seekers to openings and training programs, including low-carbon energy,
23 sustainable energy, and energy efficiency training programs.

24 (d) **State Energy Training Partnership Program.**—

25 (1) **IN GENERAL.**—Under the program established under section 4603, the
26 Secretary shall award competitive grants to States to enable the States to
27 administer low-carbon energy, sustainable energy, and energy efficiency
28 workforce development programs that include the implementation of the
29 activities described in paragraph (2).

30 (2) **ACTIVITIES.**—

31 (A) **IN GENERAL.**—A State shall use amounts awarded under the
32 subsection to award competitive grants to eligible State energy sector
33 partnerships to enable the partnerships to coordinate with existing
34 apprenticeship and labor management training programs and implement
35 training programs that lead to the economic self-sufficiency of trainees.

36 (B) **ELIGIBILITY.**—To be eligible to receive a grant under this subsection,
37 a State energy sector partnership shall—

38 (i) consist of nonprofit organizations that include equal
39 participation from industry, including public or private nonprofit
40 employers, and labor organizations, including joint labor-

1 management training programs, and may include representatives
2 from local governments, worker investment agency one-stop career
3 centers, community based organizations, community colleges, other
4 post-secondary institutions, small businesses, cooperatives, State and
5 local veterans agencies, and veterans service organizations;

6 (ii) demonstrate experience in implementing and operating worker
7 skills training and education programs; and

8 (iii) demonstrate the ability to identify and involve in training
9 programs, target populations of workers that are or will be engaged in
10 activities relating to low-carbon energy, sustainable energy, and
11 energy efficiency industries.

12 (C) PRIORITY.—In awarding grants under this subsection, the Secretary
13 shall give priority to States that demonstrate linkages of activities under
14 the grant with—

15 (i) meeting national energy policies associated with low-carbon
16 energy, sustainable energy, and energy efficiency; and

17 (ii) meeting State energy policies associated with low-carbon
18 energy, sustainable energy, and energy efficiency.

19 (D) COORDINATION.—An entity that receives a grant under this
20 subsection shall—

21 (i) coordinate activities carried out under the grant with existing
22 apprenticeship and labor management training programs; and

23 (ii) implement training programs that lead to the economic self-
24 sufficiency of trainees, including providing—

25 (I) outreach and recruitment services, in coordination with the
26 appropriate State agency;

27 (II) occupational skills training, including curriculum
28 development, on-the-job training, and classroom training;

29 (III) safety and health training;

30 (IV) basic skills, literacy, general equivalency degree, English
31 as a second language, and job readiness training;

32 (V) individual referral and tuition assistance for a community
33 college training program;

34 (VI) customized training in conjunction with an existing
35 registered apprenticeship program or labor-management
36 partnership;

37 (VII) career ladder and upgrade training; and

38 (VIII) services under transitional jobs strategies.

39 **SEC. 4605. WORKER PROTECTIONS AND**

1 **NONDISCRIMINATION REQUIREMENTS.**

2 (a) **Applicability of WIA.**—Sections 181 and 188 of the Workforce Investment Act
3 of 1998 (29 U.S.C. 2931, 2938) shall apply to all programs carried out using
4 assistance under this subtitle.

5 (b) **Consultation With Labor Organizations.**—If a labor organization represents a
6 substantial number of workers that are engaged in similar work or training in an
7 area that is the same as the area that is proposed to be funded under this subtitle,
8 the labor organization 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 the educational opportunities and
12 safety of a future generation of scientists, engineers, health physicists, and energy
13 workforce employees, 25 percent of the funds deposited into the Climate Change
14 Worker Training Fund shall be used for the University Programs within the
15 Department of Energy, to help United States university and colleges stay at the
16 forefront of science education and research and assist universities in the operation
17 of advanced energy research facilities and in the performance of other educational
18 activities.

19 (b) **Employee Organizations.**—The Secretary shall provide technical assistance
20 and funds for training directly to nonprofit employee organizations, voluntary
21 emergency response organizations, and joint labor-management organizations that
22 demonstrate experience in implementing and operating worker health and safety
23 training and education programs.

24 (c) **Workforce Training.**—

25 (1) **IN GENERAL.**—The Secretary of Labor, in cooperation with the Secretary
26 of Energy, shall promulgate regulations—

27 (A) to implement a program to provide workforce training to meet the
28 high demand for workers skilled in zero- and low-emitting carbon energy
29 technologies and provide for related safety issues;

30 (B) to implement a fully validated electrical craft certification program,
31 career and technology awareness at the primary and secondary education
32 level, preapprenticeship career technical education for all zero- and low-
33 emitting carbon energy technologies related industrial skilled crafts,
34 community college and skill center training for zero- and low-emitting
35 carbon energy technology technicians, development of construction
36 management personnel for zero- and low-emitting carbon energy
37 technology construction projects and regional grants for integrated zero-
38 and low-emitting carbon energy technology workforce development
39 programs; and

40 (C) to ensure the safety of workers in such careers.

41 (2) **CONSULTATION.**—In carrying out this subsection, the Secretary of Labor

1 shall consult with relevant Federal agencies, representatives of the zero- and
2 low-emitting carbon energy technologies industries, and organized labor,
3 concerning skills and such safety measures that are needed in those industries.

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

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

9 SEC. 4701. DEFINITIONS.

10 In this subtitle:

11 (1) ECOLOGICAL PROCESS.—

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

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

- 16 (i) nutrient cycling;
- 17 (ii) pollination;
- 18 (iii) predator-prey relationships;
- 19 (iv) soil formation;
- 20 (v) gene flow;
- 21 (vi) larval dispersal and settlement;
- 22 (vii) hydrological cycling;
- 23 (viii) decomposition; and
- 24 (ix) disturbance regimes, such as fire and flooding.

25 (2) FISH AND WILDLIFE.—The term “fish and wildlife” means—

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

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

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

34 (4) INDIAN TRIBE.—The term “Indian tribe” has the meaning given the term in
35 section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C.
36 450b).

- 1 (5) PLANT.—The term “plant” means any species of wild flora.
- 2 (6) SECRETARY.—The term “Secretary” means the Secretary of the Interior.
- 3 (7) STATE.—The term “State” means—
- 4 (A) a State;
- 5 (B) the District of Columbia;
- 6 (C) the Commonwealth of Puerto Rico; and
- 7 (D) any other territory or possession of the United States.

8 SEC. 4702. ADAPTATION FUND.

9 (a) ~~In General.~~—**All Availability of Amounts.**—All amounts deposited in the
10 Adaptation Fund established by section 4101(3) shall be made available, without further
11 appropriation or fiscal year limitation, to carry out activities (including research and
12 education activities) that assist fish and wildlife, fish and wildlife habitat, plants, and
13 associated ecological processes in **becoming more resilient**, adapting to, and surviving
14 the impacts of climate change **and ocean acidification** (referred to in this **subtitle section**
15 as “adaptation activities”) pursuant to this **subtitle section**.

16 (b) Department of ~~the~~ Interior.—Of the amounts made available **annually** to carry out
17 this **subtitle**— **subsection**—

18 (1) 35 percent shall be allocated to the Secretary, and subsequently made
19 available to States **including** through the Wildlife Conservation and Restoration
20 Account established under section 3(a)(2) of the Pittman-Robertson Wildlife
21 Restoration Act (16 U.S.C. 669b(a)(2)), to carry out adaptation activities in
22 accordance with comprehensive **State adaptation strategies, as described in**
23 **subsection (j);** ~~wildlife conservation strategies and, where appropriate, other fish~~
24 ~~and wildlife conservation strategies, including—~~

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

27 (B) ~~North American Wetlands Conservation Act (16 U.S.C. 4401 et seq.);~~

28 (C) ~~the Federal, State, and local partnership known as “Partners in Flight”;~~

29 (D) ~~coastal zone management plans;~~

30 (E) ~~regional fishery management plans; and~~

31

32 ~~* 1 (F) recovery plans for threatened and endangered species under section 6 of~~
33 ~~the Endangered Species Act of 1973 (16 U.S.C. 1535);~~

34 (2) ~~18 percent shall be allocated to the Secretary for use in funding adaptation~~
35 ~~activities carried out—~~

36 (A) ~~under endangered species, migratory bird, and other fish and wildlife~~
37 ~~programs administered by the United States Fish and Wildlife Service;~~

1 ~~(B) on wildlife refuges and other public land under the jurisdiction of the United~~
2 ~~States Fish and Wildlife Service, Bureau of Land Management, or National Park~~
3 ~~Service; or~~

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

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

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

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

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

13 ~~(D)~~~~(C)~~ the multinational species conservation fund established under the
14 heading “MULTINATIONAL SPECIES CONSERVATION FUND” of title I of the
15 Department of the Interior and Related Agencies Appropriations Act, 1999 (16
16 U.S.C. 4246);

17 ~~(E)~~~~(D)~~ the Neotropical Migratory Bird Conservation Fund established by
18 section 9(a) of the Neotropical Migratory Bird Conservation Act (16 U.S.C.
19 6108(a));

20 ~~(F)~~~~(E)~~ the Coastal Program of the United States Fish and Wildlife Service;
21 and

22 ~~(G)~~~~(F)~~ the National Fish Habitat Action Plan;

23 **(G) the Partners for Fish and Wildlife Program;**

24 **(H) the Landowner Incentive Program;**

25 **(I) the Wildlife Without Borders Program of the United States Fish and**
26 **Wildlife Service; and**

27 **(J) the Park Flight Migratory Bird Program of the National Park**
28 **Service; and**

29 **(3) 1 percent shall be allocated to the Secretary and subsequently made**
30 **available to Indian tribes to carry out adaptation activities through the tribal**
31 **wildlife grants program of the United States Fish and Wildlife Service.**

32 (c) Land and Water Conservation Fund.—

33 (1) **DEPOSITS.**—

34 **(A) IN GENERAL.**—Except as provided in paragraph (2), of the amounts made
35 available for each fiscal year to carry out this ~~sub~~**title subsection**, 10 percent
36 shall be deposited into the Land and Water Conservation Fund established
37 under section 2 of the Land and Water Conservation Fund Act of 1965 (16
38 U.S.C. 4601–5).

1 **(B) Deposits to the Land and Water Conservation Fund under this**
2 **subsection shall—**

3 **(i) be supplemental to authorizations provided under section 3 of**
4 **the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601–**
5 **6); and**

6 **(ii) remain available for non-adaptation needs.**

7 (2) EXCEPTION.—For any fiscal year in which a deposit into the Land and Water
8 Conservation Fund under paragraph (1) would result in an amount greater than
9 \$900,000,000—

10 (A) \$900,000,000 ~~of the amount~~ shall be deposited into the Land and Water
11 Conservation Fund; and

12 (B) the remaining funds shall be distributed on a pro rata basis as otherwise
13 provided in this section.

14 **(3) ALLOCATIONS.—Of the amounts deposited under this subsection into the**
15 **Land and Water Conservation Fund—**

16 (A) ~~\1/6\~~(d) ~~Forest Service.—Of the amounts made available for each fiscal~~
17 ~~year to carry out this subtitle, 5 percent~~ shall be allocated to the Secretary **and**
18 **made available to carry out section 6 of the Land and Water Conservation**
19 **Fund Act of 1965 (16 U.S.C. 4601–8) to States, on a competitive basis—**

20 **(i) in accordance with comprehensive wildlife conservation**
21 **strategies and Indian tribes, to carry out adaptation activities through**
22 **the acquisition of land and interests in land;**

23 **(ii) notwithstanding section 5 of that Act (16 U.S.C. 4601–7); and**

24 **(iii) in addition to grants provided pursuant to—**

25 **(I) annual appropriations Acts;**

26 **(II) the Energy Policy Act of 2005 (42 U.S.C. 15801 et seq.); or**

27 **(III) any other authorization for nonadaptation needs;**

28 (B) ~~\1/3\~~ shall be allocated to the Secretary to carry out adaptation
29 activities through the acquisition of lands and interests in land under
30 section 7 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C.
31 4601–9);

32 (C) ~~\1/6\~~ shall be allocated to the Secretary of Agriculture and made
33 available to the States to carry out adaptation activities through the
34 acquisition of land and interests in land under section 7 of the Forest
35 Legacy Program under the Cooperative Forestry Assistance Act of 1978
36 (16 U.S.C. 2103c); and

37 (D) ~~\1/3\~~ shall be allocated to the Secretary of Agriculture to carry out
38 adaptation activities through the acquisition of land and interests in land
39 under section 7 of the Land and Water Conservation Fund Act of 1965 (16
40 U.S.C. 4601–9).

1 **(4) EXPENDITURE OF FUNDS.—In allocating funds under subsection (c), the**
2 **Secretary and the Secretary of Agriculture shall take into consideration factors**
3 **including—**

4 **(A) the availability of non-Federal contributions from State, local, or**
5 **private sources;**

6 **(B) opportunities to protect wildlife corridors or otherwise to link or**
7 **consolidate fragmented habitats;**

8 **(C) opportunities to reduce the risk of catastrophic wildfires, extreme**
9 **flooding, or other climate-related events that are harmful to fish and**
10 **wildlife and people;**

11 **(D) the potential for conservation of species or habitat types at serious**
12 **risk due to climate change, ocean acidification, and other stressors; and**

13 **(E) the potential to provide enhanced access to land and water for**
14 **fishing, hunting, and other public recreational uses.**

15 **(d) Forest Service.—Of the amounts made available annually to carry out this**
16 **section, 5 percent shall be allocated to the Secretary of Agriculture for use in funding**
17 **adaptation activities carried out on ~~National Forests and National Grasslands~~ national**
18 **forests and national grasslands under the jurisdiction of the Forest Service, or**
19 **pursuant to the cooperative Wings Across the Americas Program.**

20 **(e) Environmental Protection Agency.—Of the amounts made available annually to**
21 **carry out this ~~sub~~title, ~~11~~ section, 5 percent shall be allocated to the Administrator for use**
22 **in adaptation activities restoring and protecting—**

23 (1) large-scale freshwater aquatic ecosystems, such as the Everglades, the Great
24 Lakes, Flathead Lake, the Missouri River, ~~the Mississippi River, the Colorado~~
25 **River, the Sacramento-San Joaquin Rivers, the Ohio River, the Columbia-**
26 **Snake River System, the Apalachicola, Chattahoochee and Flint River System,**
27 **the Connecticut River, and the Yellowstone River; ~~and~~**

28 (2) large-scale estuarine ecosystems, such as Chesapeake Bay ~~and Long Island~~
29 **Sound, Long Island Sound, Puget Sound, the Mississippi River Delta, San**
30 **Francisco Bay Delta, Narragansett Bay, and Albemarle-Pamlico Sound; and**

31 (3) freshwater and estuarine ecosystems, watersheds, and basins identified as
32 **priorities by the Administrator, working in cooperation with other Federal**
33 **agencies, States, local governments, scientists, and other conservation partners.**

34 **(f) Corps of Engineers.—Of the amounts made available annually to carry out this**
35 **subtitle, ~~11~~ section, 10 percent shall be allocated to the Secretary of the Army for use
36 **by the Corps of Engineers ~~for use in~~ to carry out adaptation activities restoring—****

37 (1) large-scale freshwater aquatic ecosystems, such as the ecosystems described in
38 subsubsection (e)(1); ~~and~~

39
40 (2) large-scale estuarine ecosystems, such as ~~Chesapeake Bay, California Bay~~

1 ~~Delta, Coastal Louisiana, Long Island Sound, and Puget Sound.~~ **the ecosystems**
2 **described in subsection (e)(2);**

3 **(3) freshwater and estuarine ecosystems, watersheds, and basins identified as**
4 **priorities by the Corps of Engineers, working in cooperation with other Federal**
5 **agencies, States, local governments, scientists, and other conservation partners;**
6 **and**

7 **(4) habitats or ecosystems under programs such as the Estuary Restoration**
8 **Act of 2000 (33 U.S.C. 2901 et seq.), project modifications for improvement of**
9 **the environment, and aquatic restoration under section 206 of the Water**
10 **Resources Development Act of 1996 (33 U.S.C. 2330).**

11 (g) Department of Commerce.—Of the amounts made available **annually** to carry out
12 ~~this subtitle, 5 section,~~ **10** percent shall be allocated to the Secretary of Commerce for use
13 in funding adaptation activities ~~carried out in protecting and restoring~~ **to protect,**
14 **maintain, and restore** coastal, estuarine, coral, and other marine species and habitats,
15 ~~including adaptation activities in cooperative grant programs such as—~~ **and marine**
16 **resources, habitats, and ecosystems, including such activities carried out under—**

17 ~~(1) the Coastal and Estuarine Land Conservation Program and the Community-~~
18 ~~Based Restoration Program of the National Oceanic and Atmospheric~~
19 ~~Administration; and~~ **(1) the coastal and estuarine land conservation program;**

20 ~~(2) programs under~~ **(2) the community-based restoration program;**

21 **(3) the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.),**
22 **consistent with subsection (j);**

23 **(4) the Open Rivers Initiative;**

24 **(5) the Magnuson Fishery Conservation and Management Act (16 U.S.C.**
25 **1801 et seq.);**

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

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

28 **(8) the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C.**
29 **1401 et seq.); and**

30 **(9) the Coral Reef Conservation Act of 2000 (16 U.S.C. 6401 et seq.).**

31 (h) Cost Sharing.—Notwithstanding any other provision of law, a State or Indian tribe
32 that receives a grant under ~~this section shall be required to~~ **paragraph (1) or (4) of**
33 **subsection (b) shall** provide 10 percent of the costs of each activity carried out using
34 ~~funds from amounts under~~ the grant.

35 (i) ~~Comprehensive Adaptation National Strategy.~~—

36 **(1) IN GENERAL.**—Effective beginning on the date that is ~~18 months~~ **3 years** after
37 the date of enactment of this Act, funds made available to the Federal agencies
38 under this ~~subtitle~~ **section** shall be used only for activities that are consistent with a
39 ~~comprehensive adaptation strategy that—~~ **the national strategy described in**
40 **paragraph (3).**

1 (A) is jointly approved by the head of each of the Federal agencies, after—(2)
2 **INITIAL PERIOD.—Until the earlier of the date that is 3 years after the date of**
3 **enactment of this Act or the date on which the President establishes the**
4 **national strategy described in paragraph (3), Federal agencies and programs**
5 **shall be eligible to receive funding under this section for adaptation activities**
6 **conducted pursuant to a workplan established by the President.**

7 ~~(i) consultation with States and Indian tribes; and~~(3) **NATIONAL STRATEGY.—**

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

9 (B) describes the manner in which the Federal Government will assist(A) **IN**
10 **GENERAL.—Not later than _____, the President shall develop and**
11 **implement a national strategy for assisting fish and wildlife, fish and wildlife**
12 **habitat, plants, and associated ecological processes in adapting to and surviving**
13 ~~the impacts of climate change.~~ **becoming more resilient and adapting to the**
14 **impacts of climate change and ocean acidification.**

15 **(B) ADMINISTRATION.—In establishing the national strategy, the**
16 **President shall—**

17 **(i) base the national strategy on the best available science, as**
18 **provided by the Advisory Board;**

19 **(ii) develop the national strategy in cooperation with State fish and**
20 **wildlife agencies, State coastal agencies, United States territories, and**
21 **Indian tribes;**

22 **(iii) coordinate with the Secretary of the Interior, the Secretary of**
23 **Commerce, the Secretary of Agriculture, the Secretary of Defense, the**
24 **Administrator of the Environmental Protection Agency, and other**
25 **agencies as appropriate;**

26 **(iv) consult with local governments, conservation organizations,**
27 **scientists, and other interested stakeholders; and**

28 **(v) provide public notice and opportunity for comment.**

29 **(C) CONTENTS.—The President shall include in the national strategy, at**
30 **a minimum, prioritized goals and measures and a schedule for**
31 **implementation—**

32 **(i) to identify and monitor fish and wildlife, fish and wildlife**
33 **habitat, plants, and associated ecological processes that are**
34 **particularly likely to be adversely affected by climate change and**
35 **ocean acidification and have the greatest need for conservation;**

36 **(ii) to identify and monitor coastal, estuarine, marine, terrestrial,**
37 **and freshwater habitats that are at the greatest risk of being damaged**
38 **by climate change and ocean acidification;**

39 **(iii) to assist species in adapting to the impacts of climate change**
40 **and ocean acidification;**

1 (iv) to protect, acquire, maintain, and restore fish and wildlife
2 habitat to build resilience to climate change and ocean acidification;

3 (v) to provide habitat linkages and corridors to facilitate fish,
4 wildlife, and plant movement in response to climate change and ocean
5 acidification;

6 (vi) to restore and protect ecological processes that sustain fish,
7 wildlife, and plant populations that are vulnerable to climate change
8 and ocean acidification;

9 (vii) to protect, maintain, and restore coastal, marine, and aquatic
10 ecosystems so that the ecosystems are more resilient and better able to
11 withstand the additional stresses associated with climate change,
12 including relative sea level rise, and ocean acidification;

13 (viii) to protect ocean and coastal species from the impact of climate
14 change and ocean acidification;

15 (ix) to incorporate adaptation strategies and activities to address
16 relative sea level rise into coastal zone planning;

17 (x) to protect, maintain, and restore ocean and coastal habitats to
18 build healthy and resilient ecosystems, including the purchase of
19 coastal and island land; and

20 (xi) to incorporate consideration of climate change and ocean
21 acidification, and to integrate adaptation strategies and activities for
22 fish and wildlife, fish and wildlife habitat, plants, and associated
23 ecological processes, in the planning and management of Federal land
24 and water administered by the Federal agencies that receive funding
25 under this section.

26 (D) COORDINATION WITH OTHER PLANS.—In developing the national
27 strategy, the President shall, to the maximum extent practicable—

28 (i) take into consideration research and information contained in—

29 (I) State comprehensive wildlife conservation plans;

30 (II) the North American waterfowl management plan;

31 (III) the national fish habitat action plan;

32 (IV) coastal zone management plans;

33 (V) the reports of the Pew Oceans Commission and the United
34 States Commission on Ocean Policy; and

35 (VI) other relevant plans; and

36 (ii) coordinate and integrate the goals and measures identified in
37 the national strategy with the goals and measures identified in those
38 plans.

39 (E) REVISIONS.—Not later than 5 years after the date on which the

1 strategy is developed, and not less frequently than every 5 years thereafter,
2 the President shall review and update the national strategy using the
3 procedures described in this paragraph.

4 **(j) State Comprehensive Adaptation Strategies.—**

5 **(1) IN GENERAL.—**Effective beginning on the date that is 3 years after the
6 date of enactment of this Act, funds made available to States under this subtitle
7 shall be used only for activities that are consistent with a State strategy that has
8 been approved by the Secretary of the Interior or the Secretary of Commerce,
9 as appropriate.

10 **(2) INITIAL PERIOD.—**Until the earlier of the date that is 3 years after the date
11 of enactment of this Act or the date on which a State receives approval for an
12 applicable strategy, a State shall be eligible to receive funding under this
13 section for adaptation activities conducted pursuant to the comprehensive
14 wildlife strategy of the State and, where appropriate, other fish, wildlife and
15 conservation strategies, consistent with national strategy under subsection (i)
16 and in accordance with a workplan developed in coordination with the
17 Secretary of the Interior or the Secretary of Commerce, as appropriate.

18 **(3) REQUIREMENTS.—**A State strategy shall—

19 **(A)** describe the impacts of climate change and ocean acidification on
20 the diversity and health of the fish, wildlife and plant populations,
21 habitats, and associated ecological processes;

22 **(B)** describe and prioritize proposed conservation actions to assist fish,
23 wildlife, and plant populations in adapting to those impacts;

24 **(C)** establish programs for monitoring the impacts of climate change on
25 fish, wildlife, and plant populations, habitats, and associated ecological
26 processes;

27 **(D)** include strategies, specific conservation actions, and a timeframe for
28 implementing conservation actions for fish, wildlife, and plant populations,
29 habitats, and associated ecological processes;

30 **(E)** establish methods for assessing the effectiveness of conservation
31 actions taken to assist fish, wildlife, and plant populations, habitats, and
32 associated ecological processes in adapting to those impacts and for
33 updating those actions to respond appropriately to new information or
34 changing conditions;

35 **(F)** involve the participation of the State fish and wildlife agency, the
36 State agency responsible for administration of Land and Water
37 Conservation Fund grants, the State Forest Legacy program coordinator,
38 and the State coastal agency;

39 **(G)** provide for solicitation and consideration of public and independent
40 scientific input;

41 **(H)** take into consideration research and information contained in, and

1 coordinate with and integrate the goals and measures identified in, as
2 appropriate, other fish, wildlife, and habitat conservation strategies,
3 including—

4 (i) the national fish habitat action plan;

5 (ii) plans under the North American Wetlands Conservation Act
6 (16 U.S.C. 4401 et seq.);

7 (iii) the Federal, State, and local partnership known as “Partners in
8 Flight”;

9 (iv) federally approved coastal zone management plans under the
10 Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.);

11 (v) federally approved regional fishery management plans and
12 habitat conservation activities under the Magnuson Fishery
13 Conservation and Management Act (16 U.S.C. 1801 et seq.);

14 (vi) the national coral reef action plan;

15 ** 1 (F)(vii) recovery plans for threatened species and endangered
16 species under section 4(f) of the Endangered Species Act of 1973 (16
17 U.S.C. ~~1535~~ 1533(f));

18 (viii) habitat conservation plans under section 10 of that Act (16
19 U.S.C. 1539);

20 (ix) other Federal and State plans for imperiled species;

21 (x) the United States shorebird conservation plan;

22 (xi) the North American waterbird conservation plan; and

23 (xii) other State-based strategies that comprehensively implement
24 adaptation activities to remediate the effects of climate change and
25 ocean acidification on fish, wildlife, and habitats;

26 (I) be incorporated into revision of the comprehensive wildlife
27 conservation strategy of a State—

28 (i) that has been submitted to the United States Fish and Wildlife
29 Service; and

30 (ii)(I) that has been approved by the Service; or

31 (II) on which a decision on approval is pending; and

32 (J) be incorporated into an approved coastal zone management plan.

33 (4) UPDATING.—Each State(2) Updating.—Each adaptation strategy described in
34 paragraph (1)(3) shall be updated at least every 5 years.

35 Subtitle H—Climate H—International Climate Change
36 Adaptation and National Security Program

1 ~~SEC. 4801. INTERAGENCY CLIMATE CHANGE AND~~
2 ~~NATIONAL SECURITY COUNCIL. FINDINGS.~~

3 ~~(a) Establishment.—There is established a Climate Change and National Security~~
4 ~~Council Congress finds that—~~

5 (1) global climate change represents a potentially significant threat multiplier
6 for instability around the world as changing precipitation patterns may
7 exacerbate competition and conflict over agricultural, vegetative, and water
8 resources and displace people, thus increasing hunger and poverty and causing
9 increased pressure on least developed countries;

10 (2) the strategic, social, political, and economic consequences of global
11 climate change could have disproportionate impacts on least developed
12 countries, which have fewer resources and thus, often fewer emissions;

13 (3) the strategic, social, political, and economic consequences of global
14 climate change are likely to have a greater adverse effect on less developed
15 countries;

16 (4) the consequences of global climate change could pose a danger to the
17 security interest and economic interest of the United States; and

18 (5) it is in the national security interest of the United States to recognize, plan
19 for, and mitigate the international strategic, social, political, and economic
20 effects of a changing climate.

21 **SEC. 4802. PURPOSES.**

22 The purposes of this subtitle are—

23 (1) to protect the national security of the United States where such interest
24 can be advanced by minimizing, averting, or increasing resilience to potentially
25 destabilizing climate change impacts;

26 (2) to support the development of national and regional climate change
27 adaptation plans in least developed countries;

28 (3) to support the deployment of technologies that would help least developed
29 countries reduce their greenhouse gas emissions and respond to destabilizing
30 impacts of climate change;

31 (4) to provide assistance to least-developed countries and small island
32 developing states with national or regional climate change adaptation plans in
33 the planning, financing, and execution of adaptation projects;

34 (5) to support investments and capital to reduce vulnerability related to
35 climate change and its impacts, including but not limited to drought, famine,
36 floods, sea level rise, shifts in agricultural zones or seasons, shifts in range that
37 affect economic livelihoods, and refugees and internally displaced persons;

38 (6) to support climate change adaptation research in or for least developed
39 countries; and

1 (7) to encourage the identification and adoption of appropriate low-carbon
2 and efficient energy technologies in least-developed countries.

3 **SEC. 4803. ESTABLISHMENT.**

4 (a) Establishment of Program.—The Secretary of State, working with the
5 Administrator of the U.S. Agency for International Development (referred to in this
6 subtitle as the “~~Council~~” “Agency”) and the Administrator, shall establish an
7 International Climate Change Adaptation and National Security Program within
8 the Agency.

9 (b) Membership.—The Council shall include—

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

11 ~~(2) the Administrator;~~

12 ~~(3) the Secretary of Defense; and~~

13 ~~(4) the Director of National Intelligence.~~

14 ~~(c) Duties.—The Council~~(b) Responsibilities of Program.—The Program shall—

15 (1) submit annual reports to the President, the Committees on Environment and
16 Public Works and Foreign Relations of the Senate, and the Committees on Energy
17 and Commerce and Foreign Relations of the House of Representatives, **and any**
18 **other relevant committees on national security, the economy and foreign policy,**
19 that describe—

20 (A) the extent to which other countries are committing to reducing
21 greenhouse gas emissions through mandatory programs;

22 (B) the extent to which global climate change, through ~~the~~ **its** potential
23 negative impacts of climate change on sensitive populations and natural
24 resources in different regions of the world **least developed countries**, may
25 threaten, cause, or exacerbate political instability or international conflict in
26 those regions; and

27 (C) the ramifications of any potentially destabilizing impacts climate change
28 may have on the **economic and** national security of the United States,
29 including—

30 (i) the creation of refugees; and

31 (ii) international or ~~intranational~~ **internal armed** conflicts over water,
32 food, land, or other resources; ~~and~~

33 (2) include in each annual report submitted under paragraph (1) ~~recommendations~~
34 ~~on whether it is necessary~~ **a description of how funds made available under**
35 **section 4804 were spent** to enhance the national security of the United States ~~by~~
36 ~~funding programs with amounts made available under section 4802 that the Council~~
37 ~~determines would~~ **and** assist in avoiding the politically destabilizing impacts of
38 climate change in volatile regions of the world, **particularly least developed**
39 **countries; and-**

1 ~~SEC. 4802. FUNDING.~~(3) identify and recommend the countries in which
2 assistance can have the greatest and most sustainable benefit to reducing
3 vulnerability to climate change, primarily in the form of deploying adaptation
4 and greenhouse gas reduction technologies.

5 ~~Upon a determination for any calendar year by the~~
6 ~~President, based on any report and recommendations~~
7 ~~submitted by the Council under section 4801, that funds~~
8 ~~should be made available to carry out the~~
9 ~~recommendations—~~ **SEC. 4804. FUNDING.**

10 ~~(1) notwithstanding section 4302(b)(3), the Corporation shall deposit 5 percent of the~~
11 ~~proceeds from auctions that the Corporation conducts for that calendar year under section~~
12 ~~4302(a)(a) Carrying Out Recommendations.—All funds deposited~~ into the Climate
13 Change and National Security Fund established by section 4101; ~~and~~(4) shall be made
14 available, without further appropriation or fiscal year limitation, to carry out the
15 program established under this subtitle.

16 ~~(2) the President shall use those funds to implement the recommendations.~~(b)
17 **Distribution of Funds.—The Administrator of the Agency shall distribute to the**
18 **International Climate Change Adaptation and National Security Program the funds**
19 **for the purposes described in section 4802.**

20 (c) **Oversight.—The Administrator of the Agency shall oversee the expenditures**
21 **by the Program.**

22 (d) **Limitations.—Not more than 10 percent of amounts made available to carry**
23 **out this subtitle shall be spent in any single country in any year.**

24 Subtitle I—Emergency Firefighting Programs

25 SEC. 4901. FINDINGS.

26 Congress finds that—

27 (1) since 1980, wildfires in the United States have burned almost twice as many
28 acres per year on average than the average burned acreage during the period
29 beginning on January 1, 1920, and ending on December 31, 1979;

30 (2) the wildfire season in the western United States has increased by an average of
31 78 days during the 30-year period preceding the date of enactment of this Act;

32 (3) researchers predict that the area subject to wildfire damage will increase
33 during the 21st century by up to 118 percent as a result of climate change;

34 (4) of the annual budget of the Forest Service, the Forest Service used for wildfire
35 suppression activities—

36 (A) 13 percent in 1991; and

37 (B) 45 percent in 2007; and

1 (5) 1 percent of the largest escaped fires—

2 (A) burn 95 percent of all burned acres; and

3 (B) consume 85 percent of all wildfire fighting costs.

4 **SEC. 4902. BUREAU OF LAND MANAGEMENT**
5 **EMERGENCY FIREFIGHTING PROGRAM.**

6 (a) Use of Funds.—The amounts deposited into the Bureau of Land Management
7 Emergency Firefighting Fund established by section 4101(5) shall be made available,
8 without further appropriation or fiscal year limitation, to pay for wildland fire
9 suppression activities the costs of which are in excess of amounts annually appropriated
10 to the Secretary of the Interior for normal, nonemergency wildland fire suppression
11 activities.

12 (b) Accounting and Reporting.—

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

17 (2) REQUIREMENT.—The system established under paragraph (1) shall require that
18 the Secretary of the Interior shall submit to the Committee on Natural Resources of
19 the House of Representatives and the Committee on Energy and Natural Resources
20 of the Senate—

21 (A) a monthly report describing each expenditure made from the Bureau of
22 Land Management Emergency Firefighting Fund during the preceding month;
23 and

24 (B) a report at the end of each fiscal year describing the expenditures made
25 from the Bureau of Land Management Emergency Firefighting Fund during the
26 preceding fiscal year.

27 **SEC. 4903. FOREST SERVICE EMERGENCY**
28 **FIREFIGHTING PROGRAM.**

29 (a) Use of Funds.—The amounts deposited into the Forest Service Emergency
30 Firefighting Fund established by section 4101(6) shall be made available, without further
31 appropriation or fiscal year limitation, to pay for wildland fire suppression activities the
32 costs of which are in excess of amounts annually appropriated to the Secretary of
33 Agriculture for normal, nonemergency wildland fire suppression activities.

34 (b) Accounting and Reporting.—

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

1 (2) REQUIREMENT.—The system established under paragraph (1) shall require that
2 the Secretary of Agriculture shall submit to the Committee on Natural Resources of
3 the House of Representatives and the Committee on Energy and Natural Resources
4 of the Senate—

5 (A) a monthly report describing each expenditure made from the Forest
6 Service Emergency Firefighting Fund during the preceding month; and

7 (B) a report at the end of each fiscal year describing the expenditures made
8 from the Forest Service Emergency Firefighting Fund during the preceding
9 fiscal year.

10 TITLE V—ENERGY EFFICIENCY

11 Subtitle A—Appliance Efficiency

12 SEC. 5101. RESIDENTIAL BOILERS.

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

15 (1) in the subsection heading, by inserting “and Boilers” after “Furnaces”;

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

18 (3) in subparagraph (B)—

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

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

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

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

24 “(3) BOILERS.—

25 “(A) IN GENERAL.—Subject to subparagraphs (B) and (C), boilers
26 manufactured on or after September 1, 2012, shall meet the following
27 requirements:3,L2(4,4,4,4,0,0),tp10,p10,10/10,g1,t1,s125,10,r125n

28 1Boiler Type Requirements1Minimum Annual Fuel Utilization Efficiency1Design

29 Gas hot water82 percent1No constant burning pilot, automatic means for adjusting water
30 temperature

31 Gas steam80 percent1No constant burning pilot

32 Oil hot water84 percent1Automatic means for adjusting temperature

33 Oil steam82 percent1None

34 Electric hot waterNone1Automatic means for adjusting temperature

35 Electric steamNone1None

1 “(B) AUTOMATIC MEANS FOR ADJUSTING WATER TEMPERATURE.—

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

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

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

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

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

24 **SEC. 5102. REGIONAL VARIATIONS IN HEATING OR**
25 **COOLING STANDARDS.**

26 (a) In General.—Section 327 of the Energy Policy and Conservation Act (42 U.S.C.
27 6297) is amended—

28 (1) by redesignating subsections (e), (f), and (g) as subsections (f), (g), and (h),
29 respectively; and

30 (2) by inserting after subsection (d) the following:

31 “(e) Regional Standards for Space Heating and Air Conditioning Products.—

32 “(1) STANDARDS.—

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

36 “(B) NATIONAL MINIMUM AND REGIONAL STANDARDS.—For each space
37 heating and air conditioning product, the Secretary may establish—

38 “(i) a national minimum standard; and

39 “(ii) 2 more stringent regional standards for regions determined to have

1 significantly differing climatic conditions.

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

5 “(D) ECONOMIC JUSTIFIABILITY STUDY.—

6 “(i) IN GENERAL.—As a preliminary step in determining the economic
7 justifiability of establishing a regional standard under subparagraph
8 (B)(ii), the Secretary shall conduct a study involving stakeholders,
9 including—

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

12 “(II) representatives of nongovernmental advocacy organizations;

13 “(III) representatives of product manufacturers, distributors, and
14 installers;

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

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

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

18 “(I) shall determine the potential benefits and consequences of
19 prescribing regional standards for heating and cooling products; and

20 “(II) may, if favorable to the standards, constitute the evidence of
21 economic justifiability required under this Act.

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

24 “(i) conform to State borders; and

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

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

32 “(3) DISTRIBUTION IN COMMERCE.—

33 “(A) IN GENERAL.—Except as provided in subparagraph (B), no product
34 manufactured in a manner that complies with a regional standard established
35 under paragraph (1) shall be distributed in commerce without a prominent label
36 affixed to the product that includes—

37 “(i) at the top of the label, in print of not less than 14-point type, the
38 following statement: ‘It is a violation of Federal law for this product to be
39 installed in any State outside the region shaded on the map printed on this

1 label.’;

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

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

11 “(B) ENERGY-EFFICIENCY RATING.—A product manufactured that meets or
12 exceeds all regional standards established under this paragraph shall bear a
13 prominent label affixed to the product that includes at the top of the label, in
14 print of not less than 14-point type, the following statement: ‘This product has
15 achieved an energy-efficiency rating under Federal law allowing its installation
16 in any State.’.

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

19 “(A) obtain and retain records on the intended installation locations of the
20 equipment sold; and

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

22 (b) Conforming Amendments.—Section 327 of the Energy Policy and Conservation
23 Act (42 U.S.C. 6297) is amended—

24 (1) in subsection (b)—

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

27 (B) in paragraph (3)—

28 (i) by striking “subsection (f)(1)” and inserting “subsection (g)(1)”; and

29 (ii) by striking “subsection (f)(2)” and inserting “subsection (g)(2)”; and

30 (2) in subsection (c)(3), by striking “subsection (f)(3)” and inserting “subsection
31 (g)(3)”.

32 Subtitle B—Building Efficiency

33 SEC. 5201. UPDATING STATE BUILDING ENERGY 34 EFFICIENCY CODES.

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

37 “SEC. 304. UPDATING STATE BUILDING ENERGY

1 EFFICIENCY CODES.

2 “(a) Updates.—

3 “(1) IN GENERAL.—The Secretary shall support updating the national model
4 building energy codes and standards not later than 3 years after the date of
5 enactment of the America’s **Lieberman-Warner** Climate Security Act of 2007, and
6 not less frequently every 3 years thereafter, to achieve overall energy savings, as
7 compared to the IECC (2006) for residential buildings and ASHRAE Standard 90.1
8 (2004) for commercial buildings, of at least—

9 “(A) 30 percent, with respect to each edition of a model code or standard
10 published during the period beginning on January 1, 2010, and ending on
11 December 31, 2019;

12 “(B) 50 percent, with respect to each edition of a model code or standard
13 published on or after January 1, 2020; and

14 “(C) targets for intermediate and subsequent years, to be established by the
15 Secretary not less than 3 years before the beginning on each target year, in
16 coordination with IECC and ASHRAE Standard 90.1 cycles, at the maximum
17 level of energy efficiency that is technologically feasible and lifecycle cost-
18 effective.

19 “(2) REVISIONS TO IECC AND ASHRAE.—

20 “(A) IN GENERAL.—If the IECC or ASHRAE Standard 90.1 regarding
21 building energy use is revised, not later than 1 year after the date of the
22 revision, the Secretary shall determine whether the revision will—

23 “(i) improve energy efficiency in buildings; and

24 “(ii) meet the energy savings goals described in paragraph (1).

25 “(B) MODIFICATIONS.—

26 “(i) IN GENERAL.—If the Secretary makes a determination under
27 subparagraph (A)(ii) that a code or standard does not meet the energy
28 savings goals established under paragraph (1) or if a national model code
29 or standard is not updated for more than 3 years, not later than 1 year after
30 the determination or the expiration of the 3-year period, the Secretary shall
31 establish a modified code or standard that meets the energy savings goals.

32 “(ii) REQUIREMENTS.—

33 “(I) ENERGY SAVINGS.—A modification to a code or standard
34 under clause (i) shall—

35 “(aa) achieve the maximum level of energy savings that is
36 technically feasible and lifecycle cost-effective;

37 “(bb) be achieved through an amendment or supplement to
38 the most recent revision of the IECC or ASHRAE Standard 90.1
39 and taking into consideration other appropriate model codes and

1 standards; and

2 “(cc) incorporate available appliances, technologies, and
3 construction practices.

4 “(II) TREATMENT AS BASELINE.—A modification to a code or
5 standard under clause (i) shall serve as the baseline for the next
6 applicable determination of the Secretary under subparagraph (A)(i).

7 “(C) PUBLIC PARTICIPATION.—The Secretary shall—

8 “(i) publish in the Federal Register a notice relating to each goal,
9 determination, and modification under this paragraph; and

10 “(ii) provide an opportunity for public comment regarding the goals,
11 determinations, and modifications.

12 “(b) State Certification of Building Energy Code Updates.—

13 “(1) GENERAL CERTIFICATION.—

14 “(A) IN GENERAL.—Not later than 2 years after the date of enactment of the
15 ~~America’s~~ **Lieberman-Warner** Climate Security Act of 2007, each State shall
16 certify to the Secretary that the State has reviewed and updated the provisions
17 of the residential and commercial building codes of the State regarding energy
18 efficiency.

19 “(B) ENERGY SAVINGS.—A certification under subparagraph (A) shall
20 include a demonstration that the applicable provisions of the State code meet or
21 exceed, as applicable—

22 “(i)(I) the IECC (2006) for residential buildings; or

23 “(II) the ASHRAE Standard 90.1 (2004) for commercial buildings; or

24 “(ii) the quantity of energy savings represented by the provisions
25 referred to in clause (i).

26 “(2) REVISION OF CODES AND STANDARDS.—

27 “(A) IN GENERAL.—If the Secretary makes an affirmative determination
28 under subsection (a)(2)(A)(i) or establishes a modified code or standard under
29 subsection (a)(2)(B), not later than 2 years after the determination or proposal,
30 each State shall certify that the State has reviewed and updated the provisions
31 of the residential and commercial building codes of the State regarding energy
32 efficiency.

33 “(B) ENERGY SAVINGS.—A certification under subparagraph (A) shall
34 include a demonstration that the applicable provisions of the State code meet or
35 exceed—

36 “(i) the modified code or standard; or

37 “(ii) the quantity of energy savings represented by the modified code or
38 standard.

39 “(C) FAILURE TO DETERMINE.—If the Secretary fails to make a determination

1 under subsection (a)(2)(A)(i) by the date specified in subsection (a)(2), or if the
2 Secretary makes a negative determination, not later than 2 years after the
3 specified date or the date of the determination, each State shall certify that the
4 State has—

5 “(i) reviewed the revised code or standard; and

6 “(ii) updated the provisions of the residential and commercial building
7 codes of the State as necessary to meet or exceed, as applicable—

8 “(I) any provisions of a national code or standard determined to
9 improve energy efficiency in buildings; or

10 “(II) energy savings achieved by those provisions through other
11 means.

12 “(c) Achievement of Compliance by States.—

13 “(1) IN GENERAL.—Not later than 3 years after the date on which a State makes a
14 certification under subsection (b), the State shall certify to the Secretary that the
15 State has achieved compliance with the building energy code that is the subject of
16 the certification.

17 “(2) RATE OF COMPLIANCE.—The certification shall include documentation of the
18 rate of compliance based on independent inspections of a random sample of the new
19 and renovated buildings covered by the State code during the preceding calendar
20 year.

21 “(3) COMPLIANCE.—A State shall be considered to achieve compliance for
22 purposes of paragraph (1) if—

23 “(A) at least 90 percent of new and renovated buildings covered by the State
24 code during the preceding calendar year substantially meet all the requirements
25 of the code; or

26 “(B) the estimated excess energy use of new and renovated buildings that did
27 not meet the requirements of the State code during the preceding calendar year,
28 as compared to a baseline of comparable buildings that meet the requirements
29 of the code, is not more than 10 percent of the estimated energy use of all new
30 and renovated buildings covered by the State code during the preceding
31 calendar year.

32 “(d) Failure to Certify.—

33 “(1) EXTENSION OF DEADLINES.—The Secretary shall extend a deadline for
34 certification by a State under subsection (b) or (c) for not more than 1 additional
35 year, if the State demonstrates to the satisfaction of the Secretary that the State has
36 made—

37 “(A) a good faith effort to comply with the certification requirement; and

38 “(B) significant progress with respect to the compliance.

39 “(2) NONCOMPLIANCE BY STATE.—

40 “(A) IN GENERAL.—A State that fails to submit a certification required under

1 subsection (b) or (c), and to which an extension is not provided under
2 paragraph (1), shall be considered to be out of compliance with this section.

3 “(B) EFFECT ON LOCAL GOVERNMENTS.—A local government of a State that
4 is out of compliance with this section may be considered to be in compliance
5 with this section if the local government meets each applicable certification
6 requirement of this section.

7 “(e) Technical Assistance.—

8 “(1) IN GENERAL.—The Secretary shall provide technical assistance (including
9 building energy analysis and design tools, building demonstrations, and design
10 assistance and training) to ensure that national model building energy codes and
11 standards meet the goals described in subsection (a)(1).

12 “(2) ASSISTANCE TO STATES.—The Secretary shall provide technical assistance to
13 States—

14 “(A) to implement this section, including procedures for States to
15 demonstrate that the codes of the States achieve equivalent or greater energy
16 savings than the national model codes and standards;

17 “(B) to improve and implement State residential and commercial building
18 energy efficiency codes; and

19 “(C) to otherwise promote the design and construction of energy-efficient
20 buildings.

21 “(f) Incentive Funding.—

22 “(1) IN GENERAL.—The Secretary shall provide incentive funding to States—

23 “(A) to implement this section; and

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

27 “(2) AMOUNT.—In determining whether, and in what amount, to provide
28 incentive funding under this subsection, the Secretary shall take into consideration
29 actions proposed by the State—

30 “(A) to implement this section;

31 “(B) to implement and improve residential and commercial building energy
32 efficiency codes; and

33 “(C) to promote building energy efficiency through use of the codes.

34 “(3) ADDITIONAL FUNDING.—The Secretary shall provide additional funding
35 under this subsection for implementation of a plan to demonstrate a rate of
36 compliance with applicable residential and commercial building energy efficiency
37 codes at a rate of not less than 90 percent, based on energy performance—

38 “(A) to a State that has adopted and is implementing, on a statewide basis—

39 “(i) a residential building energy efficiency code that meets or exceeds

1 the requirements of the IECC (2006) (or a successor code that is the
2 subject of an affirmative determination by the Secretary under subsection
3 (a)(2)(A)(i)); and

4 “(ii) a commercial building energy efficiency code that meets or
5 exceeds the requirements of the ASHRAE Standard 90.1 (2004) (or a
6 successor standard that is the subject of an affirmative determination by
7 the Secretary under subsection (a)(2)(A)(i)); or

8 “(B) in the case of a State in which no statewide energy code exists for
9 residential buildings or commercial buildings, or in which the State code fails
10 to comply with subparagraph (A), to a local government that has adopted and is
11 implementing residential and commercial building energy efficiency codes, as
12 described in subparagraph (A).

13 “(4) TRAINING.—Of the amounts made available to carry out this subsection, the
14 Secretary may use not more than \$500,000 for each State to train State and local
15 officials to implement State or local energy codes in accordance with a plan
16 described in paragraph (3).”.

17 SEC. 5202. CONFORMING AMENDMENT.

18 Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is
19 amended by adding at the end the following new paragraph:

20 “(17) IECC.—The term ‘IECC’ means the International Energy Conservation
21 Code.”.

22 TITLE VI—GLOBAL EFFORT TO REDUCE 23 GREENHOUSE GAS EMISSIONS

24 SEC. 6001. DEFINITIONS.

25 In this title:

26 (1) BASELINE EMISSION LEVEL.—The term “baseline emission level” means, as
27 determined by the Administrator, the total average annual greenhouse gas emissions
28 attributed to a category of covered goods of a foreign country during the period
29 beginning on January 1, 2012, and ending on December 31, 2014, based on—

30 (A) relevant data available for that period; and

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

35 (2) COMPARABLE ACTION.—The term “comparable action” means any greenhouse
36 gas regulatory programs, requirements, and other measures adopted by a foreign
37 country that, in combination, are comparable in effect to actions carried out by the
38 United States to limit greenhouse gas emissions pursuant to this Act, as determined
39 by the President, taking into consideration the level of economic development of the

1 foreign country.

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

5 (4) COVERED FOREIGN COUNTRY.—The term “covered foreign country” means a
6 foreign country that is included on the covered list prepared under section
7 6006(b)(3).

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

10 (A) is a primary product;

11 (B) generates, in the course of the manufacture of the good, a substantial
12 quantity of direct greenhouse gas emissions and indirect greenhouse gas
13 emissions; and

14 (C) is closely related to a good the cost of production of which in the United
15 States is affected by a requirement of this Act.

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

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

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

26 (9) INTERNATIONAL RESERVE ALLOWANCE.—The term “international reserve
27 allowance” means an allowance (denominated in units of metric tons of carbon
28 dioxide equivalent) that is—

29 (A) purchased from a special reserve of allowances pursuant to section
30 6006(a)(2); and

31 (B) used for purposes of meeting the requirements of section 6006.

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

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

34 (B) any other manufactured product that—

35 (i) is sold in bulk for purposes of further manufacture; and

36 (ii) generates, in the course of the manufacture of the product, direct
37 greenhouse gas emissions and indirect greenhouse gas emissions that are
38 comparable (on an emissions-per-dollar basis) to emissions generated in
39 the manufacture of products by covered facilities in the industrial sector.

1 **SEC. 6002. PURPOSES.**

2 The purposes of this title are—

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

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

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

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

12 (B) measures carried out by the United States that comply with applicable
13 international agreements.

14 **SEC. 6003. INTERNATIONAL NEGOTIATIONS.**

15 (a) Finding.—Congress finds that the purposes described in section 6002 can be most
16 effectively addressed and achieved through agreements negotiated between the United
17 States and foreign countries.

18 (b) Negotiating Objective.—

19 (1) STATEMENT OF POLICY.—It is the policy of the United States to work
20 proactively under the United Nations Framework Convention on Climate Change
21 and, in other appropriate forums, to establish binding agreements committing all
22 major greenhouse gas-emitting nations to contribute equitably to the reduction of
23 global greenhouse gas emissions.

24 (2) INTENT OF CONGRESS REGARDING OBJECTIVE.—To the extent that the
25 agreements described in subsection (a) involve measures that will affect
26 international trade in any good or service, it is the intent of Congress that the
27 negotiating objective of the United States shall be to focus multilateral and bilateral
28 international agreements on the reduction of greenhouse gas emissions to advance
29 achievement of the purposes described in section 6002.

30 **SEC. 6004. INTERAGENCY REVIEW.**

31 (a) Interagency Group.—

32 (1) ESTABLISHMENT.—The President shall establish an interagency group to carry
33 out this section.

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

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

38 (b) Determinations.—

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

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

7 (c) Report to President.—Not later than January 1, 2018, and annually thereafter, the
8 interagency group shall submit to the President a report describing the determinations of
9 the interagency group under subsection (b).

10 SEC. 6005. PRESIDENTIAL DETERMINATIONS.

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

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

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

17 (b) Reports.—The President shall—

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

20 (2) publish the determinations in the Federal Register.

21 SEC. 6006. INTERNATIONAL RESERVE 22 ALLOWANCE PROGRAM.

23 (a) Establishment.—

24 (1) IN GENERAL.—The Administrator shall establish a program under which the
25 Administrator, during the 1-year period beginning on January 1, 2019, and annually
26 thereafter, shall offer for sale to United States importers international reserve
27 allowances in accordance with this subsection.

28 (2) SOURCE.—International reserve allowances under paragraph (1) shall be
29 issued from a special reserve of allowances that is separate from, and established in
30 addition to, the quantity of allowances established under section 1201.

31 (3) PRICE.—

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

37 (B) MAXIMUM PRICE.—The price for an international reserve allowance
38 under subparagraph (A) shall not exceed the clearing price for current

1 compliance year allowances established at the most recent auction of
2 allowances by the Corporation.

3 (4) SERIAL NUMBER.—The Administrator shall assign a unique serial number to
4 each international reserve allowance issued under this subsection.

5 (5) TRADING SYSTEM.—The Administrator may establish, by rule, a system for the
6 sale, exchange, purchase, transfer, and banking of international reserve allowances.

7 (6) REGULATED ENTITIES.—International reserve allowances may not be
8 submitted by regulated entities to comply with the allowance submission
9 requirements of section 1202.

10 (7) PROCEEDS.—All proceeds from the sale of international reserve allowances
11 under this subsection shall be allocated to a program that the Administrator, in
12 coordination with the Secretary of State, shall establish to mitigate the negative
13 impacts of global climate change on disadvantaged communities in other countries.

14 (b) Foreign Country Lists.—

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

18 (2) EXCLUDED LIST.—

19 (A) IN GENERAL.—The President shall identify and publish in a list, to be
20 known as the “excluded list”—

21 (i) each foreign country determined by the President under section
22 6005(a) to have taken action comparable to that taken by the United States
23 to limit the greenhouse gas emissions of the foreign country; and

24 (ii) each foreign country the share of total global greenhouse gas
25 emissions of which is below the de minimis percentage described in
26 subparagraph (B).

27 (B) DE MINIMIS PERCENTAGE.—The de minimis percentage referred to in
28 subparagraph (A) is a percentage of total global greenhouse gas emissions of
29 not more than 0.5, as determined by the President, for the most recent calendar
30 year for which emissions and other relevant data is available, taking into
31 consideration, as necessary, the annual average deforestation rate during a
32 representative period for a foreign country that is a developing country.

33 (3) COVERED LIST.—

34 (A) IN GENERAL.—The President shall identify and publish in a list, to be
35 known as the “covered list”, each foreign country the covered goods of which
36 are subject to the requirements of this section.

37 (B) REQUIREMENT.—The covered list shall include each foreign country that
38 is not included on the excluded list under paragraph (2).

39 (c) Written Declarations.—

40 (1) IN GENERAL.—Effective beginning January 1, 2020, a United States importer

1 of any covered good shall, as a condition of importation or withdrawal for
2 consumption from a warehouse of the covered good, submit to the Administrator
3 and the appropriate office of the U.S. Customs and Border Protection a written
4 declaration with respect to each such importation or withdrawal.

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

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

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

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

14 (4) FAILURE TO DECLARE.—

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

19 (B) EXCEPTION FOR CERTAIN IMPORTS.—Subparagraph (A) shall not apply to
20 a covered good of a foreign country if the President determines that—

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

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

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

27 (5) CORRECTED DECLARATION.—

28 (A) IN GENERAL.—If, after making a declaration required under this
29 subsection, an importer has reason to believe that the declaration contains
30 information that is not correct, the importer shall provide a corrected
31 declaration by not later than 30 days after the date of discovery of the error, in
32 accordance with subparagraph (B).

33 (B) METHOD.—A corrected declaration under subparagraph (A) shall be in
34 the form of a letter or other written statement to the Administrator and the
35 office of the U.S. Customs and Border Protection to which the original
36 declaration was submitted.

37 (d) Quantity of Allowances Required.—

38 (1) METHODOLOGY.—

39 (A) IN GENERAL.—The Administrator shall establish, by rule, a method for
40 calculating the required number of international reserve allowances that a

1 United States importer must submit, together with a written declaration under
2 subsection (c), for each category of covered goods of each covered foreign
3 country.

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

8 (2) INITIAL COMPLIANCE YEAR.—

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

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

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

20 (B) ADJUSTMENTS.—The Administrator shall adjust the requirement under
21 subparagraph (A)—

22 (i) in accordance with the ratio that—

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

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

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

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

34 (4) PUBLICATION.—Not later than 90 days before the beginning of each
35 compliance year, the Administrator shall publish in the Federal Register a schedule
36 describing the required number of international reserve allowances for each category
37 of imported covered goods of each covered foreign country, as calculated under this
38 subsection.

39 (e) Foreign Allowances and Credits.—

40 (1) FOREIGN ALLOWANCES.—

1 (A) IN GENERAL.—A United States importer may submit, in lieu of an
2 international reserve allowance issued under this section, a foreign allowance
3 or similar compliance instrument distributed by a foreign country pursuant to a
4 cap and trade program that represents a comparable action.

5 (B) COMMENSURATE CAP AND TRADE PROGRAM.—For purposes of
6 subparagraph (A), a cap and trade program that represents a comparable action
7 shall include any greenhouse gas regulatory program adopted by a covered
8 foreign country to limit the greenhouse gas emissions of the covered foreign
9 country, if the President certifies that the program—

10 (i)(I) places a quantitative limitation on the total quantity of greenhouse
11 gas emissions of the covered foreign country (expressed in terms of tons
12 emitted per calendar year); and

13 (II) achieves that limitation through an allowance trading system;

14 (ii) satisfies such criteria as the President may establish for requirements
15 relating to the enforceability of the cap and trade program, including
16 requirements for monitoring, reporting, verification procedures, and
17 allowance tracking; and

18 (iii) is a comparable action.

19 (2) FOREIGN CREDITS.—

20 (A) IN GENERAL.—A United States importer may submit, in lieu of an
21 international reserve allowance issued under this section, a foreign credit or a
22 credit for an international offset project that the Administrator has authorized
23 for use under subtitle E of title II.

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

27 (f) Retirement of Allowances.—The Administrator shall retire each international
28 reserve allowance, foreign allowance, and foreign credit submitted to achieve compliance
29 with this section.

30 (g) Consistency With International Agreements.—The Administrator, in consultation
31 with the Secretary of State, shall adjust the international reserve allowance requirements
32 established under this section (including the quantity of international reserve allowances
33 required for each category of covered goods of a covered foreign country) as the
34 Administrator determines to be necessary to ensure that the United States complies with
35 all applicable international agreements.

36 (h) Termination.—The international reserve allowance requirements of this section
37 shall not apply to a covered good of a covered foreign country in any case in which the
38 President makes a determination described in subsection (b)(2) with respect to the
39 covered goods of that covered foreign country.

40 (i) Final Regulations.—Not later than January 1, 2019, the Administrator shall
41 promulgate such regulations as the Administrator determines to be necessary to carry out

1 this section.

2 **SEC. 6007. ADJUSTMENT OF INTERNATIONAL**
3 **RESERVE ALLOWANCE REQUIREMENTS.**

4 (a) In General.—Not later than January 1, 2023, and annually thereafter, the President
5 shall prepare and submit to Congress a report that assesses the effectiveness of the
6 applicable international reserve allowance requirements under section 6006 with respect
7 to the covered goods of each covered foreign country.

8 (b) Inadequate Requirements.—If the President determines that an applicable
9 international reserve allowance requirement is not adequate to achieve the purposes of
10 this title, the President, simultaneously with the submission of the report under subsection
11 (a), shall—

12 (1) adjust the requirement; or

13 (2) take such other action as the President determines to be necessary to improve
14 the effectiveness of the requirement, in accordance with all applicable international
15 agreements.

16 (c) Effective Date.—An adjustment under subsection (b)(1) shall take effect beginning
17 on January 1 of the compliance year immediately following the date on which the
18 adjustment is made.

19 **TITLE VII—REVIEWS AND RECOMMENDATIONS**
20 **SEC. 7001. NATIONAL ACADEMY OF SCIENCES**
21 **REVIEWS.**

22 (a) In General.—Not later than 1 year after the date of enactment of this Act, the
23 Administrator shall offer to enter into a contract with the National Academy of Sciences
24 under which the Academy shall, not later than January 1, 2012, and every 3 years
25 thereafter, submit to Congress and the Administrator a report that includes an analysis
26 of—

27 (1) the latest scientific information and data relevant to global climate change; ~~and~~

28

29 (2) the performance of this Act and other policies in reducing greenhouse gas
30 emissions and mitigating the adverse impacts of global climate change-

31 ;

32 **(3) the performance of this Act in ensuring that the Land and Water**
33 **Conservation Fund established under section 2 of the Land and Water**
34 **Conservation Fund Act of 1965 (16 U.S.C. 4601–5) receives funds that are**
35 **sufficient to carry out the purposes of that Fund; and**

36 **(4) the performance of this Act in ensuring that the Bureau of Land**
37 **Management and the Forest Service receive funds that are sufficient to enable**

1 **those agencies to suppress wildland fire effectively and thereby minimize**
2 **wildfire damage.**

3 (b) Latest Scientific Information.—The analysis required under subsection (a)(1)
4 shall—

5 (1) address existing reports, including the most recent assessment report of the
6 Intergovernmental Panel on Climate Change; and

7 (2) include a description of—

8 (A) trends in and projections for total United States greenhouse gas
9 emissions;

10 (B) trends in and projections for total worldwide greenhouse gas emissions;

11 (C) current and projected future atmospheric concentrations of greenhouse
12 gases;

13 (D) current and projected future global average temperature, including an
14 analysis of whether an increase of global average temperature in excess of 3.6
15 degrees Fahrenheit (2 degrees Celsius) above the preindustrial average has
16 occurred or is more likely than not to occur in the foreseeable future as a result
17 of anthropogenic climate change;

18 (E) current and projected future adverse impacts of global climate change on
19 human populations, wildlife, and natural resources; and

20 (F) trends in and projections for the health of the oceans and ocean
21 ecosystems, including predicted changes in ocean acidity, temperatures, the
22 extent of coral reefs, and other indicators of ocean ecosystem health, resulting
23 from anthropogenic carbon dioxide and climate change.

24 (c) Performance of This Act and Existing Technologies.—The analysis required under
25 subsection (a)(2) shall include a description of—

26 (1) the extent to which this Act, in concert with other policies, will prevent a
27 dangerous increase in global average temperature;

28 (2) the extent to which this Act, in concert with other policies, will prevent
29 dangerous atmospheric concentrations of greenhouse gases;

30 (3) the current and future projected deployment of technologies and practices that
31 reduce or limit greenhouse gas emissions, including—

32 (A) technologies for capture and disposal of greenhouse gases;

33 (B) efficiency improvement technologies;

34 (C) zero-greenhouse gas emitting energy technologies, including solar, wind
35 and geothermal technologies; and

36 (D) above- and below-ground biological sequestration technologies;

37 (4) the extent to which this Act and other policies are accelerating the
38 development and commercial deployment of technologies and practices that reduce
39 and limit greenhouse gas emissions;

1 (5) the extent to which the allocations and distributions of emission allowances
2 and auction proceeds under this Act are advancing the purposes of this Act, and
3 whether any of those allocations and distributions should be modified, including by
4 increasing the percentage of annual Emission Allowance Account being auctioned,
5 to better carry out the purposes of this Act;

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

11 (7) whether any other transportation-related programs, including fuel economy
12 standard reform, greenhouse gas vehicle emissions standards, renewable fuel
13 volume mandates, low-carbon fuel standards, and activities to reduce vehicle miles
14 traveled have been finalized and implemented by any Federal agencies or
15 departments;

16 (8) whether any regulation or program described in paragraph ~~(11)~~ **(12) or (13)**
17 is expected to achieve, as compared to the baseline greenhouse gas emissions
18 consistent with the reference case contained in the report of the Energy Information
19 Administration entitled “Annual Energy Outlook 2006”, at a minimum—

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

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

26 (9) whether additional measures, including an increase in the earned income tax
27 credit, a reduction in payroll taxes, or the implementation of electronic benefit
28 transfers by State health and human services agencies to reach low-income
29 individuals who are not required to file Federal income tax returns, are needed to
30 help low- and moderate-income individuals respond to changes in the cost of
31 energy-related goods and services;

32 (10) the feasibility of expanding the definition of the term “covered facility”
33 under this Act;

34 **(11) the feasibility of expanding the scope of the compliance obligation**
35 **established under section 1202(a);**

36 **(12) the feasibility of reducing the number of emission allowances comprising the**
37 **Emission Allowance Account for 1 or more calendar years under this Act; and**

38 ~~(12)~~**(13) the feasibility of establishing policies for reducing greenhouse gas**
39 **emissions over and above those policies established by this Act.**

40 **SEC. 7002. ENVIRONMENTAL PROTECTION**
41 **AGENCY REVIEW.**

1 Not later than January 1, 2012, the Administrator shall submit to Congress a
2 report indicating—

3 (1) the latest scientific information and data relevant to the health effects of
4 mercury emissions from coal-fired electric power generating facilities;

5 (2) the state of the technology designed to reduce mercury emissions from
6 coal combustion, including the efficacy of the technology with respect to each
7 coal type; and

8 (3) the extent to which the implementation of this Act is assisting in bringing
9 concentrations of particulate matter and ozone into line with National Ambient
10 Air Quality Standards.

11 **SEC. 7003. ENVIRONMENTAL PROTECTION** 12 **AGENCY RECOMMENDATIONS.**

13 (a) Review.—Not later than January 1, 2013, and every 3 years thereafter, the
14 Administrator shall submit to Congress recommendations for action in response to the
15 most recent report submitted by the National Academy of Sciences under section 7001
16 **and the report submitted by the Administrator under section 7002.**

17 (b) Categories of Action.—The categories of action eligible for inclusion in the
18 recommendations submitted under subsection (a) ~~include~~— **include proposed legislation**
19 **recommending—**

20 (1) expansion of the definition of the term “covered facility” under this Act;

21 (2) **expansion of the scope of the compliance obligation established under**
22 **section 1202;**

23 (3) adjustment of the number of emission allowances comprising the Emission
24 Allowance Account for 1 or more calendar years under this Act;

25 ~~and~~

26 ~~(3)~~(4) establishment of policies for reducing greenhouse gas emissions over and
27 above those policies established under this Act; **and**

28 (5) **establishment of policies for reducing nationwide emissions into the**
29 **atmosphere of sulfur dioxide, nitrogen oxides, and mercury in excess of the**
30 **reductions resulting from the implementation of this Act.-**

31
32 (c) Consistency With Reviews.—The Administrator shall include with each
33 submission of recommendations under subsection (a) an explanation of any
34 inconsistencies between the recommendations and the reviews submitted by the National
35 Academy of Sciences under section 7001 **and the report submitted by the**
36 **Administrator under section 7002.**

37 (d) Savings Clause.—**Nothing in this title limits, procedurally affects, or otherwise**
38 **restricts the authority of the Administrator, a State, or any person to use authorities**
39 **under this Act or any other law to adopt or enforce any rule.**

1 **SEC. 7004. PRESIDENTIAL RECOMMENDATIONS.**

2 (a) Establishment of the Interagency Climate Change Task Force.—Not later
3 than January 1, 2019, the President shall establish an Interagency Climate Change
4 Task Force.

5 (b) Composition.—The members of the Interagency Climate Change Task Force
6 shall be—

7 (1) the Administrator;

8 (2) the Secretary of Energy;

9 (3) the Secretary of the Treasury;

10 (4) the Secretary of Commerce; and

11 (5) such other Cabinet Secretaries as the President may name to the
12 membership of the Task Force.

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

15 (d) Report to President.—

16 (1) IN GENERAL.—Not later than April 1, 2019, the Task Force shall make
17 public and submit to the President a consensus report making
18 recommendations, including specific legislation for the President to recommend
19 to Congress.

20 (2) BASIS.—The report shall be based on the third set of recommendations
21 submitted by the Administrator to Congress under section 7003.

22 (3) INCLUSIONS.—The Task Force shall include with the consensus report an
23 explanation of any inconsistencies between the consensus report and the third
24 set of recommendations submitted by the Administrator to Congress under
25 section 7003.

26 (e) Presidential Recommendation to Congress.—Not later than July 1, 2020, the
27 President shall submit to Congress the text of a proposed Act based on the
28 consensus report submitted to the President under subsection (d).

29 **SEC. 7005-**

30 ~~SEC. 7003.~~ **ADAPTATION ASSESSMENTS AND**
31 **PLAN.**

32 (a) Regional Estimates.—

33 (1) ESTIMATES.—

34 (A) IN GENERAL.—The Administrator, in consultation with the officials
35 described in paragraph (2) and relevant State agencies, shall conduct 6 regional
36 infrastructure cost assessments in various regions of the United States, and a
37 national cost assessment, to provide estimates of the range of costs that should

1 be anticipated for adaptation to the impacts of climate change.

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

5 (2) DESCRIPTION OF OFFICIALS.—The officials referred to in paragraph (1) are—

6 (A) the Secretary of Agriculture;

7 (B) the Secretary of Commerce;

8 (C) the Secretary of Defense;

9 (D) the Secretary of Energy;

10 (E) the Secretary of Health and Human Services;

11 (F) the Secretary of Homeland Security;

12 (G) the Secretary of Housing and Urban Development;

13 (H) the Secretary of the Interior;

14 (I) the Secretary of Transportation;

15 (J) the Director of United States Geological Survey; and

16 (K) the heads of such other Federal agencies and departments as the
17 Administrator determines to be necessary.

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

21 (b) Adaptation Plan.—

22 (1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act,
23 the Administrator shall submit to Congress a climate change adaptation plan for the
24 United States, based on—

25 (A) assessments performed by the United Nations Intergovernmental Panel
26 on Climate Change in accordance with the Global Change Research Act of
27 1990 (15 U.S.C. 2921 et seq.); and

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

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

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

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

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

36 (D) an assessment of climate change science research needs, including

- 1 probabilistic assessments as an aid to planning;
2 (E) an assessment of climate change technology needs; and
3 (F) regional and national cost assessments for the range of costs that should
4 be anticipated for adapting to the impacts of climate change.

5 (c) Impacts of Climate Change on Low-Income Populations.—

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

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

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

10 (ii) developing countries;

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

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

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

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

20 **TITLE VIII—FRAMEWORK FOR GEOLOGICAL**
21 **SEQUESTRATION OF CARBON DIOXIDE**

22 **SEC. 8001. NATIONAL DRINKING WATER**
23 **REGULATIONS.**

24 (a) In General.—Section 1421 of the Safe Drinking Water Act (42 U.S.C. 300h) is
25 amended—

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

28 (2) by redesignating subsection (d) as subsection (e); and

29 (3) by inserting after subsection (c) the following:

30 “(d) Carbon Dioxide.—

31 “(1) REGULATIONS.—Not later than 1 year after the date of enactment of the
32 ~~America’s~~ **Lieberman-Warner** Climate Security Act of 2007, the Administrator
33 shall promulgate regulations for permitting commercial-scale underground injection
34 of carbon dioxide for purposes of geological sequestration to address climate
35 change, including provisions—

36 “(A) for monitoring and controlling the long-term storage of carbon dioxide

1 and avoiding, to the maximum extent practicable, any release of carbon dioxide
2 into the atmosphere, and for ensuring protection of underground sources of
3 drinking water, human health, and the environment; and

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

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

13 “(3) REVISION.—If the Administrator determines, based on a report under
14 paragraph (2), that regulations promulgated pursuant to paragraph (1) require
15 revision, the Administrator shall promulgate revised regulations not later than 1 year
16 after the date on which the applicable report is submitted to Congress under
17 paragraph (2).”.

18 (b) Conforming Amendment.—Section 1447(a)(4) of the Safe Drinking Water Act (42
19 U.S.C. 300j–6(a)(4)) is amended by striking “section 1421(d)(2)” and inserting “section
20 1421(e)(2)”.

21 SEC. 8002. ASSESSMENT OF GEOLOGICAL 22 STORAGE CAPACITY FOR CARBON DIOXIDE.

23 (a) Definitions.—In this section:

24 (1) ASSESSMENT.—The term “assessment” means the national assessment of
25 capacity for carbon dioxide completed under subsection (f).

26 (2) CAPACITY.—The term “capacity” means the portion of a storage formation
27 that can retain carbon dioxide in accordance with the requirements (including
28 physical, geological, and economic requirements) established under the
29 methodology developed under subsection (b).

30 (3) ENGINEERED HAZARD.—The term “engineered hazard” includes the location
31 and completion history of any well that could affect a storage formation or capacity.

32 (4) RISK.—The term “risk” includes any risk posed by a geomechanical,
33 geochemical, hydrogeological, structural, or engineered hazard.

34 (5) SECRETARY.—The term “Secretary” means the Secretary of the Interior, acting
35 through the Director of the United States Geological Survey.

36 (6) STORAGE FORMATION.—The term “storage formation” means a deep saline
37 formation, unmineable coal seam, oil or gas reservoir, or other geological formation
38 that is capable of accommodating a volume of industrial carbon dioxide.

39 (b) Methodology.—Not later than 1 year after the date of enactment of this Act, the
40 Secretary shall develop a methodology for conducting an assessment under subsection

1 (f), taking into consideration—

- 2 (1) the geographical extent of all potential storage formations in all States;
3 (2) the capacity of the potential storage formations;
4 (3) the injectivity of the potential storage formations;
5 (4) an estimate of potential volumes of oil and gas recoverable by injection and
6 storage of industrial carbon dioxide in potential storage formations;
7 (5) the risk associated with the potential storage formations; and
8 (6) the work performed to develop the Carbon Sequestration Atlas of the United
9 States and Canada completed by the Department of Energy in April 2006.

10 (c) Coordination.—

11 (1) FEDERAL COORDINATION.—

12 (A) CONSULTATION.—The Secretary shall consult with the Secretary of
13 Energy and the Administrator regarding data sharing and the format,
14 development of methodology, and content of the assessment to ensure the
15 maximum usefulness and success of the assessment.

16 (B) COOPERATION.—The Secretary of Energy and the Administrator shall
17 cooperate with the Secretary to ensure, to the maximum extent practicable, the
18 usefulness and success of the assessment.

19 (2) STATE COORDINATION.—The Secretary shall consult with State geological
20 surveys and other relevant entities to ensure, to the maximum extent practicable, the
21 usefulness and success of the assessment.

22 (d) External Review and Publication.—On completion of the methodology under
23 subsection (b), the Secretary shall—

24 (1) publish the methodology and solicit comments from the public and the heads
25 of affected Federal and State agencies;

26 (2) establish a panel of individuals with expertise in the matters described in
27 paragraphs (1) through (5) of subsection (b) composed, as appropriate, of
28 representatives of Federal agencies, institutions of higher education,
29 nongovernmental organizations, State organizations, industry, and international
30 geosciences organizations to review the methodology and comments received under
31 paragraph (1); and

32 (3) on completion of the review under paragraph (2), publish in the Federal
33 Register the revised final methodology.

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

37 (f) National Assessment.—

38 (1) IN GENERAL.—Not later than 2 years after the date of publication of the
39 methodology under subsection (d)(3), the Secretary, in consultation with the

1 Secretary of Energy and State geological surveys, shall complete a national
2 assessment of the capacity for carbon dioxide storage in accordance with the
3 methodology.

4 (2) GEOLOGICAL VERIFICATION.—As part of the assessment, the Secretary shall
5 carry out a characterization program to supplement the geological data relevant to
6 determining storage capacity in carbon dioxide in geological storage formations,
7 including—

8 (A) well log data;

9 (B) core data; and

10 (C) fluid sample data.

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

15 (4) INCORPORATION INTO NATCARB.—

16 (A) IN GENERAL.—On completion of the assessment, the Secretary shall
17 incorporate the results of the assessment using, to the maximum extent
18 practicable—

19 (i) the NatCarb database; or

20 (ii) a new database developed by the Secretary, as the Secretary
21 determines to be necessary.

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

24 (i) for capacity and risk;

25 (ii) across the United States;

26 (iii) within each State;

27 (iv) by formation; and

28 (v) within each basin.

29 (5) REPORT.—Not later than 180 days after the date on which the assessment is
30 completed, the Secretary shall submit to the Committee on Energy and Natural
31 Resources of the Senate and the Committee on Science and Technology of the
32 House of Representatives a report describing the results of the assessment.

33 (6) PERIODIC UPDATES.—The assessment shall be updated periodically (including
34 not less frequently than once every 5 years) as necessary to support public and
35 private sector decisionmaking, as determined by the Secretary.

36 **SEC. 8003. STUDY OF THE FEASIBILITY RELATING**
37 **TO CONSTRUCTION OF PIPELINES AND**

1 **GEOLOGICAL CARBON DIOXIDE SEQUESTRATION**
2 **ACTIVITIES.**

3 (a) In General.—The Secretary of Energy, in coordination with the Administrator, the
4 Federal Energy Regulatory Commission, the Secretary of Transportation, and the
5 Secretary of the Interior, shall conduct a study to assess the feasibility of the construction
6 of—

7 (1) pipelines to be used for the transportation of carbon dioxide for the purpose of
8 sequestration or enhanced oil recovery; and

9 (2) geological carbon dioxide sequestration facilities.

10 (b) Scope.—The study shall consider—

11 (1) any barrier or potential barrier in existence as of the date of enactment of this
12 Act, including any technical, siting, financing, or regulatory barrier, relating to—

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

15 (B) the geological sequestration of carbon dioxide;

16 (2) any market risk (including throughput risk) relating to—

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

19 (B) the geological sequestration of carbon dioxide;

20 (3) any regulatory, financing, or siting option that, as determined by the Secretary
21 of Energy, would—

22 (A) mitigate any market risk described in paragraph (2); or

23 (B) help ensure the construction of pipelines dedicated to the transportation
24 of carbon dioxide for the purpose of sequestration or enhanced oil recovery;

25 (4) the means by which to ensure the safe handling and transportation of carbon
26 dioxide;

27 (5) any preventive measure to ensure the integration of pipelines to be used for the
28 transportation of carbon dioxide for the purpose of sequestration or enhanced oil
29 recovery; and

30 (6) any other appropriate use, as determined by the Secretary of Energy, in
31 coordination with the Administrator, the Federal Energy Regulatory Commission,
32 the Secretary of Transportation, and the Secretary of the Interior.

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

36 **SEC. 8004. LIABILITIES FOR CLOSED GEOLOGICAL**
37 **STORAGE SITES.**

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

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

11 TITLE IX—MISCELLANEOUS

12 SEC. 9001. PARAMOUNT INTEREST WAIVER.

13 (a) In General.—If the President determines that a national security emergency exists
14 and, in light of information that was not available as of the date of enactment of this Act,
15 it is in the paramount interest of the United States to modify any requirement under this
16 Act to minimize the effects of the emergency, the President may, after opportunity for
17 public notice and comment, temporarily adjust, suspend, or waive any regulations
18 promulgated pursuant to this Act to achieve that minimization.

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

- 22 (1) the National Academy of Sciences;
- 23 (2) the Secretary of Energy; and
- 24 (3) the Administrator.

25 (c) Judicial Review.—An emergency determination under subsection (a) shall be
26 subject to judicial review in accordance with section 307 of the Clean Air Act (42 U.S.C.
27 7607).

28 ~~SEC. 9002. CORPORATE ENVIRONMENTAL~~ 29 ~~DISCLOSURE OF CLIMATE CHANGE RISKS.~~

30 ~~(a) Regulations.—Not later than 2 years after the date of~~
31 ~~enactment of this Act, the Securities and Exchange~~
32 ~~Commission (referred to in this section as the~~
33 ~~“Commission”) shall promulgate regulations in accordance~~
34 ~~with section 13 of the Securities Exchange Act of 1934 (15~~
35 ~~U.S.C. 78m) directing each issuer of securities under that~~
36 ~~Act, to inform, based on the current expectations and~~

1 ~~projections and knowledge of facts of the issuer, securities~~
2 ~~investors of material risks relating to—~~

3 ~~(1) the financial exposure of the issuer because of the net~~
4 ~~global warming pollution emissions of the issuer; and~~

5 ~~(2) the potential economic impacts of global warming on~~
6 ~~the interests of the issuer.~~

7 ~~(b) Uniform Format for Disclosure.— In carrying out~~
8 ~~subsection (a), the Commission shall enter into an~~
9 ~~agreement with the Financial Accounting Standards Board,~~
10 ~~or another appropriate organization that establishes~~
11 ~~voluntary standards, to develop a uniform format for~~
12 ~~disclosing to securities investors information on the risks~~
13 ~~described in subsection (a).~~

14 ~~(c) Interim Interpretive Release.—~~

15 ~~(1) In general.— Not later than 1 year after the date of~~
16 ~~enactment of this Act, the Commission shall issue an~~
17 ~~interpretive release clarifying that under items 101 and 303~~
18 ~~of Regulation S-K of the Commission under part 229 of~~
19 ~~title 17, Code of Federal Regulations (as in effect on the~~
20 ~~date of enactment of this Act)—~~

21 ~~(A) the commitments of the United States to reduce~~
22 ~~emissions of global warming pollution under the United~~
23 ~~Nations Framework Convention on Climate Change, done~~
24 ~~at New York on May 9, 1992, are considered to be a~~
25 ~~material effect; and~~

26 ~~(B) global warming constitutes a known trend.~~

27 ~~(2) Period of effectiveness.— The interpretive release~~
28 ~~issued under paragraph (1) shall remain in effect until the~~

1 ~~effective date of the final regulations promulgated under~~
2 ~~subsection (a).~~

3 ~~SEC. 9003.~~ ADMINISTRATIVE PROCEDURE AND
4 JUDICIAL REVIEW.

5 (a) Rulemaking Procedures.—Any rule, requirement, regulation, method, standard,
6 program, determination, or final action made or promulgated pursuant to any title of this
7 Act, with the exception of sections 3101, **3102**, 3201, ~~3301~~, and 3901, shall be subject to
8 the rulemaking procedures described in sections 551 through 557 of title 5, United States
9 Code.

10 (b) Enforcement.—Each provision of this Act (including provisions relating to
11 mandatory duties of the Administrator) shall be fully enforceable pursuant to sections
12 113, 303, and 304 of the Clean Air Act (42 U.S.C. 7413, 7603, 7604).

13 (c) Recordkeeping, Inspections, Monitoring, Entry, and Subpoenas.—The
14 Administrator shall have the same powers and authority provided under sections 114 and
15 307(a) of the Clean Air Act (42 U.S.C. 7414, 7607(a)) in carrying out, administering, and
16 enforcing this Act.

17 (d) Judicial Review.—A petition for judicial review of any regulation promulgated, or
18 final action carried out, by the Administrator pursuant to this Act may be filed only—

- 19 (1) in the United States Court of Appeals for the District of Columbia; and
20 (2) in accordance with section 307(b) of the Clean Air Act (42 U.S.C. 7607(b)).

21 ~~SEC. 9004~~ **9003.** RETENTION OF STATE AUTHORITY.

22 (a) In General.—Except as provided in subsection (b), in accordance with section 116
23 of the Clean Air Act (42 U.S.C. 7416) and section 510 of the Federal Water Pollution
24 Control Act (33 U.S.C. 1370), nothing in this Act precludes or abrogates the right of any
25 State to adopt or enforce—

- 26 (1) any standard, cap, limitation, or prohibition relating to emissions of
27 greenhouse gas; or
28 (2) any requirement relating to control, abatement, or avoidance of emissions of
29 greenhouse gas.

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

33 ~~SEC. 9005~~ **9004.** TRIBAL AUTHORITY.

34 For purposes of this Act, the Administrator may treat any federally recognized Indian
35 tribe as a State, in accordance with section 301(d) of the Clean Air Act (42 U.S.C.
36 7601(d)).

1 **SEC. 9006 9005. AUTHORIZATION OF**
2 **APPROPRIATIONS.**

3 There are authorized to be appropriated such sums as are necessary to carry out this
4 Act.

5 **TITLE X—CONTROL OF**
6 **HYDROFLUOROCARBON CONSUMPTION**

7 **SEC. 10001. APPLICABILITY.**

8 For purposes of this Act, it shall be unlawful for any person to produce or import
9 for consumption in the United States any hydrofluorocarbon, or product or
10 equipment containing a hydrofluorocarbon, except exclusively in accordance with
11 this title and the regulations promulgated by the Administrator pursuant to this
12 title.

13 **SEC. 10002. DEFINITIONS.**

14 In this title:

15 (1) **BASELINE.**—The term “baseline” means the global warming potential-
16 weighted equivalent of 300,000,000 metric tons of carbon dioxide.

17 (2) **ENTITY; PERSON.**—The terms “entity” and “person” have the meaning
18 given the term “person” in section 551 of title 5, United States Code.

19 (3) **GLOBAL WARMING POTENTIAL.**—

20 (A) **IN GENERAL.**—The term “global warming potential” means the
21 potential contribution to global warming of a hydrofluorocarbon, as
22 compared to the potential contribution to global warming of an equal
23 weight of carbon dioxide.

24 (B) **CALCULATION.**—For the purposes of calculating the global warming
25 potential of a hydrofluorocarbon, the values for the 100-year time horizon
26 in the fourth assessment report of the Intergovernmental Panel on Climate
27 Change shall be used.

28 (4) **GLOBAL WARMING POTENTIAL-WEIGHTED.**—The term “global warming
29 potential-weighted”, with respect to a hydrofluorocarbon, means the value
30 equal to the product obtained, for purposes of determining the quantity of
31 carbon dioxide with an equivalent global warming potential, by multiplying—

32 (A) a certain quantity of the hydrofluorocarbon; and

33 (B) the global warming potential of the hydrofluorocarbon.

34 (5) **HYDROCHLOROFLUOROCARBON.**—The term “hydrochlorofluorocarbon”
35 means any hydrochlorofluorocarbon identified in section 602(b) of the Clean
36 Air Act (42 U.S.C. 7671a(b)).

37 (6) **HYDROFLUOROCARBON.**—The term “hydrofluorocarbon” means a

1 **hydrofluoroalkane.**

2 **(7) HYDROFLUOROCARBON CONSUMPTION.—**

3 **(A) IN GENERAL.—The term “hydrofluorocarbon consumption”, with**
4 **respect to a hydrofluorocarbon, means—**

5 **(i) in the case of a hydrofluorocarbon producer, a value equal to the**
6 **difference between—**

7 **(I) a value equal to the sum of—**

8 **(aa) the quantity of the hydrofluorocarbon produced in**
9 **the United States; and**

10 **(bb) the quantity of the hydrofluorocarbon imported from**
11 **any source into the United States or acquired in the United**
12 **States from another hydrofluorocarbon producer through**
13 **sale or other transaction; and**

14 **(II) the quantity of the hydrofluorocarbon exported or**
15 **transferred to another hydrofluorocarbon producer or importer**
16 **in the United States through sale or other transaction; and**

17 **(ii) in the case of a hydrofluorocarbon importer, a value equal to**
18 **the difference between—**

19 **(I) the quantity of the hydrofluorocarbon imported from any**
20 **source into the United States; and**

21 **(II) the quantity of the hydrofluorocarbon exported.**

22 **(B) EXCLUSION.—The term “hydrofluorocarbon consumption” does not**
23 **include a quantity of hydrofluorocarbon that is recycled.**

24 **(8) HYDROFLUOROCARBON CONSUMPTION ALLOWANCE.—The term**
25 **“hydrofluorocarbon consumption allowance” means an authorization—**

26 **(A) to produce or import a global warming potential-weighted quantity**
27 **of hydrofluorocarbon equivalent to 1 metric ton of carbon dioxide; or**

28 **(B) to import products or equipment containing a quantity of**
29 **hydrofluorocarbon equivalent in global warming potential to 1 metric ton**
30 **of carbon dioxide.**

31 **(9) HYDROFLUOROCARBON DESTRUCTION.—The term “hydrofluorocarbon**
32 **destruction” means a process that results in the permanent transformation or**
33 **decomposition of all or a significant portion of a hydrofluorocarbon to another**
34 **gas, liquid, or solid with a lower or zero global warming potential.**

35 **(10) HYDROFLUOROCARBON DESTRUCTION ALLOWANCE.—The term**
36 **“hydrofluorocarbon destruction allowance” means an authorization to produce**
37 **or import a global warming potential-weighted quantity of hydrofluorocarbon**
38 **equal to the global warming potential-weighted quantity of hydrofluorocarbon**
39 **destroyed pursuant to section 10010.**

1 **(11) HYDROFLUOROCARBON IMPORTER.**—The term “hydrofluorocarbon
2 importer” means an entity that imported hydrofluorocarbon or products or
3 equipment containing hydrofluorocarbon into the United States during
4 calendar year 2005.

5 **(12) HYDROFLUOROCARBON PRODUCER.**—The term “hydrofluorocarbon
6 producer” means an entity that produced hydrofluorocarbon in the United
7 States for sale in the United States during calendar year 2005.

8 **(13) IMPORT.**—The term “import” means the action of landing on or
9 bringing or introducing a product into, or attempting to land on or bring or
10 introduce a product into, any area subject to the jurisdiction of the United
11 States, regardless of whether 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” and “production” mean the
15 manufacture of a hydrofluorocarbon from any raw material, feedstock, or
16 chemical.

17 **(B) EXCLUSIONS.**—The terms “produce” and “production” do not
18 include—

19 (i) the manufacture of a hydrofluorocarbon that is used and entirely
20 consumed (except for trace quantities) in the manufacture of other
21 chemicals or products; or

22 (ii) the reuse or recycling of a hydrofluorocarbon.

23 **(15) RECYCLE; REUSE.**—The terms “reuse” and “recycle” mean—

24 **(A) the removal of a quantity of hydrofluorocarbon from a product or**
25 **equipment;**

26 **(B) the reprocessing of the product or equipment to remove impurities;**
27 **and**

28 **(C) the offering of the product or equipment for sale in the United**
29 **States.**

30 **SEC. 10003. CAP ON HYDROFLUOROCARBON**
31 **CONSUMPTION AND IMPORTATION INTO**
32 **UNITED STATES.**

33 **(a) Establishment.**—The Administrator shall establish a cap on
34 hydrofluorocarbon consumption in the United States for each calendar year during
35 the period of calendar years 2010 through 2050, as directed in section 10004 that
36 shall not be exceeded except as provided in section 10009.

37 **(b) Prohibition.**—Consumption of a hydrofluorocarbon or products or equipment
38 containing any hydrofluorocarbon, except as provided in this title, shall be illegal.

1 **SEC. 10004. HYDROFLUOROCARBON**
2 **CONSUMPTION ALLOWANCE ACCOUNT.**

3 (a) **Allowance Account.—**

4 (1) **ESTABLISHMENT.—**Not later than April 1, 2009, and annually thereafter
5 through April 1, 2050, the Administrator shall establish and allocate a separate
6 quantity of hydrofluorocarbon consumption allowances.

7 (2) **DENOMINATION.—**Hydrofluorocarbon consumption allowances shall be
8 denominated in metric tons of carbon dioxide equivalent.

9 (b) **Identification Numbers.—**The Administrator shall assign to each
10 hydrofluorocarbon consumption allowance established under subsection (a) a
11 unique identification number that includes the calendar year for which the
12 hydrofluorocarbon consumption allowance was assigned.

13 (c) **Legal Status of Hydrofluorocarbon Consumption Allowances.—**

14 (1) **IN GENERAL.—**A consumption allowance allocated under this title is a
15 limited authorization to produce or import a hydrofluorocarbon and any
16 product or equipment containing a hydrofluorocarbon, in accordance with this
17 title.

18 (2) **ALLOWANCE NOT PROPERTY RIGHT.—**A hydrofluorocarbon consumption
19 allowance does not constitute a property right.

20 (3) **TERMINATION OR LIMITATION.—**Nothing in this Act or any other
21 provision of law limits the authority of the United States to terminate or limit
22 hydrofluorocarbon consumption allowances.

23 (4) **EFFECT OF ACT.—**Nothing in this Act relating to hydrofluorocarbon
24 consumption allowances shall affect the application of, or any requirement of
25 compliance with, any other provision of law by any person.

26 (d) **Lifetime of Hydrofluorocarbon Consumption Allowances.—**
27 Hydrofluorocarbon consumption allowances distributed by the Administrator and
28 hydrofluorocarbon destruction allowances may be used for compliance for a period
29 of not more than 5 years after the calendar year for which the allowances are
30 allocated.

31 (e) **Hydrofluorocarbon Consumption Allowances for Each Calendar Year.—**The
32 number of hydrofluorocarbon consumption allowances established and allocated by
33 the Administrator for each of calendar years 2010 through 2050 shall be as
34 follows:2,L0(0,0,0,4,0,0),tp0,p1,10/12,g1,t1,s190n,xs95n

35 11

36 lCalendar yearHFC consumption allowances (in million metric tons)

37 20101300

38 20111294

39 20121289

- 1 2013I283
- 2 2014I278
- 3 2015I272
- 4 2016I267
- 5 2017I261
- 6 2018I256
- 7 2019I250
- 8 2020I245
- 9 2021I239
- 10 2022I234
- 11 2023I228
- 12 2024I222
- 13 2025I217
- 14 2026I206
- 15 2027I195
- 16 2028I184
- 17 2029I173
- 18 2030I162
- 19 2031I150
- 20 2032I139
- 21 2033I128
- 22 2034I117
- 23 2035I106
- 24 2036I95
- 25 2037I90
- 26 2038I90
- 27 2039I90
- 28 2040I90
- 29 2041I90
- 30 2042I90
- 31 2043I90
- 32 2044I90
- 33 2045I90

1 2046190
2 2047190
3 2048190
4 2049190
5 2050190

6 **SEC. 10005. ALLOCATION OF**
7 **HYDROFLUOROCARBON CONSUMPTION**
8 **ALLOWANCES.**

9 (a) **In General.**—Not later than 90 days before the beginning of each applicable
10 calendar year, the Administrator shall allocate the portion of the hydrofluorocarbon
11 consumption allowances in the hydrofluorocarbon consumption allowance account
12 that is available for allocation for that calendar year.

13 (b) **Eligible Entities.**—

14 (1) **IN GENERAL.**—The Administrator shall allocate hydrofluorocarbon
15 consumption allowances as described in paragraph (2) to entities that—

16 (A) were hydrofluorocarbon producers or hydrofluorocarbon importers
17 during the period beginning on January 1, 2004, and ending on December
18 31, 2006; and

19 (B) are hydrofluorocarbon producers or hydrofluorocarbon importers
20 on the date of enactment of this Act.

21 (2) **DESCRIPTION OF ALLOCATION.**—Hydrofluorocarbon consumption
22 allowances shall be allocated to entities described in paragraph (1) as follows:

23 (A) **HYDROFLUOROCARBON PRODUCERS.**—Each hydrofluorocarbon
24 producer shall receive a quantity of hydrofluorocarbon allowances equal
25 to the ratio that—

26 (i) a value equal to the difference between—

27 (I) the global warming potential-weighted average of 100
28 percent of the hydrofluorocarbon and 60 percent of the
29 hydrochlorofluorocarbon produced in the United States,
30 imported into the United States, or acquired in the United States
31 by the hydrofluorocarbon producer during the period beginning
32 on January 1, 2004, and ending on December 31, 2006; and

33 (II) the global warming potential-weighted average of 100
34 percent of the hydrofluorocarbon and 60 percent of the
35 hydrochlorofluorocarbon that the producer produced in the
36 United States or imported into the United States, as a product or
37 contained in equipment, during the period described in subclause
38 (I); bears to

1 (ii) a value equal to the difference between—

2 (I) the total global warming potential-weighted average of 100
3 percent of the hydrofluorocarbon and 60 per cent of the
4 hydrochlorofluorocarbon produced in or imported into the
5 United States, as a product or contained in equipment, during the
6 period described in clause (i)(I); and

7 (II) the global warming potential-weighted average of 100
8 percent of the hydrofluorocarbon and 60 per cent of the
9 hydrochlorofluorocarbon exported from the United States during
10 that period.

11 (B) HYDROFLUOROCARBON IMPORTERS.—Each hydrofluorocarbon
12 importer shall receive a quantity of hydrofluorocarbon allowances equal to
13 the ratio that—

14 (i) the global warming potential-weighted average of 100 percent of
15 hydrofluorocarbon and 60 percent of hydrochlorofluorocarbon
16 imported by the hydrofluorocarbon importer as a product or
17 contained in equipment, or acquired in the United States from a
18 hydrofluorocarbon producer through sale or other transaction during
19 the period beginning on January 1, 2004, and ending on December 31,
20 2006; bears to

21 (ii) a value equal to the difference between—

22 (I) the total global warming potential-weighted average of 100
23 percent of the hydrofluorocarbon and 60 per cent of the
24 hydrochlorofluorocarbon produced in, or imported into, the
25 United States during the period described in clause (i); and

26 (II) the global warming potential-weighted average of 100
27 percent of the hydrofluorocarbon and 60 per cent of the
28 hydrochlorofluorocarbon exported from the United States during
29 that period.

30 (c) Withholding Allowances.—

31 (1) IN GENERAL.—For calendar year 2010 and each calendar year thereafter,
32 the Administrator shall withhold a quantity of hydrofluorocarbon consumption
33 allowances that would otherwise be allocated under subsection (b) for auction
34 at least annually by the Corporation to the entities identified in subsection
35 (b)(1).

36 (2) AUCTIONS BY CORPORATION.—For each applicable calendar year, the
37 Administrator shall withhold, and the Corporation shall auction to the entities
38 identified in subsection (b)(1), the following quantities of the
39 hydrofluorocarbon consumption allowances established under section
40 10004:2,L0(0,0,0,4,0,0),tp0,p1,10/12,g1,t1,s190n,xs95n

41 11

1 **ICalendar yearPercent withheld for auction**
2 **201015**
3 **2011110**
4 **2012110**
5 **2013110**
6 **2014115**
7 **2015120**
8 **2016125**
9 **2017130**
10 **2018135**
11 **2019140**
12 **2020145**
13 **2021150**
14 **2022155**
15 **2023160**
16 **2024165**
17 **2025170**
18 **2026175**
19 **2027180**
20 **** 2 2028185**
21 **2029190**
22 **2030195**
23 **20311100**
24 **20321100**
25 **20331100**
26 **20341100**
27 **20351100**
28 **20361100**
29 **20371100**
30 **20381100**
31 **20391100**
32 **20401100**
33 **20411100**

1 20421100
2 20431100
3 20441100
4 20451100
5 20461100
6 20471100
7 20481100
8 20491100
9 20501100

10 (3) **PROCEEDS.**—The Corporation shall award the proceeds of the auction to
11 support the following purposes:

12 (A) A program to recover and destroy the maximum economically
13 recoverable chlorofluorocarbons, halons, and other substances listed
14 under title VI of the Clean Air Act (42 U.S.C. 7671 et seq.) that have
15 significant ozone depletion potential and global warming potential.

16 (B) A program of incentives for consumer purchases of refrigeration
17 and cooling equipment that—

18 (i) contains refrigerants with no or low global warming potential;
19 and

20 (ii) achieves energy efficiency that represents at least a 30 percent
21 improvement, as compared to the more efficient of—

22 (I) the applicable Federal energy efficiency standard; and

23 (II) the applicable Energy Star rating.

24 (C) A program to support the development and deployment of—

25 (i) hydrofluorocarbons with low global warming potential; and

26 (ii) energy efficient technologies, equipment, and products
27 containing or using hydrofluorocarbons.

28 (D) The programs receiving auction proceeds under title IV.

29 **SEC. 10006. COMPLIANCE OBLIGATION.**

30 (a) **Submission of Allowances.**—

31 (1) **IN GENERAL.**—Not later than 90 days after the end of each applicable
32 calendar year, a hydrofluorocarbon producer or hydrofluorocarbon importer
33 shall submit to the Administrator a quantity of hydrofluorocarbon
34 consumption allowances, or hydrofluorocarbon destruction allowances
35 awarded pursuant to section 10010, equal to the total number of global
36 warming potential-weighted tons of hydrofluorocarbon consumed in the United

1 States during the preceding calendar year by the hydrofluorocarbon producer
2 or hydrofluorocarbon importer, as determined in accordance with paragraphs
3 (2) and (3).

4 (2) **HYDROFLUOROCARBON PRODUCERS.**—For hydrofluorocarbon producers,
5 the quantity of hydrofluorocarbon consumed shall be a value equal to the
6 difference between—

7 (A) the global warming potential-weighted tons of hydrofluorocarbon
8 produced in the United States, imported as a product or contained in
9 equipment, or acquired in the United States from another
10 hydrofluorocarbon producer through sale or other transaction; and

11 (B) the global warming potential-weighted tons of hydrofluorocarbon
12 the producer exported as a product or contained in equipment, or
13 transferred to another hydrofluorocarbon producer in the United States
14 through sale or other transaction.

15 (3) **HYDROFLUOROCARBON IMPORTERS.**—For hydrofluorocarbon importers,
16 hydrofluorocarbon consumed shall be a value equal to the global warming
17 potential-weighted tons of hydrofluorocarbon imported by the
18 hydrofluorocarbon importer as a product or contained in equipment, or
19 acquired in the United States from a hydrofluorocarbon producer through sale
20 or other transaction.

21 (b) **Retirement.**—Immediately on receipt of a hydrofluorocarbon consumption
22 allowance or a hydrofluorocarbon destruction allowance under subsection (a), the
23 Administrator shall retire the allowance.

24 (c) **Determination of Compliance.**—Not later than July 1 of each year, the
25 Administrator shall—

26 (1) determine whether each hydrofluorocarbon producer and
27 hydrofluorocarbon importer achieved compliance with subsection (a) for the
28 preceding year; and

29 (2) so notify each hydrofluorocarbon producer and hydrofluorocarbon
30 importer.

31 (d) **Penalties.**—A hydrofluorocarbon producer or hydrofluorocarbon importer
32 that is not in compliance with subsection (a), as determined under subsection (c),
33 shall be liable for the payment of an excess consumption penalty as provided in
34 section 1203, except that the deadlines described in this title shall be substituted for
35 the deadlines described in that section.

36 **SEC. 10007. SALE, EXCHANGE, AND OTHER USES** 37 **OF HYDROFLUOROCARBON CONSUMPTION** 38 **ALLOWANCES.**

39 (a) **Permissible Uses.**—

40 (1) **IN GENERAL.**—A hydrofluorocarbon producer or hydrofluorocarbon

1 importer may purchase, hold, sell, exchange, transfer, submit for compliance in
2 accordance with section 10006, or retire hydrofluorocarbon consumption
3 allowances or hydrofluorocarbon destruction allowances.

4 (2) ACTION ON RETIREMENT.—If any hydrofluorocarbon producer or
5 hydrofluorocarbon importer permanently retires a hydrofluorocarbon
6 consumption allowance, the Administrator shall promptly redistribute the
7 allowance to another hydrofluorocarbon producer or hydrofluorocarbon
8 importer pursuant to section 10005(b).

9 (b) Prohibitions.—

10 (1) IN GENERAL.—Hydrofluorocarbon consumption allowances or
11 hydrofluorocarbon destruction allowances shall not be traded or exchanged
12 with allowances associated with any other emission allowance allocation or
13 trading program under this Act.

14 (2) CERTAIN USES.—Hydrofluorocarbon consumption allowances shall not be
15 used to achieve compliance with any other obligation relating to emissions of
16 greenhouse gases regulated under any other provision of this Act, and emission
17 allowances established and allocated under any other provision of this Act shall
18 not be used to achieve compliance with this title.

19 (c) Limitation.—The privilege of purchasing, holding, selling, exchanging,
20 transferring, and submitting for compliance in accordance with section 10006, and
21 retiring hydrofluorocarbon consumption allowances or hydrofluorocarbon
22 destruction allowances shall be restricted to entities described in section 10005(b)(1).

23 **SEC. 10008. ALLOWANCE TRANSFER SYSTEM.**

24 (a) Regulations.—Not later than 18 months after the date of enactment of this
25 Act, the Administrator shall promulgate regulations to carry out the provisions of
26 this title relating to hydrofluorocarbon consumption allowances and
27 hydrofluorocarbon destruction allowances, including regulations providing that the
28 transfer of those allowances shall not be effective until the date on which a written
29 certification of the transfer, signed by a responsible official of each party to the
30 transfer, is received and recorded by the Administrator in accordance with those
31 regulations.

32 (b) Transfers.—

33 (1) IN GENERAL.—The regulations promulgated under subsection (a) shall
34 permit the transfer of hydrofluorocarbon consumption allowances prior to the
35 allocation of the allowances.

36 (2) DEDUCTION AND ADDITION OF TRANSFERS.—A recorded preallocation
37 transfer of hydrofluorocarbon consumption allowances shall be—

38 (A) deducted by the Administrator from the number of
39 hydrofluorocarbon consumption allowances that would otherwise be
40 allocated to the transferor; and

41 (B) added to those hydrofluorocarbon consumption allowances allocated

1 to the transferee.

2 (c) Issuance, Recording, and Tracking System.—The regulations promulgated
3 under subsection (a) shall include a system for issuing, recording, and tracking
4 hydrofluorocarbon consumption and hydrofluorocarbon destruction allowances
5 that shall specify all necessary procedures and requirements for an orderly and
6 competitive functioning of the hydrofluorocarbon consumption allowance system.

7 **SEC. 10009. BANKING AND BORROWING.**

8 (a) Banking.—A hydrofluorocarbon producer or hydrofluorocarbon importer
9 that submits hydrofluorocarbon consumption allowances or hydrofluorocarbon
10 destruction allowances to the Administrator to achieve compliance with section
11 10006 shall indicate in the identification number of the hydrofluorocarbon
12 consumption allowance or hydrofluorocarbon destruction allowance the calendar
13 year for which the allowance is submitted.

14 (b) Borrowing of Hydrofluorocarbon Consumption Allowances.—In accordance
15 with the regulations promulgated under section 10008(a), and subject to subsection
16 (d), a hydrofluorocarbon producer or hydrofluorocarbon importer may—

17 (1) borrow hydrofluorocarbon consumption allowances from the
18 Administrator; and

19 (2) for a calendar year, submit borrowed hydrofluorocarbon consumption
20 allowances to the Administrator to satisfy not more than 15 percent of the
21 compliance obligation under section 10006.

22 (c) Limitation on Borrowing.—A hydrofluorocarbon consumption allowance
23 borrowed under subsection (b) shall be a hydrofluorocarbon consumption
24 allowance established by the Administrator for a specific subsequent calendar year
25 under section 10004(g).

26 (d) Term.—A producer or importer shall not submit, and the Administrator shall
27 not accept, a borrowed hydrofluorocarbon consumption allowance in partial
28 satisfaction of the compliance obligation under section 10006 for any calendar year
29 that is more than 5 years before the calendar year included in the identification
30 number of the borrowed hydrofluorocarbon consumption allowance.

31 (e) Repayment of Interest.—For any borrowed hydrofluorocarbon consumption
32 allowance submitted in partial satisfaction of the compliance obligation under
33 section 10006 for a particular calendar year (referred to in this subsection as the
34 “use year”), the number of hydrofluorocarbon consumption allowances or
35 hydrofluorocarbon destruction allowances that the hydrofluorocarbon producer or
36 hydrofluorocarbon importer is required to submit under section 10006 for the year
37 from which the borrowed hydrofluorocarbon consumption allowance was taken
38 (referred to in this subsection as the “source year”) shall be increased by an amount
39 equal to the product obtained by multiplying—

40 (1) 1.1; and

41 (2) the number of calendar years beginning after the use year but before the

1 source year.

2 **SEC. 10010. HYDROFLUOROCARBON**
3 **DESTRUCTION ALLOWANCES.**

4 (a) **Destruction of Hydrofluorocarbon.—**

5 (1) **IN GENERAL.—**The Administrator shall issue hydrofluorocarbon
6 **destruction allowances to any hydrofluorocarbon producer or**
7 **hydrofluorocarbon importer that performs or arranges for recovery and**
8 **destruction of hydrofluorocarbon from products or equipment.**

9 (2) **ISSUANCE AND DENOMINATION.—**Hydrofluorocarbon destruction
10 **allowances shall be issued on a global warming potential-weighted basis,**
11 **denominated in terms of metric tons of carbon dioxide.**

12 (3) **LIMITATIONS.—**

13 (A) **BYPRODUCTS.—**No hydrofluorocarbon destruction allowance shall
14 **be issued under this section for destruction of hydrofluorocarbon**
15 **produced as a byproduct in a production process.**

16 (B) **CERTAIN PURPOSES.—**No hydrofluorocarbon destruction allowance
17 **shall be issued under this section for destruction or recycling of**
18 **hydrofluorocarbon produced for a purpose other than the ultimate sale**
19 **and use of the product.**

20 (b) **Regulations.—**

21 (1) **REQUIREMENT.—**The regulations promulgated under section 10008(a)
22 **shall authorize the issuance of hydrofluorocarbon destruction allowances.**

23 (2) **CRITERIA.—**Those regulations shall establish appropriate criteria for
24 **determining—**

25 (A) **the effectiveness of destruction;**

26 (B) **the net quantity of global warming potential-weighted**
27 **hydrofluorocarbon that has been destroyed; and**

28 (C) **procedures for verification, registration, and issuance of**
29 **hydrofluorocarbon destruction allowances.**

30 (c) **Satisfaction of Requirements.—**Beginning with calendar year 2012, a
31 **hydrofluorocarbon producer or hydrofluorocarbon importer may satisfy a portion**
32 **of the hydrofluorocarbon consumption allowance submission requirement under**
33 **section 10006 by submitting hydrofluorocarbon destruction allowances generated in**
34 **accordance with the regulations promulgated pursuant to section 10008(a).**

35 (d) **Ownership.—**Initial ownership of a hydrofluorocarbon destruction allowance
36 **shall be held by the hydrofluorocarbon producer or hydrofluorocarbon importer**
37 **that performs or arranges for recovery and destruction or recycling of**
38 **hydrofluorocarbon, including hydrofluorocarbon from products or equipment**
39 **containing hydrofluorocarbon, unless otherwise specified in a legally binding**

1 contract or agreement to which the hydrofluorocarbon producer or
2 hydrofluorocarbon importer is a party.

3 (e) Transferability.—A hydrofluorocarbon destruction allowance generated
4 pursuant to the regulations promulgated pursuant to subsection (b)—

5 (1) may be sold, traded, or transferred to any hydrofluorocarbon producer
6 or hydrofluorocarbon importer referred to in section 10005(b); but

7 (2) shall not be sold, traded, transferred, or used for compliance with any
8 other emission allowance requirement of this Act or any other law.

9 TITLE XI—AMENDMENTS TO CLEAN AIR ACT

10 SEC. 11001. NATIONAL RECYCLING AND 11 EMISSION REDUCTION PROGRAM.

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

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

15 (2) by inserting before subsection (b) (as so redesignated) the following:

16 “(a) Definition of Hydrofluorocarbon Substitute.—In this section, the term
17 ‘hydrofluorocarbon substitute’ means a hydrofluorocarbon—

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

19 “(2) that is used in or for types of equipment, appliances, or processes that
20 previously relied on class I or class II substances.”;

21 (3) in subsection (b) (as so redesignated)—

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

24 “(5) The regulations”;

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

26 (C) by inserting after paragraph (2) the following:

27 “(3)(A) Not later than 1 year after the date of enactment of the Lieberman-
28 Warner Climate Security Act of 2007, the Administrator shall promulgate
29 regulations establishing standards and requirements regarding the sale or
30 distribution, or offer for sale and distribution in interstate commerce, use, and
31 disposal of hydrofluorocarbon substitutes for class I and class II substances not
32 covered by paragraph (1), including the use, recycling, and disposal of those
33 hydrofluorocarbon substitutes during the maintenance, service, repair, or
34 disposal of appliances and industrial process refrigeration equipment.

35 “(B) The standards and requirements established under subparagraph (A)
36 shall take effect not later than 1 year after the date of promulgation of the
37 regulations.”;

1 (4) in subsection (c) (as so redesignated)—

2 (A) by redesignating paragraphs (1) through (3) as subparagraphs (A)
3 through (C), respectively, and indenting the subparagraphs appropriately;

4 (B) by striking the subsection designation and heading and all that
5 follows through “following—” and inserting the following:

6 “(c) Safe Disposal.—The regulations under subsection (b) shall—

7 “(1) establish standards and requirements for the safe disposal of class I and
8 II substances and hydrofluorocarbon substitutes for those substances; and

9 “(2) include each of the following:”;

10 (C) in subparagraph (A) (as redesignated by subparagraph (A)), by
11 inserting “(or hydrofluorocarbon substitutes for those substances)” after
12 “class I or class II substances”; and

13 (D) in paragraphs (2) and (3), by inserting “(or a hydrofluorocarbon
14 substitutes for such a substance)” after “class I or class II substance” each
15 place it appears.

16 **SEC. 11002. SERVICING OF MOTOR VEHICLE AIR** 17 **CONDITIONERS.**

18 Section 609 of the Clean Air Act (42 U.S.C. 7671h) is amended—

19 (1) in subsection (b), by adding at the end the following:

20 “(5) The term ‘hydrofluorocarbon substitute’ means a hydrofluorocarbon—

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

22 “(B) that is used in or for types of equipment, appliances, or processes
23 that previously relied on class I or class II substances.”; and

24 (2) in subsection (e)—

25 (A) by striking the subsection designation and heading and all that
26 follows through “Effective” and inserting the following:

27 “(e) Small Containers of Class I or Class II Substances and Hydrofluorocarbon
28 Substitutes.—

29 “(1) CLASS I OR CLASS II SUBSTANCES.—Effective beginning”; and

30 (B) by adding at the end the following:

31 “(2) HYDROFLUOROCARBON SUBSTITUTES.—Effective beginning January 1,
32 2010, it shall be unlawful for any person to sell or distribute, or offer for sale or
33 distribution, in interstate commerce to any person (other than a person
34 performing service for consideration on motor vehicle air-conditioning systems
35 in compliance with this section) any hydrofluorocarbon substitute that is—

36 “(A) suitable for use in a motor vehicle air-conditioning system; and

1 **“(B) in a container that contains less than 20 pounds of the**
2 **hydrofluorocarbon substitute.”.**